Composting Tradition:

Reconstructing Catholic Sacramental Pedagogies for this Era of Eco-Catastrophe

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Advisor: Catherine Keller

Patrick A. Kelly

Drew University

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ABSTRACT

COMPOSTING TRADITION:

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Patrick A. Kelly

Drew Theological School

This dissertation responds to the ongoing climate crises by taking up Pope Francis's call for ecological conversion to address its root causes. Drawing on compost as process, metaphor, and muse, the ecological work of religious women, and persisting theological insights of Roman Catholic sacramental tradition, the dissertation explores how sacramental theology can inform embodied pedagogies for collective ecological flourishing.

Chapter one introduces the ethical demands of the Anthropocene and proposes four key interventions: addressing human hubris, acknowledging harms of colonialism and capitalism, recognizing matter's agentive capacities, and attending to the existential cost of ecological devastation. These interventions frame an exploration of alternate epochal names—the Chthulucene, Capitalocene, and New Climatic Regime—through a theological lens shaped by feminist insights on naming.

Chapter two argues that ethically navigating ecological crisis requires the use of multiple names and frameworks. Grounded in Catholic Social Teaching, the spirit of Vatican II, and Francis's encyclical, *Laudato si'*, the chapter develops a vision of sacramental and theological "composting" that addresses what Pope Francis identifies as

the evils of global wealth inequality and anthropogenic climate change. It seeks to support development of an integral ecology and the universal destination of all goods.

Chapter three turns to Roman Catholic inheritances—cosmological, metaphysical, and sacramental—as a theological compost heap. Recognizing both toxic and restorative elements of the heap, this chapter seeks reclamation through engagement with the tradition's contested entanglements.

Chapter four critically examines sacramental pedagogy during the thirteenth and the twentieth centuries. The chapter attends to operative dynamics of "tradition" as theological authority. By engaging feminist theology and Thomas Aquinas, read through Mark D. Jordan, it explores the embodied dimensions of sacramental life and its implications for contemporary pedagogy.

Chapter five reframes sacramental causality in light of post-Newtonian physics. Drawing on Karen Barad, it reconceives sacraments as *apparatuses*—material-discursive practices that enable relational transformation and intra-action—to suggest a more ecologically responsive theology of sacramentality.

Chapter six, finally, extends the dissertation beyond Catholicism, explicating Walt Whitman's poem "This Compost" as a model for ecological attunement. Whitman's poetic vision offers affective pedagogical tools for facing climate injustice in and through theological educational.

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INTRODUCTION

As practice, process and metaphorical muse, compost has inspired my scholarship for nearly a decade. Studying and writing with compost has instructed me on matters of entanglement and interrelation, reclamation, mutual becoming, aesthetics, and the honoring of difference, and fostering of life-giving abundance. Thus, compost comes to ground this dissertation and to inform its composition. In reclaiming and reworking the Roman Catholic (RC)[1] tradition in which I am situated, I encounter RC conventions materially and theoretically as a compost heap always growing and changing. In composting the tradition, I hope to foster the nourishing parts and potentials of Roman Catholicism. Doing so will require turning together toxic dimensions of the tradition with those traditional elements that are nourishing already or capable of becoming so. This process aerates the compost heap, inspiring the tradition with fresh air and vital energies for conspiring together to materialize climate justice. It turns and scrambles the heap, and aeration facilitates increased temperatures for richer decomposition. It is this process of turning and fostering interrelation of incongruent materials, that enables reconstitution. Composting thus thrives *with*, actually *requires*, difference, interaction, and change.

This ecological process, which occurs in diverse settings like forest floors and riparian water systems, has been harnessed by human, animal, plant, and fungi communities for eons. In these and domestic settings, composting functions on a timescale that people have come to know and appreciate. The composting process can ground humans within ecosystems and serve as a portal into the climatic and geological

[1] RC will always stand for "Roman Catholic" never the cola.

rhythms from which many powerful subsets of humans have all but entirely dissociated. The speeds of communication, commerce, and consumer gratification in the twenty-first century sit at odds with other planetary timescales. These disjunctures demand reparation, as they are part of how humans have caused ecological crises through inattention to and lack of attunement to geological and climatic systems. My hope is that composting practices might guide my reclamation of the compost heap in which I am planted and by which I have been nourished.

GREEN SISTERS AND THE GENESIS FARM HEAP

Forty-five miles northwest of Drew University's campus sits Genesis Farm on 226 partly forested acres of beautiful rolling hills just beyond Blairstown, New Jersey. Sister Miriam MacGillis of the Roman Catholic Dominican Order founded Genesis Farm in 1980, ever since cultivating the farm in community as a spiritual practice of personal, social, and ecological change.[2] The farm espouses the scientifically-informed cosmological "New Story" of Father Thomas Berry, C.P., which views the planet Earth and the Universe as a unified process of unfolding. The community at Genesis Farm extends beyond the confines of the Roman Catholic Church, which the Dominican Sisters call their religious home. The community consists of local ecologists, farmers, and spiritual seekers; the farm is home to a community supported garden which has more than 300 local members.[3] The ecological spirituality of the sisters at Genesis Farm values the

[2] Sister MacGillis resigned as director in 2020, and as the Genesis Farm website states, "The future of the farm will be revealed in the coming months and years. We continue to live into the Great Mystery of the expanding Universe." "Genesis Farm: History," *Genesis Farm*, accessed March 8, 2025, http://www.genesisfarm.org/about/16.

[3] Ibid.

insights of all traditions and respectfully approaches them as grounded within their own religious and spiritual tradition.

Genesis Farm and many other ecologically attuned Roman Catholic women's religious communities are described in *Green Sisters: A Spiritual Ecology*, published in 2007, by scholar of religious studies, ecology, and environmental policy Sarah McFarland Taylor.[4] McFarland Taylor demonstrates how "green sisters" have for decades attuned daily life in women's religious communities to the ecosystems in which they are entangled. Communities of green sisters are not singular or unified in their views or adaptations of the RC tradition, but they have variously adopted practices, such as growing food for their communities—cloistered and beyond; composting food (in traditional, open-air piles) and human waste (through composting toilets); eating less ecologically destructive diets by embracing vegetarianism; and ecologically renovating their mother houses to be more sustainable and energy efficient. Their visions for ecological and spiritual consciousness begin at home, in their own backyards.[5]

These very material and concrete projects and practices evidently constitute praxis, the living out and developing of one's theoretical commitments in practice.[6] The "green sisters" provide outstanding examples of theology and theory practiced. The

[4] Sarah McFarland Taylor, *Green Sisters: A Spiritual Ecology* (Harvard University Press, 2007).

[5] Ibid., 69. It is inspiring and important to me that these sisters do their work in their homes and gardens, rather than railing against systems that are beyond their control. Though those systems might bear greater responsibility for ecological destruction and might have the ability to affect greater changes, the sisters recognize their agency and live into that. Though the work that I pursue in this dissertation ins beyond my immediate control, I perceive this dissertation as working with the compost heap in which I am grounded.

[6] Feminist theory rejects the dichotomy of theory and practice; praxis is theory in action, and that theoretical practice is informed/produced by practical activity.

ecological and spiritual commitments of the Roman Catholic sisters charted in *Green Sisters* include regenerative agricultural practices like companion planting, tending compost heaps, installing composting toilets, and more. Moreover their commitments inform their religious practices and theological understandings. The sisters ecologically "reinhabit" and theologically reimagine their vows and daily rituals and prayers.[7] Their Roman Catholic sensibility for the sacramental is deeply ingrained. This sacramentalism of the sisters recognizes the Holy in the material world and affirms the goodness of creation. The green sisters continually reaffirm the Divine presence in the world through their conscientious ecological and spiritual renovation and agricultural projects, as well as in their adaptation and development of prayers and rituals. In *Green Sisters*, McFarland Taylor details a number of ritual chants, prayers, dances, altars, and liturgies that celebrate "the sacred interconnections between the human community and the larger community of life."[8] She captures the daily, holistic, integral eco-spirituality that these groups of vowed Roman Catholic women live: "they are self-consciously and earth-consciously considering what it means truly to dwell in place and in a way that is mindful of past actions and attitudes as well as present and future needs."[9]

Sister MacGillis envisioned Genesis Farm as a "seed community" that might disseminate in formation of other communities grounded likewise in locality and commitments to ecological and spiritual restoration. McFarland Taylor describes Sister MacGillis's abiding commitment to work within the context of the broader religious,

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[7] See McFarland Taylor, *Green Sisters,* 60-77.

[8] Ibid., 22.

[9] Ibid., 77.

ecological, and social justice movements, of which Sister MacGillis and the women's community at Genesis Farm form a vibrant part.[10] The green sisters inhabit a challenging position, minding "past actions and attitudes" in relation to "present and future needs," especially given their vows within the Roman Catholic patriarchal hierarchy. McFarland Taylor documents carefully how Sister MacGillis navigates her complex relationship with the institutional Church and its hierarchy, RC tradition, and change. MacGillis "affirms the tradition of the Church while edging its living and lived aspects in new directions," McFarland Taylor writes. She continues, quoting MacGillis, "'I think we carry the entire past. We're not cutting ourselves off from the past, as though the past were wrong, and we're making an enormous corrective that disconnects us from it. The past has made it possible for us to have these kinds of insights.'"[11]

COMPOSTING FOR ECOLOGICAL CONVERSION

Inspired by the example of Sister MacGillis and her many green religious kin, this dissertation hopes to chart a similar path by respectfully acknowledging and navigating traditions and change, and by composting wrongs of the past into raw materials for spiritual growth and nourishment. This dissertation emulates the green sisters, who

[10] Though Sister MacGillis's ministry and Genesis Farm are the foremost examples of the green sisters with whom I engage in this dissertation, many others are similarly inspiring and worthy of thorough engagement. A two examples include: Green Mountain Monastery and Thomas Berry Sanctuary, founded in 1999 as an "Eco-Zoic" RC monastery seeking to heal and to protect the Earth (Green Mountain Monastery ~ Thomas Berry Sanctuary, "Sisters of the Earth Community" https://www.greenmountainmonastery.org/). The Sisters of the Immaculate Heart of Mary, based in Monroe, MI, "Urged by the love of God to respond to the most serious needs of our time, [pursue] justice, peace and sustainable ways of life." The IHM sisters have long dedicated themselves to justice and have thoroughly integrated sustainability into that work. They completed a sustainable renovation of their motherhouse, completed in 2003 (IHM Sisters, "Motherhouse Campus: Renovation" https://ihmsisters.org/living-justly/sustainable-community/renovation/).

[11] McFarland Taylor, *Green Sisters,* 51.

"consciously make a point of rooting discussions of ecospiritual practice, earth ethics, and creation care in a Catholic milieu, careful not to abandon the fertile soil that originally nurtured their spiritual awareness and growth."[12] The praxis of the Roman Catholic green sisters inspires this theology of compost and embodied, ecological sacramentalism.

In re*turn*ing to the complex RC compost pile that has originally and continually nurtures my spiritual awareness and growth, I hope to honor the complexities of my RC inheritances while tending to present and future needs of my communities of accountability. The ecological needs of the present and future, to which green sisters like Miriam MacGillis have attended for nearly half a century, are finally receiving serious affirmative thought and attention from the institutional hierarchy of the RC Church. In the 2015 encyclical *Laudato Si'*, subtitled "On Care for Our Common Home," Pope Francis calls on RC communities to respond to "[t]he urgent challenge to protect our common home" through "a new dialogue about how we are shaping the future of our planet."[13] Francis's encyclical composts, turns, and re-turns Catholic Social Teachings regarding ecological care originally articulated by local bishops' conferences that drew on traditions and theologies, especially liberation theologies. This dissertation may be read as one RC theologian's independent response to Francis' call for the ecological conversion.

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[12] Ibid., 69. McFarland Taylor further explains, "In interviews, sisters, especially those active with social justice concerns among native peoples in North America, stressed the importance of "looking to one's own tradition" rather than appropriating those of others" (Green Sisters, 69).

[13] Pope Francis, *Laudato Si': On Care for Our Common Home* (Our Sunday, 2015), paragraphs 13, 14.

The urgent challenge of climate breakdown causes me to despair at times, to say the least. I am tormented by the human systems and patterns of human thought and behavior that are causing climate change, environmental injustice, and multispecies biodiversity devastation. As a theologian, I continue to interrogate how the RC Church and its teachings are captive to these systems and patterns, many of which remain prevalent to orthodoxy. Yet I am inspired by the work of the green sisters, Pope Francis, and so many others to redress climate change theologically, sacramentally, and materially.

Pope Francis has affirmed what scientists have proven: contemporary ecological crises are chiefly "human" made; climate injustice reflects and further ramifies reigning social inequities; Anthropocene[14] conditions are grounded in gravely misled societies and organizations of power/knowledge production. Francis's encyclical explains how the "technocratic paradigm" has confused the limited methods and goals of modern Western science and technology with an ultimate "epistemological paradigm." This paradigm, which he describes as "undifferentiated and one-dimensional," seeking power and control, shapes the lives of individuals and communities.[15] The technocratic paradigm's subservience to free market economic and managerial political ends has led to the deterioration and devaluation of the environment and communities of human and nonhuman people.[16]

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[14] The Anthropocene, which will be detailed in chapter one, refers to a proposed name for the current geological era in which humans are a primary geological force; it means "the age of the human."

[15] Francis, *LS*, paragraphs 105-106.

[16] Ibid., paragraphs 106-114.

The paradigmatic results of modern Western technocracy have entailed stark disparities in wealth and access to basic needs across the globe. An elite subset of individuals, communities, and corporations profit wildly from the technocratic paradigm while the vast majority of the planetary population suffers degradation of culture and homeland. Those of us committed to climate justice and social redistribution are left with few resources to cope. Thus Pope Francis calls on all within and beyond the RC global communion to respond to climate change by confronting technocratic systems while recognizing differentiated responsibilities.[17] To enter into and support dialogue about shaping planetary futures, Francis summons nation states, corporations and people of goodwill to know their relative power and unique contributions to the present state of the world. In acknowledgment of varied abilities and powers, Francis calls upon these groups of actors to take appropriate responsibility and act according to their abilities while prioritizing the needs of the poor, weak, and vulnerable. Francis proclaims, "We need to strengthen the conviction that we are one single human family. There are no frontiers or barriers, political or social, behind which we can hide, still less is there room for the globalization of indifference."[18] Our species, a single human family that is part of God's one Creation, can permit no human-made barriers to divide us, exacerbate ecological crises and inequality, or disproportionately shape our collective future.

Francis' acknowledgment of the complexities of our global crisis with its environmental, social, political, and economic entanglements demands a similarly complex "integral ecology." There is no other option, as he clearly states: "everything is

[17] Ibid., paragraph 52.

[18] Ibid.

closely interrelated."[19] The interrelation stressed by Francis runs all the way down and all the way up. From subatomic particles to artists to celestial movements, everything exists only in relation and nothing should be considered in a vacuum. Importantly, Francis emphasizes the important role of culture and localized communities in responding to the ecological crisis. He states that

> New processes taking shape cannot always fit into frameworks imported from outside; they need to be based in the local culture itself. As life and the world are dynamic realities, so our care for the world must also be flexible and dynamic… There is a need to respect the rights of peoples and cultures, and to appreciate that the development of a social group presupposes an historical process which takes place within a cultural context and demands the constant and active involvement of local people *from within their proper culture*.[20]

In navigating the new and unfolding challenges of the twenty-first century ecological crisis, Francis implores that the rights and knowledges of local communities be honored with proper standing. Those who ascribe to technocratic and capitalist paradigms and epistemologies formative to the global crises need to learn from local, often disempowered, communities who are deeply connected with their ecosystems and often rely on embodied, relational knowledge. Francis' affirmation of the import and power of locally-based solutions evokes the insights of the green sisters' dwelling in place, attending to local communities and ecosystems.

I hope to take the encyclical seriously by *composting* my own limited capacities and ways of knowing and learning – epistemologies and pedagogies – which have constructed domineering, androcentric systems forming me and shaping the ecological crisis that causes me much dismay. I will attempt to gather, turn together, and biodegrade

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[19] Ibid., paragraph 137.

[20] Ibid., paragraph 144. Emphasis original.

components of RC theology with the aid of other theologians and contemporary theorists from various disciplines to enhance the interrelation Francis' ecological conversion and integral ecology call for. In doing so I hope to raise the temperature and so speed along the decomposition of toxic elements of my RC inheritance, while fostering the resurrective capacities of nourishing portions of the tradition, most especially of embodied sacramentality.

This embodied, sacramental composting is inspired and informed by the green sisters and some of their comrades in ecofeminist theology, namely Rosemary Radford Ruether, Elizabeth Johnson, and Ivone Gebara. I consider RC ecofeminist theologians one community of accountability in my work. In other words, this dissertation's RC composting aims to meet standards set forth by ecofeminist theologians and to work faithfully with their central tenets. Ecofeminist theologians have marked the nature-culture dualism in Western theology and philosophy as a root cause of both the subordination of women and the degradation of the Earth. They have identified how gendered metaphors and concepts developed in service of this dualism to foster hierarchical, domineering, and destructive impact. Ecofeminists have demonstrated that ecological degradation has always been tied together with the degradation of women, as well as of the poor and vulnerable. In offering these crucial insights and marking toxins honestly while honoring nourishing ground for the inherent dignity of all of Creation, these theologians have charted a way for this present ecological composting of RC theology.

Reading Francis's *Laudato si'*, I hear the echoes of ecofeminist theologians, though perhaps unsurprisingly the Pope fails to cite RC women intellectuals.

Ecofeminist theologian Ivone Gebara, in *Longing for Running Water,* exposes the "logic of the capitalist system, with its narrow exclusiveness, as well as the logic of hierarchical patriarchy and of class, race, and gender privilege."[21] Gebara articulates a forceful repudiation of the destructive greed of global, international capitalism (the current iteration of the patriarchal system), with its extractive and exterminating logics. In my reading, there is clear resonance with Francis' critique of global capital in his analysis of the "technocratic paradigm."[22] Gebara has long lived in and embodied a theological, ecofeminist praxis aligned with that for which Francis calls. She is firmly rooted in the impoverished community where she lives, teaches, and serves in Brazil. And so, the present theology of compost, a theology of embodied sacramentality, will gratefully think with Gebara and other ecofeminist theologians.

Gebara knows well the enduring power of Greek and Thomistic thought especially within Roman Catholicism, and how this combination is responsible, in part, for how many people understand the world, live in it, and imagine the future, historically and today. Thus, in navigating the inheritances of Roman Catholicism for present and future needs, Gebara comments that, "although we continue to swim in a sea of uncertainties and doctrinal debates, it is still possible to find a way that differs from that of classical Greek or Thomistic philosophies."[23] She offers her readers a new ecofeminist epistemological framework or theory of knowledge. This framework is grounded in *experience* through bodies, in place and time. It is a contextualized epistemology.

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[21] Ivone Gebara, *Longing for Running Water* (Fortress Press, 1999), 3.

[22] Ibid., 16.

[23] Ibid., 48.

Gebara's framework is limited and interdependent; it is dynamic and non-linear; it rejects the separation of body and spirit; it is mediated and enhanced by gender and our embodiment; it is passionate and polyphonic.[24] In it, Gebara affirms knowledge through *and* of the body *within* a highly interdependent, relational worldview. She offers an epistemology rooted in embodied relationships and grounded in localities that are part of the "Sacred body of the cosmos."[25] Knowing in this mode is a complex process, not merely linear causality. It instead espouses a "complex causality," to use a term from modern physics that describes non-linear and emergent outcomes from complex systems of relation.[26] The relationships and complex systems, the dimensions of our world like gender, race, class, and ecology, are constitutive of our constructed realties and knowledges. As such, it is important to recognize their role in the processes of knowledge production. In other words, consideration of one's gendered identity in the creation and expression of knowledge increases our knowledge. Likewise, attention to the particularities of one's local ecosystem, increases knowledge. Being contextual, Gebara's contextual epistemology does not claim or seek to absolutize present ways of knowing as universal, absolute, ahistorical.

Gebara's epistemology continues to challenge power imbalances and dominant epistemologies to meet the needs of our present, and its praxis of ecofeminist theology

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[24] Ibid., 48-65.

[25] Ibid., 53.

[26] Tina Grotzer, a professor at Harvard Graduate School of Education and a principle research scientist associated with Project Zero, EcoXPT, and EcoLearn, all of which are focused on pedagogy and learning in an era of climate crisis, emphasizes the importance of complex causality not only in teaching about the climate crisis, but crucial to informing how teach and understanding how students learn. Tina Grotzer in discussion with the author, October 2023.

transforming the realities of its engagement. By affirming that knowledge is produced in our bodies and their local contexts, Gebara's epistemology views "the lived context of every human group as its primary and most basic reference point."[27] Knowledge, in other words, needs to be accountable to particular communities and contexts, first, and then it can be broadened. I will attempt to limit the scope of my claims and conclusions throughout this dissertation, speaking primarily to what I have experienced in my life and through my studies as a Roman Catholic. Even so, the U.S. and RC contexts is quite varied and complex, and I do not anticipate the knowledge produced through my particular positionality to be judged apt by all who overlap in any number of these markers.

The thrust of this dissertation is pedagogical—that is, it is concerned with methods and practices of teaching. However, I hold that epistemological clarity informs and enables more strategic and effective pedagogy. Thus, I have foregrounded the epistemology to which I hold myself accountable throughout this dissertation. In the pages ahead I will compost RC embodied sacramentalism to inform an ethical pedagogy our contemporary era of climate breakdown. Thus my contribution to the dialogue Francis urgently calls Roman Catholics into will think with the Church's sacramentalism to think about how they might meaningfully inform how we teach human communities to better live relation with local ecosystems. Attunement to body and place will prove essential. I aim to break down the absolutist, androcentric, and extractive entanglements with the sacraments themselves in order to re-inhabit sacramentality following the green sisters and Gebara's ecofeminist epistemology.

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[27] Gebara, *Longing for Running Water*, 61

PRECAPITULATING THE HEAP AHEAD

The context in which this dissertation is written and the horizons in relation to which it is imagined shape the content of the first chapter. Chapter one will critically explore the geological conception of the Anthropocene. The array of issues and unknowns resulting from anthropogenic climate crisis implies that confronting the future requires coalitions, and a multitude of flexible and responsive approaches. Thus, while the Anthropocene will remain an important, but limited, name for our contemporary geological timescape, I will also recount arguments for a number of its many alternative names and conceptualizations: the Capitalocene, the Chthulucene, the New Climatic Regime. This process will hopefully illuminate interventions that I find necessary in addressing the climate crisis. These names layer upon one another to mark important distinctions regarding the different responsibilities of various groups for the climatic breakdown that differently impacts many peoples in unique and severe ways. In setting the stage for contemplation of ethical pedagogy with the RC sacramental tradition, the Anthropocene is marked also by Roman Catholicism—a Catholocene.

Chapter Two argues that Roman Catholicism bears a unique responsibility for the planetary degradation, easily traced to the "Doctrine of Discovery." Simply rendered, in the Doctrine of Discovery the "universal" RC church blessed the colonization and extractivism of "the New World" in the 15th century. RC theologians, ethicists, and scholars then set the stage for reconstruction of the tradition in order to reckon with the unethical patterns and practices inscribed upon the faith. In the long wake of the colonization and extraction caused by the Doctrine of Discovery, Francis deals directly with the issues of climate change and demands our recognition of responsibilities,

appropriately differentiated, and in so doing intensifies the heat on RC in the composition of this dissertational heap.

In chapter three, I turn my attention from the horizon as variously named to the compost heap in which I am situated: that of my RC inheritances. I recount a necessarily limited history of ecological and sacramental RC thought. This history will name and recognize the prophetic and nourishing threads of RC sacramentality, especially in relation to the creation, while also facing the troubling inheritances of the RC tradition, most notably instantiated in patriarchal theologies and substance metaphysics, which represses the relationality the climate crises are making undeniably evident. In our polarized present, the logics of purity and the cultural practices of cancellation make it difficult to hold the tension of RC androcentrism and extractivism with its indubitable liberatory and redemptive potential, a potential especially markedly situated in sacramental theology and practice. Many might ask, can RC tradition be extended without reinscribing its deeply rooted historical harms? Can nourishing and healing elements of the faith tradition be separated from the pollutants which participated in their production? Though I do not aim to answer such questions definitively, I hope that in attuning us to those problems I might make progress in working with this multifaceted tradition that has proven unlikely to dissipate. In composting the good and the bad (and discarding that which cannot be composted), I aim to state explicitly some of the necessary directions in which the RC theology and practice need change *if* reclaimed.

Wrestling with powerful and violent histories propagated by a highly hierarchical, patriarchal RC Church requires a reckoning with the realities of power, tradition, and change. *Nouveaux* theologians like Yves Congar and contemporary theologians like

Terrance Tilley guide the fourth chapter, which considers tradition as the living transmission, adaptation, and growth of belief in thought and practice. As such, the non-dogmatic, historically contextualized approach of these *nouveaux* theologians to the tradition not only opens the door to reimagination of tradition and theology by those living out the tradition, but also necessitates the adaptation and response of the tradition to the radical planetary and social changes—ever nouvelles!—marking the ecological crisis.

The lived expression and practice of RC tradition has ever been grounded in the liturgical practices—in communion, prayer, and sacrament. Sacramental theologians, such as Siobhan Garrigan, in conversation with such social and political theorists as Hannah Arendt and Jurgen Habermas, argue that the theological capacity to ground the community through sacramental expression can render the lay communities powerful in defining tradition in a dynamic that troubles and calls into question the centralized, hierarchal, and patriarchal authority of the RC Church. I will further argue that in similar but inverse fashion the communicative power of communal, sacramental worship ethically shapes individuals and communities, and can be understood as pedagogically efficacious and responsively leveraged to concerns of the Anthropocene.

At this juncture, in chapter five, I turn to the fertile ground of sacramental theologies. These span the thirteenth and twentieth centuries. These periods are linked not only in the development and resurgence, respectively, of Scholastic and Thomistic theology, but also in their being periods of tremendous socio-cultural and historical change. In attending to these theological arguments about the teaching work of the sacraments, I will argue that this thread of embodied and material pedagogy, working on

levels individual, communal, and "universal" (according to Roman Catholicism), is an important one to draw upon in the re-composition of the Anthropocene.

In the sixth chapter, I attend to and turn in to the RC heap my markedly American perspective. To adhere to the relational and coalitional ecological theology for which Francis calls, I broaden my consideration of sacramentality by incorporating Walt Whitman in his non-RC cosmological spirituality. Through reading Whitman as having written poems that are scenes of moral instruction, I seek to build coalitions beyond the strictures of RC. Reading carefully his poetry, especially *This Compost*, with guidance from other non-RC thinkers like process theologian Catherine Keller, eco-poetic Whitman scholar M. Jimmie Killingsworth, and Whitehead-influenced political theorist Jane Bennett, I lift up the notion that attentiveness to the body and, through the senses, to the earth is essential for living well and ethically in the unfolding s/cene of ecological crisis. Notions of ambiguity and multiplicity must remain central to an ethic for the new era; Whitman brings these notions to life through his poetic expression of his visceral, embodied reactions to the earth's power to compost, to resurrecting beauty from human destruction. The resurrective processes of the earth, composting, draws us to recognize our mutual nonseparability and entanglement. Whitman's poems, like the sacraments, are scenes of embodied ethical instruction. And we need such scenes to attune us to our planet in crisis, to the present s/cene.

The compost heap accumulates, the decomposition continues, and the compost is never complete. So too, the traditions of RC are handed on, often changing, however subtly, to meet the needs of each era as interrelated with all of creation. Roman Catholicism, in its breadth and dynamism, indeed in its *catholicism*, contains the tools for

critique and for regeneration. This era of existential climate crises demands broad coalition building. The insights regarding the formation of human persons and communities through embodied, sacramental pedagogies are uniquely and adeptly attuned to the fullness of creation that is currently needed. Humans need to attune ourselves in all our senses to the emerging needs of the planet and our fellow creaturely inhabitants. The composted sacraments are a model for integrating the salvific and spiritual needs of our full humanity with a care for divine immanence in all of creation. And so, I offer a composted version of ecological sacramentality in conversation with planetary realities, with Whitman as my bard for the composted Catholocene.

The Compost Collect:

Never alone
I am created enfleshed
grounded in relation
to the Creator
to the earth
to my bodies, my flesh
to communities of humans,
plants, animals, and
ecosystems
stunningly complex
porous and responsive

societies move and shape me
as they are moved and shaped by me
to these communities I am accountable

to approach always
with the love and care
owed to sisters and brothers
Created by God
filled with Spirit

to recognize my limits
proceed with humility
and curiosity
open to being molded
in every way
by our mutual Revelation

to *know*
sacramentally

ecosystems and the multitudes who inhabit them
humans, plants, animals,
soils and water systems are
suffering
out of balance
struggling to adapt to
climate breakdown.

migration, undue competition, violence, and extinctions
ensue
no ecosystem, nation-state, economy, or social status

escapes this human-made climate crisis

grief and despair
are borne from this suffering
that knows no boundaries

with the climate
I breakdown
I am porous
I decompose
I compost
    with heat and moisture
    turning
    intermingling
    spurring one another's
    decomposition
    becoming-with
    anew
the resurrecting Spirit
sacramental,
relational reconstitution

"Behold this compost!" [28, 29]

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28 "The Collect" is the name for the prayer that concludes the "introductory Rites" of the Roman Catholic Mass; this prayer-poem is envisioned as a calling together of the ideas enfolded in this dissertation to set in motion my theological reflection.

[29] This quotation from Walt Whitman's *This Compost*, which has served as inspiration and guide for this dissertation, also invites others into the composting ruminations and process. The imperative "behold" though archaic is familiar to Roman Catholics, as it is the command given in the Eucharistic Celebration: "Behold the Lamb of God." This "behold" moves from charging the congregation to contemplate and see the Eucharist, to composting those very substances into one's own flesh and blood by through consumption and digestion. It is in this sense and with this hope of composting together that I use the term here at the conclusion of the collect.

CHAPTER ONE: ALTER-S/CENES

THE ANTHROPOCENE, ITS LIMITATIONS, AND ALTERNATIVES

> This sister[1] now cries out to us because of the harm we have inflicted on her by our irresponsible use and abuse of the goods with which God has endowed her. We have come to see ourselves as her lords and masters, entitled to plunder her at will. The violence present in our hearts, wounded by sin, is also reflected in the symptoms of sickness evident in the soil, in the water, in the air and in all forms of life. This is why the earth herself, burdened and laid waste, is among the most abandoned and maltreated of our poor; she "groans in travail" (Rom 8:22). We have forgotten that we ourselves are dust of the earth (cf. Gen 2:7); our very bodies are made up of her elements, we breathe her air and we receive life and refreshment from her waters.
>
> Pope Francis, *Laudato si',* paragraph 2.

> The chthonic ones are not confined to a vanished past. They are a buzzing, stinging, sucking swarm now, and human beings are not in a separate compost pile. We are humus, not Homo, not anthropos; we are compost, not posthuman.
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> Donna Haraway, *Staying with the Trouble*, 55.

Pope Francis, in this, the second paragraph of his ecological encyclical, *Laudato si',* is unequivocal in naming that humans have caused great harms to the earth. Humans have degraded the soils, water, and air of the planet endangering many ecosystems and the innumerable forms of life those ecosystems support. Francis marks the earth as abandoned, maltreated, poor, foreshadowing his resolute concern for the poorest, most disenfranchised people. In Roman Catholic Social Teaching, this has been known since 1968 as the "preferential option for the poor."[2] The late Pope Francis follows Francis of

[1] Pope Francis is alluding to "Sister Mother Earth" from St. Francis of Assisi's *Canticle of the Creatures*.

[2] Among early uses of this phrase was the 1968 letter to Latin American Jesuits from Pedro Arrupe, then Superior General of the Society of Jesus.

Assisi in praising God through "Sister Mother Earth"; in doing so Pope Francis' genders the earth female suggesting, though not explicitly stating, that humanity's harm and abuse of earth is intimately tied to the suffering of women.[3] This connection has long been a central contention of ecofeminists: the degradation of earth has disproportionately harmed women, poor communities and communities of color, and the exploitation of these groups has facilitated the degradation of the long feminized Earth. The third chapter will elaborate further the historical and symbolic disregard for women and conjointly for the material world. The Medieval Francis also foreshadows in the above-quoted paragraph from *Laudato si'* the interrelatedness of all things that the encyclical strongly espouses. In the degradation of the Earth humans have harmed themselves and other humans, present and future.[4]

Throughout *Laudato si'* Francis refers to the present state of the planet and global affairs to which he is responding as "the ecological crisis."[5] He takes a sociohistorical approach to climate in *Laudato si'* and its "update" *Laudate Deum*, aligning with natural and social scientists to affirm that the crisis is one of humans' making, disproportionately certain groups humans (for instance, in its original moments, Euro-American, white men of the capitalist class). According to Francis the crisis results from multiple causes, including excessive and misguided anthropocentrism; "unchecked human activity",

[3] Though there is suggestion through this engendering, I doubt that Pope Francis intended an eco-feminist reading of his citation and use of Francis of Assisi… though Pope Francis regularly reminds that everything is interrelated.

[4] It is worth noting that the interrelation of all things also teaches that so too with the abuse, harm, or degradation of any fellow human, group of humans, creature, or environment, each of us is so harmed through our interrelation.

[5] See for example, Francis, *Laudato si',* paragraphs 15, 63, 101.

especially those destructive and extractive economies; pollution caused by the consumption driven "throwaway culture"; and the domineering patterns of the "technocratic paradigm."[6] Francis details a complex multiplicity of causal factors that continue to produce the emergent ecological crisis. He thus names the crisis as "environmental, economic, and social."[7]

Without a doubt, Francis is right in naming the present state of the globe as one of ecological crisis. He is also wise in pointing towards the complex of systemic causes from which this crisis has emerged. Francis writes, "Given the complexity of the ecological crisis and its multiple causes, we need to realize that the solutions will not emerge from just one way of interpreting and transforming reality."[8] This chapter will share multiple ways of naming and their attendant interpretations of the emergent ecological crisis: the Anthropocene, the Capitalocene, the Chthulucene, and the New Climatic Regime. The unique conceptions of the crisis will speak to different contributing causes of the crisis and thereby together illuminate some of the layers and complexities of the crisis and entrenched systems (symbolic and material) in need of composting and remediation. Before exploring what these namings, or s/cenes, uniquely illuminate about the present ecological crisis, I will address the practice of naming the ineffable and elusive, which is a potent theme in Christian theology as well as for present ecological consciousness.

GEO- AND THEO- LOGICAL NAMING

[6] See, Francis, *Laudato si'*, paragraphs 115-136; 4; 20-22; 106-114.

[7] Francis, *Laudato si'*, paragraph 138.

[8] Ibid., paragraph 63.

To name, within the theological tradition, is to participate in God's creative process. It is a mark of humanity and it enables humans to establish relationships from their own positionality with linguistic and conceptual adequacy. The process for naming and speaking about God theologically has a rich history.[9] Traditionally three methods for speaking about God have held prominence.

First, there is the *via negativa*, or the negative way that is grounded in the incomprehensibility of God. This way of speaking about God names what God is not. It focuses on humans' inability to know or comprehend the transcendent divine. Elizabeth Johnson, a Roman Catholic vowed religious and theologian, writes of the *via negativa,* "this sense of an unfathomable depth of mystery, of a vastness of God's glory too great for the human mind to grasp, undergirds the religious significance of speech about God."[10] So this negative way often accompanies a positive path.

The second mode for speaking about God is the affirmative method. This way holds that God possesses perfections prior to all creatures. As such, any perfection, such as goodness and wisdom, found (in a limited way) in a creature can also legitimately be affirmed of the divine. Further, those qualities as witnessed in creatures are predicated of God.

The third method for speaking about the divine is what Johnson in *She Who Is* (1992), adapting the medieval language, calls "analogical," or what the earlier Mary Daly, a former Catholic and radical feminist philosopher and theologian, in *Beyond God*

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[9] This brief recollection of the three prominent ways of speaking about God relies on Mary Daly, *Beyond God the Father: Toward a Philosophy of Women's Liberation*, 2nd ed (Boston: Beacon Press, 2015), 36-40; and Elizabeth A. Johnson, *She Who Is: The Mystery of God in Feminist Theological Discourse*, Twenty-fifth Anniversary Edition (New York: Crossroad Publishing Company, 2017), 108-125.

[10] Johnson, *She Who Is,* 109.

the Father (1973) calls the "way of eminence." This third way is not completely unique from the above two, but is succinctly relayed from early, classical theology by Johnson as a process that "involves a threefold motion of affirmation, negation, and eminence."[11] The first movement of this analogical process affirms a positive, cherished attribute of God; second, that same attribute is negated, for what humans are able to know of God is necessarily flawed due to our creaturely limitations. Finally, the word or conception is predicated of God and eminently affirmed, though in a way that exceeds our ability to comprehend or understand. Thus, with this final movement, the words used to speak about and name God become only gestures towards the divine, holy mystery.

Elizabeth Johnson and Mary Daly have each recounted these three modes of God-talk. Johnson affirms the analogical approach. Grounded in this approach and the historical "tradition of the many names of God result[ing] from the genuine experience of divine mystery", she argues for the need for many names, a polyphony of names gathered from a broader, more inclusive swath of unique perspectives that each individual brings.[12] Like Ivone Gebara's theology discussed in the introduction, Johnson's basis grounds knowledge of the divine and the process of developing names for God in an experienced, embodied epistemology. For Johnson, the diversity in the creation offers "fragments of beauty, goodness, and truth" that uniquely point toward "the one ineffable source and goal of all."[13]

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[11] Johnson, *She Who Is*, 117.

[12] Ibid., 122.

[13] Ibid.

Daly, writing before Johnson, is more critical in her approach, which preceded her later exit from theology and Christianity altogether. *Beyond God the Father,* Daly's 1973 philosophy for women's liberation and women's religious community, condemns the patriarchal Roman Catholic Church. She argues that

> [i]n order to understand the implication of this process [or method of liberation] it is necessary to grasp the fundamental fact that women have had the power of *naming* stolen from us. We have not been free to use our own power to name ourselves, the world, or God. The old naming was not the product of dialogue—a fact inadvertently admitted in the Genesis story of Adam's naming the animals and the woman. Women are now realizing that the universal imposing of names by men has been false because partial. That is, inadequate words have been taken as adequate.[14]

To name is to have power and perspective. To name and have that name recognized is to fully participate in human community; and in naming humans reflect God's creativity. Daly argues that the power of naming has been stolen from women, denying women's full humanity. Further she makes clear that any naming that occurs without the insights of women is partial and inadequate.

Johnson, in addressing "the mystery of God [who] undergirds the whole world," writes of the living God as "Spirit-Sophia," drawing together the traditional name for God as God appears and moves in the world of human experience, *Spirit*, with the feminine symbol of divine wisdom, *Sophia*.[15] Johnson explicitly wrestles with the ecological crisis as an historical mediation of the presence and absence of *Spirit-Sophia* in and through the natural world. Though not perfectly homologous to naming and describing God, the process of naming the emerging era of ecological crisis is an attempt

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[14] Mary Daly, *Beyond God the Father*, 8. Emphasis original.

[15] Johnson, *She Who Is*, 131-2.

to understand its causes and likely futures. As I write, in the third decade of the twenty-first century, potential names for the emerging period endeavor to prepare us for and predict the wildly unknown and potentially unfathomable changes that have begun to impact what humans have comfortably understood as largely stable climates and ecosystems. Given the enigmatic complexities of the unfolding crises, adequacy cannot be presumed of any name given to it. There could be as many potential names as there are systemic causes for the era of climate breakdown (Capitalocene, Plastocene, Plantationocene…).

Drawing upon insights from the theological problem of naming, the use of many names will prove proper for us in considering the present and emerging timescape, as Johnson advises. A multiplicity of names will help humans to understand and adapt to the complications of the planetary ecological crisis, as well as the concomitant social, cultural, economic, and political crises that will ensue locally. Together, multiple names for this era of climatic breakdown can offer nuance and complexity to aid in the composting of systems that caused harmful imbalances and inspire appropriate adaptations. This theologically informed approach to naming recognizes the inherent limitations of any one name, human conceptualization, or understanding.

The theological problem of naming God, who is transcendent and immanent, with whom humans experience meaningful relations and who is far beyond our comprehension, and who is not of this world and has real material relations with it, intriguingly maps onto the climate crisis. The geological era we now inhabit is likewise difficult to conceptualize and name. Atmospheric changes and climate-related data are challenging to grasp, even though we have developed the expertise and tools to collect

the indicative data; thus experts only point towards the impacts of their understanding because they cannot with certainty or fullness predict them; and so many experience daily the impacts of climate breakdown, while having no access to, knowledge of, or name for the planetary changes they are experiencing. Such data is often garnered through processes of data collection that require intricate technologies. The resulting information that maps particulate matter is like the transcendent: beyond the normal range of human experiential phenomenon. More importantly, however, those who do most fully grasp what humans can understand through the most advanced sciences do not have themselves a full picture, because the emergent and causally complex nature of the ecological crisis is not fully predictable. Similarly, the local impacts will be unique to ecological, social, cultural, political, and economic ways of life that differ tremendously around the globe. The crises that the planet and its many societies will face are both transcendent and local—too much for any name or concept to fully hold.

Naming the unfolding era of ecological crisis with many names will continue to require adaptability from the communities who hope to establish new ways of living in new ecological realities. Doing so will require attention. The multiplicity of names and all that is conveyed through them only point towards some aspects of realities that will require new modes of attention. Those with the power and ability to name and affect change must continue to listen to those who might not have the power to offer names that reach a wide audience, but who attend to the daily needs of their communities. Daly's philosophy and her proposed women's community suggests "[t]he development of this hearing faculty [by women to hear and speak their own words] and power of speech involves the dislodging of images that reflect and reinforce the prevailing social

arrangements."[16] Listening to those who are disempowered and the perspectives they offer that challenge prevailing systems is essential in the development of new ways of living in community. Honoring a diversity of perspectives and how they name the unfolding era can aid in the establishment of social arrangements that are more responsive to present and future needs.

Later I will detail conceptual names for the present that help to identify major causes and issues needing to be addressed. First, I wish to make a few methodologically important points. These names are not the names presented by the marginal or even the most impacted. They are names offered by academics who are in many ways powerful and privileged. Their offerings are only a few and are merely a preliminary collection of worthy names to consider. In line with Daly's radical feminist perspective, my hope in sharing these names is to cultivate creative listening to multiple voices and to encourage all to gather in local communities to name and nurture new realities. Daly's narrow scope, responding to its patriarchal and misogynist historical context, proposed listening exclusively to women. In responding to the existential ecological crisis and to learn how to better flourish it, I propose we broaden that scope to include listening to all marginalized and disempowered perspectives. Daly writes, "Women will free traditions, thought, and customs only by hearing each other and thus making it possible to speak our word. This involves interaction between insight and praxis, not in the sense of 'reflection' upon 'social action' (a false dualism), but rather in the sense of a continual growth, flexibility, and emergence of new perceptions of reality—perceptions that come from

[16] Daly, *Beyond God the Father*, 10.

being where one is."[17] Naming realities from and listening to the perspectives of those grounded in particular communities has the potential to cultivate new perceptions of reality and the ability to respond to and grow into them.

There is much in a name and much to name—perhaps too much. Nevertheless, taking the insights from the Christian theological tradition of naming and critical feminist reclamations of it, the remainder of this chapter will offer four unique names for the present era. Folding them into the heat of the compost pile, they will together decompose to offer perspectives on the non-separable crises of the present era. Four theoretical interventions that identify and respond to problematic assumptions that inform and perpetuate ways of thinking and acting that are partly responsible for the unfolding crises inform the four names I will elucidate. Additionally, these theoretical critiques importantly inform my proposal for ethical pedagogy to navigate the ecological crisis.

INTERVENTIONS

Four interventions are necessary to structure the inquiry going forward. These interventions stand as important correctives to injurious tendencies. Contemporary modes of critical analysis have pinpointed and thoroughly critiqued assumptions of Western thinking that have informed the global systems and relations that are in part responsible for unfolding planetary crises. Though they do not simply map onto the four conceptual names for the present era that this dissertation engages, they inform the conceptualizations and will be important to recall in relation to each.

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[17] Ibid., 11

i) Humanity's Hubris: The Fallacy of a Global Subject

The first intervention regards humanity's hubris, particularly in the modern and post-Enlightenment era. Enlightenment thinking that aimed at rationality and purported objectivity has stirred excessive self-confidence in humanity regarding the ability to understand, harness, control, and "fix" ecosystems and landscapes. Humans' hubris is both epistemological and technological. I argue that humans need more humility on all axes, especially in light of the unknowability of the process and outcomes of climate breakdown, which was in no small part a result of actions taken by humans because of that hubris. Queer theorists have for decades critiqued post-Enlightenment epistemological hubris. For instance, queer theorist Eve Kosofsky Sedgwick critiques "unexamined Enlightenment assumptions."[18] For Sedgwick and others, these unquestioned and dominant assumptions are based upon and reinforce dichotomies and hierarchies of the Western intellectual history. Queer theorists have demonstrated how categories, desires, and identities that are presumed natural and merely descriptive, are in fact non-stable and non-universal and are borne from particular positionalities, identities, and experiences. The hubris of the universal subject and the purportedly stable, objective truths developed in Enlightenment thought are destabilized and rendered more fluid and complex through the critiques of queer theory.

Notions of the subject, identity, and agency are vital to the development of queer theory as they were developed in relation to identity politics (and identity labeling, which Foucault so richly detailed in his historical genealogies of homosexuality and other

[18] Eve Kosofsky Sedgwick, *Epistemology of the Closet* (Berkeley: University of California Press, 1990), 8. Here Sedgwick is noting the unexamined Enlightenment assumptions in relation to the category of ignorance, its use, and relation to knowledge and knowledge production.

categorizations).[19] Since the Enlightenment, notions of identity and agency have relied on a sovereign subject who precedes, in some stable way, the external powers and influences of culture and society that said subject navigates. Philosopher and queer theorist Judith Butler challenges these in her groundbreaking 1990 text, *Gender Trouble*. Butler confronts the notion of identity markers as foundational to politics; they argue against the substantive "I" and for an understanding of identity as a signifying practice. Working in a discursive and signifying mode rather than an epistemological one, Butler, in their notion of performativity, opens up the space for agency through subversive repetition, thereby shaking the foundations of identity as fixed. As Butler writes,

> The critical task for feminism is not to establish a point of view outside of the constructed identities; that conceit is the construction of an epistemological model that would disavow its own cultural location and, hence, promote itself as a global subject, a position that deploys precisely the imperialist strategies that feminism ought to criticize. The critical task is, rather, to locate strategies of subversive repetition enabled by those constructions, to affirm the local possibilities of intervention through participating in precisely those practices of repetition that constitute identity and, therefore, present the immanent possibility of contesting them.[20]

Butler argues against the construction of a global subject, and for localized subversive performances and practices that contest fixed and naturalized notions of identity. Agency and action are possible in and through the recognition that identity is an "*effect*, that is, *produced* or *generated.*"[21]

Butler and Sedgwick have inspired continued critique of enlightenment ways of knowing that are grounded in a global subject, removed from the purported "objects" of

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[19] See, Foucault's *History of Sexuality* vols. 1-3.; *The Archeology of Knowledge*; *Abnormal*; etc.

[20] Judith Butler, *Gender Trouble: Feminism and the Subversion of Identity*, Thinking Gender (New York London: Routledge, 1990), 147.

[21] Ibid. Emphasis original.

knowledge. In this dissertation I will work against the imperialist and dichotomous ways of knowing that continue to exercise influence in the West and treat ecosystems and other inhabitants of the planet as objects to be used or dominated. The separations and power dynamics fostered by these ways of knowing have contributed in no insignificant way to the systems that fostered the climatic breakdown. Humility, relation, and mutual-construction need to ground pedagogies and epistemologies for the unfolding present, countering the strength of modern, Enlightenment human hubris.

ii) Colonialism and Capitalism: Undoing Systems of Domination and Extraction

The second intervention for the emerging era of ecological crisis demands ecological consciousness registered as socio-political and critique of modern geopolitics and capital. This intervention is largely informed by postcolonial theory. Postcolonial thought emerges from the boundaries of empires, from the societies brutally conquered by domineering, colonial geo-political forces. The insights from postcolonial thought connect the present to historical legacies and shortcomings in order to call into question the present inter-human distinctions that appear natural, but are in fact the legacies of colonialisms. As Mayra Rivera writes, "Postcolonial theory thus calls us to re-link interhuman differences to their history; it encourages us to see today's encounters in their relationships to other encounters, with other people, at other places and times."[22] Inter-human differences are marked by power and resource imbalances that resulted from a colonial world order that transformed into global capitalism.

[22] Mayra Rivera, *Touch of Transcendence: A Postcolonial Theology of God* (Westminster John Knox Press, 2007), 103.

Roman Catholicism has for centuries been a global force in colonizing most of the world. Papal blessings of the colonizers marked non-European cultures and people as inferior and in need of saving by colonizers. The RC Church has been central to extraction and movement of resources from the "Third World" or "Global South" to the "First World" or self-styled "civilized" nations. The distinctions between colonizer and colonized, the ravaging of the planet for scarce and valuable resources, and the imperial and nationalist discourses that have fomented in their wake continue to mark groups of people exclusively and oppressively along lines of gender, ethnicity, race, class, and power, and divide the world broadly between North and South; Old and New; First and Third. These divisions foreclose possibilities of encounter between subjects, groups, and nations. For, as Rivera writes, "Within imperialist discourses, however, these oppositions [between metropolitan subject/native, civilized/savage, developed/undeveloped…] must appear as natural, stable, and essential."[23] In creating those appearances, relation between these purportedly unique, distinct classes must be repeatedly repudiated.

In the present era of climatic breakdown, relational worldviews and broad coalitions of people that respect the subjectivity of each individual and group, will be necessary to collective thriving. The planet, its ecosystems, and climatic patterns are changing drastically and inter-human systems of relation—political, social, and economic—are necessarily changing as well. Postcolonial critiques of the seemingly fixed and essential distinctions between colonizers and colonized must be heeded to move us beyond the current realities and imaginaries that have fostered the exclusionary, hierarchical, and extractive relations among people globally. The concomitant models of

[23] Ibid., 107.

political nation-states and capitalist economics and modes of production, which are the legacies of colonialism, must likewise be refuted and transformed.

iii) The Fantasy of Fixed Ontologies and Inert Matter: New Materialist Renderings

In a similar vein that moves beyond the political and economic relations typically conceived as merely inter-human, a third intervention draws upon the insights of new materialisms that trouble the distinctions such as nonhuman/human, inanimate/animate, nonliving/living. Anthropologist Elizabeth Povinelli considers theories of power pertinent to the present climatic moment in *Geontologies*. Within a Foucaultian framework, she notes that power has for some time nearly exclusively concerned itself with power over life (and death). In an era of climate change and the threat it poses to all biological life on Earth, the drama in which conceptions of power have primarily played out—regarding control of life and death—now unfold in a stark new light given the existential threat of "Nonlife." She writes, "it is increasingly clear that the *anthropos* remains an element in the set of life only insofar as Life can maintain its distinction from Death/Extinction *and* Nonlife."[24] The concern with "Nonlife" arises from the ways in which geological and planetary forces seem to be responding to human interference in planetary systems and in doing so threaten the very existence of humans and many, if not all, other life forms on the planet.

Likewise, new materialists recently have deepened attunement to the real material of existence, matter itself, and processes of materialization in order to better study and

[24] Elizabeth A. Povinelli, *Geontologies: A Requiem to Late Liberalism* (Durham: Duke University press, 2016), 9.

conceive of material reality. The anthropocentrism of Western modernity, deeply caught up in humans' hubris, needs contestation especially in the era of climate change. To be clear, anthropocentrism has largely taken the form of unexamined androcentrism, and new materialist interventions should not ignore or supersede the urgency of redressing ongoing injustices of gender, class, and race.

Troubling and interrogating the distinctions between life and nonlife has the potential to expand the realm of care and concern that humans can factor into the creation of political, economic, and knowledge systems and notions of flourishing for the new ecological era. The unfolding era will challenge humans' notions of agency and the content of humans' concern; new materialist insights offer another important layer to destabilizing unquestioned categories and distinctions moving forward.

iv) Ecological Toll: Affect, Embodiment, and the Challenge of Being Human

Fourth and finally, in considering the drastic ecological and climatic changes underway and the difficult unknowns of the rapidly emerging planetary crises, the affective toll should not be abjured. When contemplating this human-made crisis and the ecological devastation wrought already, I personally vacillate between serious despair and tireless activism. In conversations with others about climate and ecological issues, we share affective responses of grief, despair, mourning, and alarm. Further, the rise of climate grief and ecological grief sessions offered by NGOs, and the emerging field of climate or ecological chaplaincy, add to this broad need. These responses syncopate, then they give way to waves of hope, awe at communities' ecological resilience, and activist commitment.

Activist Buddhist scholar Joanna Macy has counseled against disavowing despair and other troubling responses to what is being done to and in our shared world. She writes, "Pain for the world is not only natural, it is a part of our healing…The problem lies not with our pain for the world, but in our repression of it."[25] Macy and her companions who developed "despair work" and "deep ecology work" have long argued that honest recognition, work on, and sharing of our innermost pain for the world, is an essential part in healing. This deep ecology work enables individuals and communities to develop deep and meaningful relationships of respect, awe, and love for the planet and its constitutive communities. Macy calls sorrow "the other face of love" and advocates for radical truth-telling from one's sorrow to create space for justice-oriented communities wherein power to activate changes in the world becomes a possibility.

While critical analytic capacities will be necessary to confronting the planetary crises, human affective attachments to places and things will be likewise crucially important to living and dying well on this radically changing planet.[26] Eve K. Sedgewick, especially in her writing on affect in *Touching Feeling*, argues for affective "reparative practices" that seek pleasure, can be filled with surprise, are fully embodied and affective, and are fundamentally ameliorative.[27] It is a remarkably distinct alternative to the dominant analytical, cerebral hermeneutic of suspicion. Sedgwick thus proposes a way of

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[25] Joanna Macy, *World as Lover, World as Self: Courage for Global Justice and Ecological Renewal* (Berkeley, CA: Parallax Press, 2007), 90.

[26] There is a tremendous amount of inspiring work happening on this front. One such example is the BTS Center in Portland, ME, offers eco-spiritual workshops on ecological grief, kinship, refugia and more. See The BTS Center, "The BTS Center," accessed July 24, 2025, https://thebtscenter.org/.

[27] Eve Kosofsky Sedgwick, "Paranoid Reading and Reparative Reading, or, You're So Paranoid, You Probably Think This Essay Is About You" in *Touching Feeling: Affect, Pedagogy, Performativity*, 2. print, Series Q (Duke University Press, 2004), 123-152.

knowing and becoming that is embodied, affective, dynamic, justice-oriented, and generative. This dissertation is my hopeful truth-telling; it is my effort to learn from ecological sorrow, composting it through reparative practices of knowing into ecological hope and care.

Dialectic Between Naming and Interventions

The names for this present and unfolding space-time of ecological crisis intervene by drawing on insights from critiques distilled by queer theory, postcolonial theory, new materialisms, and affect theory, though not exclusively or exhaustively. These are four interventions I believe will be continually necessary to mind and develop in the turning, heating, tending, and ultimately composting traditions in which individuals and communities are rooted as they confront these crises. These are the registers that I will keep in mind as I tend to the compost heap that is my inheritance, Roman Catholic tradition, to find insights for ecological and ethical formation. The names for this present and unfolding space-time of ecological crisis variously intervene on these four registers, though not exclusively or exhaustively.[28]

In setting the stage for thinking about planetary becoming, the ethical formation of humans, and human response-ability to other earth beings, I hope naming "the Anthropocene," "the Capitalocene," "the Chthulucene," and "the New Climatic Regime" will offer possible "horizons" for our imagining. These horizons are not stagnant, however. They are ever-changing, as is each one of us. With each moment all that is,

[28] Consciously honoring these interventions opens up a host of questions I want to hold steady: What is our collective, planetary backdrop—or the constructed setting into which I aim to imagine ethical pedagogies? What will be assumed and shared? What must be critiqued and composted? What is the present geological moment? How does a conception of "temporality" require a "multiplicity of names" in concert to deepen our understanding/ecological imaginary of the unfolding s/cenes?

collectively and individually, comes into being anew, informed, inflected, impressed upon by influences great and small.

In offering a collection of names for the present era, they mark time as indissolubly enmeshed with matter and highlight how human conceptions of time have become estranged from earth-time. The messiness and human adherence of time is not limited to its being caught up in matter, for the world is enfolding the past into the present as it unfolds into the future. Through a critical, though limited, multiplicity of names for the planetary present and future, I hope the notions of time, self, and collective intertwined therein aid in decomposing and recomposing the reader's imagination amidst the planet's multispecies becoming.

THE ANTHROPOCENE AND ITS LIMITATIONS: A LITANY OF NAMES

"Anthropocene" most basically means "the age of the human." *Anthropos* is the Greek for "human"; the suffix "-cene" is usually understood as "era," particularly in its contemporary geological usage.[29] The Anthropocene is a proposed name for our contemporary geological epoch, until recently under consideration by the Anthropocene Working Group of the Subcommission on Quaternary Stratigraphy of the International Union of Geological Sciences. The International Union of Geological Sciences is the

[29] "Cene" however is multivalent. "Cene" comes from the Greek *kainos* and the Latin *recens,* both of which mean "recent" or "new" or "now." This temporal valence is one worth ruminating on as it could render the meaning of Anthropocene "recent-human-now" as Nils Hanwahr suggests. This can focus our attentions on the extremely recent and speedy transformations of humanity's relationship with the planet. See Merriam-Webster dictionary entry (https://www.merriam-webster.com/dictionary/-cene) as well as, Nils Hanwahr, "Marine Animal Satellite Tags" in *Future Remains: A Cabinet of Curiosities for the Anthropocene*, edited by Gregg Mitman, Marco Armiero, and Robert S. Emmett (Chicago: University of Chicago Press, 2018), 97.

leading association of geological experts who deal collectively with questions of stratigraphy, the relationship between sedimentary layers and geological time periods. As such, this group of geological scientists is considering whether anthropogenic planetary changes will be legible in future stratigraphic geological formations. The determination of whether or not the current epoch is appropriately named the Anthropocene is a question of human influence on the environment and the registering of that influence in the planet's depth of sedimentary layers. Paul Crutzen and Eugene Stoermer popularized the term in 2000 in the International Geosphere-Biosphere Programme.[30] Since then, use of the term has captured the minds of academics from many disciplines and has begun working its way into more popular discourse. In February 2024, the International Union of Geological Scientists voted against adopting the Anthropocene to the official scientific timeline of earth's history, though this vote was not unanimous or without contestation.[31] Nevertheless, the term will likely continue to hold sway, though among what groups of people remains an open question.

The term "Anthropocene" is familiar enough to many, and it has increasingly received critical attention in publications like the *New York Times* and *The Atlantic,* as well as in more ecologically-oriented outlets like *High Country News* and *The Guardian*. As I have been living for part of each year in an area of Colorado quite removed from academia, I have witnessed the increasing public awareness and acceptance of this term.

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[30] Paul Crutzen is a Nobel-Prize winning atmospheric chemist and Eugene Stoermer is a paleoecologist. Stoermer has been using the term since the 1980s, though it did not catch on until Crutzen joined him in forwarding it. See Paul Crutzen and Eugene Stoermer, "The 'Anthropocene'" in *IGBP Newsletter* 41 (2000) 17-18.

[31] See, Zhong, Raymond, "Geologists Make It Official: We're Not in an 'Anthropocene' Epoch," *The New York Times*, March 20, 2024, https://www.nytimes.com/2024/03/20/climate/anthropocene-vote-upheld.html.

My particular community, being that it thrives socially, culturally, and economically on outdoor activities, has an awareness of the concept though not a thorough familiarity with its meaning. Still, ways in which the Anthropocene has garnered a foothold in the imaginations of those concerned with the Earth's changing planetary systems, and humanity's role in those changes more trenchantly, is noteworthy. It is rather uncommon for academic jargon to make a swift impact beyond the academy, especially when the concepts in question have been under consideration by somewhat obscure working groups and subcommissions. The broader cachet of the Anthropocene, especially as localized in halls of geopolitical and economic influence, like the World Economic Forum and *The Economist*, suggests that the concept is here to stay. Regardless of official geological judgements about its scientific merit, the Anthropocene has, in other words, a rhetorical power that is itself worth considering and complicating. An important part of that rhetorical power is the manner in which it raises quite important and basic questions about the ways humans relate to or fit into local and planetary ecosystems.[32]

The scientific, geological articulation of the Anthropocene suggests objectivity. However, the concept is "itself far from neutral," as T.J. Demos rightly notes.[33] The underpinning assumptions of "the age of the human" are complex and troublesome. This dissertation's representation will attend to the assumptions and implications of the Anthropocene by probing the debates about what to call the present era. Like other scholars in the social sciences and humanities, my goal in critically assessing the

[32] Jason Moore marks the Anthropocene as "a worthy point of departure" for raising such questions in his introduction to *Anthropocene or Capitalocene? Nature, History and the Crisis of Capitalism* (Oakland, CA: PM Press, 2016), 2.

[33] T.J. Demos, *Against the Anthropocene: Visual Culture and Environment Today* (Berlin: Sternberg Press, 2017), 81.

Anthropocene and exploring alternatives to it is to generate greater awareness of the erasures of race, gender, class and other marginalized communities it inscribes as a name or periodicity. And despite its troubles, I will continue strategically to refer to this era[34] as the Anthropocene along with other proposed names, composting them together, in line with the multivocality for which I argue, recognizing its important rhetorical work.[35]

A second central concern for this critical approach to the Anthropocene is to elaborate the broad ecological, political, and social s/cene, or horizon, to inform and nuance my perspective regarding ethical formation of humans. Though economic and political concerns are important forces that shape the present moment, I argue that the ecological crisis, given its existential threat to human existence and planetary support of life as we know it, should be the primary frame through which we understand correlatively important forces that define our current moment and will continue to do so for the foreseeable future. The ecological crisis is the broadest-reaching ethical issue on the planet and, by its assertion and by its suppression, is fundamentally shaping our politics, social organizations, and material world. Bruno Latour, to whose arguments I will attend in greater detail below, succinctly places the ecological crises at the center of our politics; he writes, "climate-change denial organizes all politics at the present time."[36]

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[34] The challenge of temporally marking this planetary crisis, especially on the geological scale, is a tricky one—is this new temporal demarcation an era? An epoch? Event? Age? Moment? A boundary event (Donna Haraway, "Anthropocene, Capitalocene, Platnationocene, Chthulucene: Making Kin," *Environmental Humanities* 6 (2015), 160)?

[35] I am following Donna Haraway and T.J. Demos in taking this stance. I think Haraway is correct in writing "because the word is already well entrenched and seems less controversial to many important players compared to the Capitalocene, I know that we will continue to need the term *Anthropocene*. I will use it too, sparingly; what and whom the Anthropocene collects in its refurbished netbag might prove potent for living in the ruins and even for modest terran recuperation." Donna J. Haraway, *Staying with the Trouble: Making Kin in the Chthulucene* (Durham: Duke University Press, 2016), 47.

[36] Bruno Latour, *Down to Earth: Politics in the New Climatic Regime* (Cambridge, UK: Polity Press, 2018), 24. I also wish to note here that climate change is but one dimension of the Anthropocene,

In attending here to a set of alternative conceptions of our current era in a contrapuntal manner, I hope to illuminate the multiplicity of entangled elements—social, epistemological, political, economic, affective—with which our collective being, becoming, and ethical formation must reckon today.

The global impacts of anthropogenic climate change and the implications of the Anthropocene do not adhere to "commonsense" boundaries of nation states, or binary oppositions constructed historically between the so-called "living" and "nonliving." In the Anthropocene we are being forced to know our entanglements with other species, with planetary cycles and processes usually considered non-living/non-acting and manipulable. The Western sovereign individual is no longer a tenable construct in the Anthropocene. Stacy Alaimo brilliantly articulates key questions for the present study: "What can it mean to be human in this time when the human is something that has become sedimented in the geology of the planet? What forms of ethics and politics arise from the sense of being embedded in, exposed to, and even composed of the very stuff of a rapidly transforming material world?"[37]

In our entanglements, our porosity is undeniable; we are composting—de- and re-composing—ourselves and our communities, constantly with planetary neighbors near and far. We are so intimately entwined with the planet that as a species we are literally composing the present stratigraphic, sedimentary layers, which are in turn acting back

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perhaps the most prominent. The Anthropocene and climate change are not interchangeable and do not refer to precisely the same thing.

[37] Stacy Alaimo, *Exposed: Environmental Politics & Pleasures in Posthuman Times* (Minneapolis: University of Minnesota Press, 2016), 1.

upon us through eco-systemic processes. That which we in part compose on the planet in concert composes us.[38]

As noted already, this chapter amplifies some of the polyphonic multiplicity of names—Anthropocene, Chthulucene, Capitalocene, Plasticocene…—currently in use for understanding the uniquely anthropogenic planetary system of global climate change in order to differentiate responsibilities for those changes and to mark more precisely who is required to redress them at their own expense. This postcolonial socio-political register marks the unique agency of humans and recognizes the power imbalances within our global and local societies. In attending to this register, I do not aim to limit or diminish the unique non-human agencies who partake in planetary becoming but rather to highlight the important, and potentially liberatory, socio-economic and political nexus wherein the global north and its capitalist classes are held accountable for the ecological degradation they have wrought. We might consider the below framings of the current era as offering unique socio-political effects that together render a more complex and accurate picture of the horizon into which we must think about our collective becoming and ethical formation.

First, we will delve more deeply into the Anthropocene itself. What are the problematic assumptions and implications of the Anthropocene? If humans have become the primary geological force today, does not 'the Anthropocene' accurately convey that?

[38] These entanglements and "intra-actions" are finding explicit expression in the formulations of New Materialisms, one of the four interventions described previously. These New Materialisms will not be forwarded, per se, in this re-introduction of the Anthropocene; however, their influence looms in the background and will become even more explicit in later chapters.

The Anthropocene signals the historically recent role of humanity as a significant geological force. As such, "the age of the human" daringly strokes humanity's hubris, risking to intensify an anthropocentrism long at work. It threatens to psychologically, socially, and theoretically re-center the human at a time when we are recognizing that the historical placement of humans as the apex of creation has played no small part in fomenting ecological degradation through our unchecked hubris and greed. Biblically rooted logics of dominion in the Christian West have in modernity galvanized colonizing projects and extractive economics that we are now realizing have irreversibly changed Earth's planetary processes.[39] Naming a geological epoch (which tends to span 3 million years on average) for the influence of the human species, at least one especially imperial subset of it, could easily lead to a re-inscription of humans as the zenith for which all else exists.[40] Do we not need, at this moment, to recognize our limited, less than central role in planetary matters? Should a proper framing of the present moment focus on de-centering humans? Can we come up with a name for the moment that points to the

[39] The link between Christian dominion and the human extractive economies that drive Anthropogenic climate change are well rooted in the Doctrine of Discovery as articulated in Pope Alexander IV's *Inter Caetera* (1493) which condoned the colonization of the "New World."

[40] Peter Brannen, among many others, has argued persuasively in a number of articles in *The Atlantic* that the idea of the Anthropocene as an Epoch is ridiculous given geologic timescales. Given the very small timescale, the Anthropocene is at most an event, which only "appear as strange lines in the rock". He argues, "the idea of the Anthropocene inflates our own importance by promising eternal geological life to our creations. It is a thread with our species' peculiar, self-styled exceptionalism…This illusion may, in the long run, get us all killed." See "The Anthropocene is a Joke: On geological timescales, human civilization is an event, not an epoch" in *The Atlantic*, 13 August 2019. Though, by October of the same year, Brannen had reconsidered his strong position on the Anthropocene; see: Peter Brannen, "What Made Me Reconsider the Anthropocene Whether Our Civilization Is Transient or Not, Its Effects on the Living World Will Last Forever.," *The Atlantic*, https://www.theatlantic.com/science/archive/2019/10/anthropocene-epoch-after-all/599863/. Donna Haraway also argues against the Anthropocene as epoch; Haraway draws on Scott Gilbert to argue that it should be considered a boundary event, similar to the "K-Pg boundary between the Cretaceous and the Paleogene." See Haraway, "Anthropocene, Capitalocene, Plantationocene, Chthulucene: Making Kin," footnotes 4 and 5.

destructive impacts of many human cultures as something needing corrective? We can easily recognize how a notion such as the Anthropocene may perpetuate humanity's destructive relationship to the Earth that brought about the undesirable planetary conditions we now face.

One could consider humans' responsibility for the dawn of the Anthropocene a hopeful sign: if humans have the power to initiate a new geological epoch then we must have the technoscientific prowess to mitigate it! A hope-filled rendering of the potentials of human power named by "the Anthropocene" indicates that we have dramatically changed the shape of the planet through technoscientific innovations—geo-engineering projects, fossil fuel (and other) extraction and combustion, the development and detonation of nuclear bombs. The impacts of these human projects will register on the deep-time archive of geologic stratigraphy. The implications for the planetary changes that are resultant from the increased greenhouse gasses making up the atmosphere and the temperature rise, acidification of the ocean, and the jumpstarting of other planetary feedback loops may prove disruptive to our ways of life. (Though disrupting such a manner of living is exactly what we need!). We are experiencing and predict that we will continue to experience intensifying droughts and floods, and generally less-predictable and more intense weather and seasonal patterns. Humanity's ability to affect such changes in planetary systems signals our power to shape the planet. This positive spin on the Anthropocene leads to thinking that the planet only needs our technoscientific mitigation to ensure humanity's continued thriving and planetary dominance. The flourishing of other forms of human life and other creatures, particularly those that do not register centrally in our social consciousness, might or might not factor into this view.

The Anthropocene understood from the vantage of human technoscientific power caresses humans' hubris and supports continued approaches to "fixing" the warming planet that perpetuate extractive, destructive practices. What such a view does not take into account are the unpredictable results of our actions, the unforeseen feedback loops triggered by humans' geo-engineering interventions. We should not forget that we continue to learn new implications of humans' actions in the not-so-distant past: fossil-fuel extraction, river damming, nuclear detonation, fracking. The technoscientific perspective that offers a positive outlook on the Anthropocene re-centers the human and places too much confidence in our ability to predict the long- and short-term impacts of our interventions into planetary processes. For instance, the Marine Cloud Brightening Program researches the possibility of adding aerosols into the atmosphere to brighten clouds and reflect more sunlight back into space. Karen Orenstein, who directs the Climate and Energy Justice Program at Friends of the Earth U.S., "called solar radiation modification 'an extraordinarily dangerous distraction.'"[41] Even those working on the project are aware that the atmospheric engineering being developed and tested by the Marine Cloud Brightening Program could have "potential side effects that still need to be studied, including changing ocean circulation patterns and temperatures, which might hurt fisheries… [or reduce] rainfall in one place while increasing it elsewhere."[42] These researchers are aware that there are yet unknown dangers of their research, yet they are driven, in part, by a sense that if planetary conditions deteriorate

[41] Karen Orenstein as quoted by Christopher Flavelle, "Warming is Getting Worse. So They Just Tested a Way to Deflect the Sun." in *The New York Times*, April 2, 2024, https://www.nytimes.com/2024/04/02/climate/global-warming-clouds-solar-geoengineering.html.

[42] Ibid.

precipitously, their technological advances could save at least humans. Such perspectives, engendered by the Anthropocene narrative, also fail to displace the imperial power dynamics asymmetrically structuring what it means to be human. Such revelations should perhaps give us pause. Maybe we do not know what we are doing. Should we slow down and not over-excitedly pursue any rapid "techno-fixes" at large scale? Yes.[43] As a species (but especially those with economic and political power), humans could benefit from (more than) a touch of epistemic humility (a pedagogical aim of Christian sacraments, to which we will turn later).

On a socio-political register, perhaps the most troubling assumption of the Anthropocene is its "we:" a singular, globalized humanity which is causing the planetary changes "we" witness today and predict.[44] This is evident even in the above paragraphs where I write of "the human" and "humanity." But, not all persons or groups of people are equally responsible for the planetary changes we can directly link to human activities. Theological ethicist Christiana Zenner makes this point clear: "By describing planetary degradation as a species-wide phenomenon, the idea of the Anthropocene may be erroneously taken to mean that all human beings are equally responsible for subsequent environmental and social degradations."[45] Indeed the Anthropocene conceptually plays

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[43] See, Forrest Clingerman, "Geoengineering, Theology, and the Meaning of Being Human," Zygon: Journal of Religion and Science, 49, no. 1, March 2014, 6-21, and Forrest Clingerman, and Kevin J. O'Brien, eds. *Theological and Ethical Perspectives on Climate Engineering: Calming the Storm* (Lanham, MD: Lexington Books, 2016).

[44] I suggest that the undifferentiated responsibility posited by the Anthropocene's "we" is most troubling, because the Anthropocene, though a geological proposition has stronger rhetorical and social implications for the immediate future and for the purposes of this study.

[45] Christiana Zenner, *Just Water: Theology, Ethics, and Frew Water Crisis,* rev. ed., (Orbis Books, 2018), 122.

into the "sovereign individualism" so important to global capital and Western liberal democracy. This is an error I hope to redress by attending to dynamics of race, gender, and class that have differently contributed to planetary ecological crises.

Human environmental degradation affecting planetary systems is largely resultant from the structures of privilege established by the actions of a relatively small group of largely white, European males that are manifesting as climate colonialism.[46] This is true regardless of when one marks the dawn of the Anthropocene—a lively argument I will touch on below. Through systems of exploitative, imperial, and extractive economic pursuits, privileged individuals (many of whom were historically white, Western men) and their systems of empowerment and justificatory philosophical, theological, and legal frameworks have ravaged ecosystems around the globe for their own economic and social gain. The global, capitalist economic system that demands continual growth via material consumption is the legacy of the exploits of (largely and systemically) this group of people. Sustained growth and extractive economic practices have affected and continue to disproportionately and negatively affect expropriated people of color who have reaped very few, if any, of the benefits of these systems.

In the United States particularly, though not exclusively, the assumptions of the seemingly neutral scientific language employed in the geological framing of the Anthropocene belies the racism which underpins it. Kathryn Yusoff, a professor of "inhuman geography" at Queen Mary University, London, accurately details: "As the Anthropocene proclaims the language of species life—*anthropos*—through a universalist

[46] See, for instance, Andreas Malm and Alf Hornborg, "The Geology of Mankind? A Critique of the Anthropocene Narrative," *The Anthropocene Review* 1, no. 1 (2014): 62–69.

geologic commons, it neatly erases histories of racism that were incubated through the regulatory structure of geologic relations."[47] Throughout *A Billion Black Anthropocenes or None* (2018) Yusoff demonstrates how geology has engaged in designating properties—persons, lands, ecosystems—as sites for the extraction of wealth to benefit a few within colonial and capitalist economic systems. Yusoff thereby renders geology itself as "a racial formation from the onset and, in its praxis, as an extractive and theoretical discipline"[48] that has propagated a falsely racially-blind conceptualization of the Anthropocene. She writes, "If the Anthropocene proclaims a sudden concern with the exposures of environmental harm to white liberal communities, it does so in the wake of histories in which these harms have been knowingly exported to black and brown communities under the rubric of civilization, progress, modernization, and capitalism."[49]

The erasure of black and brown peoples and communities is one of many erasures that occurs through the universalist, singular "we" of the Anthropocene and the geo-logics which inform it. Race, gender, and class dynamics in particular have been notably leveled in naming the current era and its progenitors as humankind. Yet any worthwhile analysis of the anthropogenesis of the planetary crises will recognize the remarkably few persons or groups of people who are responsible for and have benefited from the most ruinous extractive and colonial economies. One important way in which these erasures occur in the geo-logics of the Anthropocene has to do with its anthropogenesis, or how the origin story of the Anthropocene is narrated. Yusoff notes how such origins are

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[47] Kathryn Yusoff, *A Billion Black Anthropocenes or None* (Minneapolis: University of Minnesota Press, 2018), 2.

[48] Yusoff, xiv.

[49] Yusoff, xiii.

"intensely political" and have as much to do with narratives of power as they do with the geologic objects themselves.[50]

Those concerned with theorizing the Anthropocene within the scientific community continue to debate what constitutes the correct "Golden Spike," the boundary marker of the Anthropocene (demarcating the new geological period from the preceding Holocene). Yusoff analyzes the scientific community's "three possible material beginnings of the Anthropocene subject: the Columbian 'exchange' and 'Orbis hypothesis' event (Lewis and Maslin 2015) (1610); the Industrial Revolution and James Watt's steam engine (1800); and the 'Great Acceleration' and nuclear isotopes from missile testing."[51] Yusoff deals with erasures of indigenous and black and brown people that the framing of each of these spikes perpetrates, each in turn.[52] She marks the assumed universal Whiteness of the undifferentiated "we" of the Anthropocene as one that erases the violence done to black, brown, and indigenous people not only through enslavement and genocide, but also through the "homogenization of subjective affects and material possibilities."[53] This racialized geo-logic is dangerous both because of the homogenizing violence, as well as the presumed Whiteness of the Anthropocenic subject—a "structural Whiteness of the Anthropocene" which Yusoff's billion Black Anthropocenes works against.[54] Yusoff makes clear the centrality of race, though

[50] Yusoff, 24-25.

[51] Yusoff, 24.

[52] Yusoff, 23-64.

[53] Yusoff, 50.

[54] Yusoff, 61.

unacknowledged, in the Western geologic of the Anthropocene. Her movement towards a billion Black Anthropocenes is not an alternative name for the Anthropocene but a strategy for recognizing that the idea itself as a product of "racializing assemblage[s]" of Western geology.[55]

In line with Yusoff's "redescription" of the Anthropocene, this dissertation's critical rendering will not claim that the Anthropocene is capacious or inclusive enough to name the geological timescape for those who have been erased or ignored in its very conceptualization. Instead, I here aim to pose challenges to the conception of the Anthropocene itself in order to more fully understand the time and space on the planet we now inhabit through a teasing of the rhetorical, geological, socio-historical, economic, racial and gendered layers that inform it. Like Yusoff, I will not posit a particular alter-s/cene, but will pragmatically retain the Anthropocene in chorus with other names. In order to do so and to complicate the notion of the Anthropocene, I will next turn to a few of the many alter-s/cenes that point toward other ways to conceive of the anthropogenic nature of the planetary ecological crises. Each of these alter-s/cenes foregrounds particular complexes that have substantially contributed to the alarming planetary changes now witnessed and predicted. With multivocal complexity, I hope that allowing these conceptions to de-compose and re-compose one another will offer us a more accurate and imaginatively rich horizon into which to think, construct, and conspire towards collective futures.

[55] Ibid. She offers this as a "redescription" in order to avoid making claims for Blackness within the Anthropocene which would simply perpetuate colonial practices.

ALTER-S/CENES

Many creative and critical theorists concerned with the anthropogenic changes to ecosystems and species around the planet have proposed alternative conceptions of the present era. The proposed alternatives: the Capitalocene, the Chthulucene, and the New Climatic Regime, were inspired by critiques that align with those articulated above: the undifferentiated responsibility among humans under the heading of the Anthropocene; the lack of attention to gender, race, and class across a wide array of present perspectives of climate change; the underdeveloped relationship between globalized capitalist economics, regimes of sociopolitical inequality, and the ecological crises; the stoking of humanity's hubris and delusional arrogance in its ability to provide a technological hack for the harms some humans have perpetrated; the lack of imaginative responses the name Anthropocene engenders in humanity particularly in relation to non-human coalitions. Proposed alternatives to the Anthropocene are many; they include (but are not limited to): "Misanthropocene," "*Man*thropocene" "Gyennecene," "Plasticene," "Ecocene," "Technocene," "Homogenocene," "Plantationocene," "Capitalocene," and "Chthulucene."[56] Next, I will outline the Capitalocene, the Chthulucene, and the New Climatic Regime as alter-scenes in order to highlight crucial interventions to the Anthropocene naming, to point to some of the more compelling paths forward, and to turn them together to more generatively compost together.[57]

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[56] See Demos, 85-100; see also Jason W. Moore, "Introduction" in *Anthropocene or Capitalocene? Nature, History, and the Crisis of Capitalism,* ed. Jason W. Moore (Oakland, CA: CM Press, 2016), 6.

[57] Recall that in the theological tradition of naming humans participate and God's creative process. As such, and in a more explicitly religious register, one might consider these namings *altar*-s/cenes: ritualized, sacramental names that in their multivocality produce a plethora of embodied, relational, instructive scenes for the crises of the present moments. We might consider these s/cenes as imaginative,

Capitalocene

The Capitalocene is an important alter-cene or "halfway house" concept that moves towards a new synthesis adequate to the finite, relational, changing, material, planetary reality.[58] Though it is a concept that has been formulated differently by a number of scholars, depending on their respective renditions of "capital", including Andreas Malm, David Ruccio, and others, I will focus on environmental historian and historical geographer Jason W. Moore's crystallization, which I have found to be most thorough, convincing, and promising.

Important to Moore's conceptualization of the Capitalocene is his understanding of capitalism not merely as an economic or social system. He writes, "the Capitalocene signifies capitalism as a way of organizing nature—as a multispecies, situated capitalist world ecology."[59] Capitalism is not limited to human societies, for Moore; instead, its reach incorporates planetary beings and ecosystems. Hence, in *Capitalism in the Web of Life*, he devotes a great deal of attention to theorizing capitalism in relation to the *oikeios*, to the process of life making. The *oikeios* names, for Moore, "the creative, historical, and dialectical relation between, and always also within human and extra-human natures."[60] Thus Moore asks his readers to understand capitalism as a "*world-ecology*": capitalism

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ritual spaces to engage, creatively and iteratively (and alternatively) with the hope of better attuning modes of response to our relational, earthly becoming.

[58] Moore, "Introduction", 6.

[59] Ibid.

[60] Jason W. Moore, *Capitalism in the Web of Life: Ecology and the Accumulation of Capital* (London: Verso, 2015), 35.

organizes nature and is itself a product of certain material-environmental and species relations. The multiplicities of relations that might always be present are uniquely configured by capitalism to foster a certain kind of mutually-informed becoming on (and with) this planet. Such a conceptualization recognizes the dialectical and generative, not to mention precariously fragile, relations between humans and the "web of life."

One of the driving elements to Moore's analysis is his move beyond Cartesian dualisms, particularly that of Nature/Society, which dominates a great deal of environmental or "green" thought. In his theorizing of capitalism as structuring nature and structured by nature, he moves to a more interactive, interdependent, interpenetrating understanding of the actual relations of humans to the planet.[61] This is integral to his movement beyond dualisms and towards a dialectics. The introduction to Moore's text is entitled "The Double Internality: History as if Nature Matters." The work he does in this introduction is theoretically important to understand his project and his notion of the Capitalocene. "Double Internality," for Moore, is the dialectical movement of capitalism working *through* nature and nature working *through* capitalism.[62] This may not seem terribly important or interesting. However, if one thinks about environmental degradation, usually one thinks about how humans and capitalism (and colonialism, racism, extraction…, I would add) have destroyed or worked *through* nature. Rarely does one consider how nature has worked *through* capitalism.

[61] Though Moore does not use the terminology of "structuring and structured," I am choosing to in order to mark what I perceive as alignment with Bourdieu's conception of *habitus*, which is conceived of as structured and structuring. See, Pierre Bourdieu, *Outline of a Theory of Practice* (Cambridge: Cambridge Univ. Press, 1977).

[62] Moore, *Capitalism*, 1.

Nature, especially in the west, has historically been conceived as external to Society—in capitalist economics it has literally been an "externality"[63]—and generally Nature is seen as an inanimate tap and/or sink which Society or the economy can use as best suits it.[64] Society and capitalism have always worked *through* Nature; green thought most often considers what Society has done to Nature in conjunction with what Nature has done for Society. These are inheritances of Cartesian dualistic thinking which Moore stands in a long line of eminent thinkers pushing beyond.

Many feminists and ecofeminists in particular have powerfully indicated the violence of dualistic thinking to groups of people and to non-human forms of life alike (and at times by merging the two). For instance, in Val Plumwood's incisive critique of dualist thought in her *Feminism and the Mastery of Nature* (1993), "the concept of dualism is central to an understanding of what is problematic in the attempt to reverse the value both of the feminine and of nature"[65] she makes clear that the Nature/Society dualism has also been gendered, pulling the rug out from under the clean dualisms of much Eurocentric male thought. Indeed, such a binary is undone by its very own gender dynamics. I argue that these insights should be more meaningfully incorporated into Moore's work and our understanding of the present era more generally. Nevertheless, the

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[63] In economic terms, an externality is something that perceived as an impact of economic, commercial, or industrial activity that is not factored into the costs of that activity/service/product. The effects are considered to be outside of the economic calculus as arbitrarily construed by those in power.

[64] Moore rightly notes that "the view of Nature as external is a fundamental condition of capital accumulation" which is in turn the foundation of the greatest social inequities we witness today as well as the planetary degradation. See Moore, *Capitalism*, 2.

[65] Val Plumwood, *Feminism and the Mastery of Nature* (London: Routledge, 1993), 31. Gender does not hold theoretical weight in Moore's thought, though it is addressed at a few crucial moments. This is a red flag, though there are many points of intersection between his work and feminism, ecofeminism, gender theory, as well as critical race theory (also notably absent in Moore).

mutually-informing, "double internality" of nature and capitalism – articulated by Moore, as always already structured by, and structuring, one another – is an edge of the Capitalocene that is strikingly missing from most renderings of the Anthropocene.

The Capitalocene as theorized by Moore also specifies the historical context in which humans became a powerful force on a planetary scale: during an era in which globalized corporate capitalism flourished. This flourishing of capitalism was also premised on the "law of Cheap Nature," according to Moore (a law whose reign is quickly coming to an end). Capitalism thus flourished on "cheap food, labor power, energy, and raw materials."[66] The Capitalocene helps to name the system which has determined the values of these four primary elements of Cheap Nature, making possible the accumulation of capital by relatively few people. All of this is premised, since the long sixteenth century (roughly considered 1450-1640), on a "scientific and symbolic creation of nature in its modern form, as something that could be mapped, abstracted, quantified, and otherwise subjected to linear control."[67] Yusoff more pointedly adds that these are imperial and colonial, exploitative and extractive practices based in a racialized logic of material power and control. The ways in which nature and labor have been valued in recent centuries under capitalist logics helps historically to contextualize and specify some of the underlying issues that have created and perpetuate planetary instability and rapid degradation.

Drawing on its deep Marxist roots, Moore's Capitalocene sharply names the system responsible for producing and perpetuating planetary crises like climate change,

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[66] See Moore, *Capitalism*, 52-58, and 53, fn. 5.

[67] Moore, *Capitalism*, 86.

as well as devastation to local ecosystems through practices like mountaintop removal. T.J. Demos, a scholar of contemporary art, global politics, and ecology, appreciates how the Capitalocene thus differentiates responsibility between "low-level consumerist complicity" and the "structural responsibility" of "the agents of the Capitalocene—corporate and financial elites, petrochemical industry leaders, growth-obsessed pundits."[68] This kind of differentiated responsibility is absolutely necessary to any understanding of current area, however named. Responsibility for anthropogenic changes in planetary processes does not belong equally to all persons. Odd as it may seem coming from the head of one of the originary globalizing institutions, Pope Francis' environmental encyclical, *Laudato si'* (2015), likewise critiques the role of capitalism, the greed and technocratic powers it engenders, while calling for differentiated responsibilities in addressing the climate crisis.[69] Francis' emphasis on the necessary differentiation is born from the care for poor, vulnerable, and ostracized populations who are less responsible and in some ways less able to respond (due to systemic marginalization and lack of power within dominant systems of governance and economics) to ecological changes wrought by the planetary ecological crises. Incongruous as the coupling of Francis and Moore might seem—the pontiff and a historian/sociologist—such points of connection across differences in ideology, culture, and responsibility, mark the potentialities for coalition building the planetary crisis

[68] Demos, 55-56.

[69] Pope Francis, *Laudato si': On Care For Our Common Home*, 2015, especially paragraphs 52 and 170.

demands.[70] Differentiated responsibilities do not mean that some people are exempt from responding ethically to the changes occurring in their ecosystems. The situation requires concerted effort from a plurality of agents, even if the deck has been stacked in the asymmetric favor of an infamous 1%. The necessary abilities to respond in the present era are not adequately captured or addressed by either the name Capitalocene or the name Anthropocene. We need additional names; we need to develop supplementary modes of learning; we need to imaginatively cultivate and practice arts of attention. To think creatively through what flourishing looks like today and in the near future, we will turn to another alter-s/cene: Donna Haraway's "Chthulucene."

Chthulucene

The Chthulucene is Donna Haraway's creative "SF"[71] naming of "an ongoing temporality that resists figuration and dating and demands a myriad of names."[72] The deliberately ambivalent and multivalent "SFs" of Haraway's thinking proliferate from her "situated feminisms and speculative fabulations" to ever more creative and critical practices of thinking and writing in scholarly and creative modes. SF unfolds into string figures, science fictions, and speculative feminisms. In its continual proliferation, SF disrupts assumed knowledge and queers perspectives. SFs are not limited, however, to

[70] It is worth noting that Francis has not, to my knowledge, ever used the term "Anthropocene", nor any of the alternatives explored here.

[71] Haraway uses the figure of "SF" to blur disciplinary and genre boundaries. It stands for: science fiction, speculative fabulations, situated feminisms, science fact, string figures, speculative feminisms and more. SF signals a creative mode of engagement with storytelling, ideas, the planet, and each other.

[72] Haraway, *Staying with the Trouble*, 51.

imaginative alterities or fictional sciences, but includes science facts. Her capacious approach draws in many ways of knowing and demands they converse. In this spirit, Haraway approaches naming and understanding the present period. Her Chthulucene emphasizes kinship, "sympoiesis," and "symbiogenesis." Haraway forwards this naming as a "needed third story, a third netbag for collecting up what is crucial for ongoing, for staying with the trouble."[73] In so doing she seeks to tell a "big-enough" story that avoids the determinism or teleology, Man-Species exceptionalism or heroism for which she criticizes both the Anthropocene and the Capitalocene.[74] The Chthulucene sets out to lure humans toward imaginative alternatives to the modes of flourishing and that can sustain hope despite hegemonic economies of value, namely that of linear, accumulative capitalist progress—a narrative employment that cultural theorist Lauren Berlant would call cruelly optimistic.[75] Haraway performs and argues for the Chthulucene by conjuring mythical creatures and marveling at the ingenious cooperative unfurling of "oddkin," like coral reefs and octopi and arachnids. She captures the reader's attention by creatively muddling the disciplinary divides between science fact and speculative fabulation. Haraway's tentacular text implores readers to *think* in these urgent times and to explore connections and kinships that might be left otherwise unthought. The Chthulucene thus

[73] A third story to the Anthropocene and Capitalocene; Haraway, *Staying with the Trouble*, 55.

[74] These critiques are explicit in Haraway, *Staying with the Trouble*, 49-51.

[75] See Lauren Berlant, *Cruel Optimism* (Duke University Press, 2011). Berlant theorizes 'cruel optimism' as an attachment to or desire for an object/scene actually makes flourishing impossible; the relation itself, which is pleasurable, is thus a threat to that for which the person(s) are striving.

aims at and affirms "on-the-ground collectives capable of inventing new practices of imagination, resistance, revolt, repair, and mourning, and of living and dying well."[76]

Chthulucene is (etymologically) a combination of *khthôn* (in or under the earth) and *kainos* (the now-time), a time of beginning that names a "staying with the trouble," learning to live and die in response-able ways with humans' planetary interspecies kin.[77] Throughout her text Haraway focuses on practices of situated knowing that can sympoietically (making-with) live in the thick present by developing unexpected kinships. Through and in these kinships differing species can become-with (symbiogenesis) each other. The radically interdependent, relational outlook provided by the Chthulucene is a needed intervention which recognizes that humans, while important actors, are not the only or even the primary agents or actors—a strike against anthropocentric hubris. Haraway thereby moves beyond individualism and human exceptionalism by revealing the myriad of entanglements and interconnections amongst all "intra-active" and agentive earth-dwelling "critters."[78] The sympoietic and symbiogenetic proposal of the Chthulucene is one important counter to the "autopoietic," sovereign individualism that rules the day in modern, global capitalism.[79] It demonstrates

[76] A description of what Pignarre and Stengers do in their work with which she is connecting her theorization of the Chthulucene; Haraway, *Staying with the Trouble*, 51.

[77] Haraway, *Staying with the Trouble*, 2.

[78] Haraway draws on Karen Barad's notion of "intra-action" which Barad develops to reconfigure agency as it relates to space, time, and matter. This broad and inclusive understanding of agency is elemental to developing a more rigorous ethics as will be developed later. See, Karen Barad, *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning* (Durham: Duke University Press, 2007), 178-9.

[79] It is worth noting the juxtaposition of autopoietic and sympoietic systems. Autopoietic systems are conceived as closed steady, centralized, predictable systems that have self-created boundaries. Sympoietic systems are conceived as the opposite, they are open systems without boundaries, they are

that our entanglements go all the way down and all the way up—from the myriad makeup of our microbiomes to the abstract and powerful global systems that seem beyond the reach of any individuals. Importantly for the imaginary of the present composting of this text, Haraway declares that in the space-time of the Chthulucene "we are humus, not Homo, not Anthropos; we are compost, not posthuman."[80]

Compost indeed—we relationally assemble, decompose, and recompose through intra-action with other beings always in process, always becoming in the interstices of being.

An indispensable element of the Chthulucene, as Haraway develops it, is the insistence on cultivating an ethics of "response-ability."[81] This ethical heat is a stark contrast to the cold, cynical, apocalyptic, or techno-utopic mythos of both the Anthropocene and the Capitalocene. Cultivating response-ability requires developing "ecologies of practice" that embody new and sustainable modes of becoming with our interspecies kin. Alternatively, the Anthropocene and Captialocene turn away or turn in, either in despair or in finding technological fixes that enable human persistence, often without care or attention to other-than-human "ongoingness." For Haraway, the urgency of the boundary event that we inhabit—Anthropocene, Capitalocene, Chthulucene, or however the saying and unsaying will unfold—demands "multispecies ecojustice" that "can also embrace diverse human people."[82] Her slogan for the Chthulucene, "Make Kin

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unpredictable and have non-centralized, amorphous control systems that are externally and internally structured. See Haraway, *Staying with the Trouble,* 176 n13.

[80] Haraway, *Staying with the Trouble*, 55.

[81] Haraway, *Staying with the Trouble*, 34.

[82] Haraway, *Staying with the Trouble,* 102.

Not Babies!,"[83] identifies the process of making oddkin and collaborating with others bound to this earth as the most difficult and pressing task before our mammalian species. This is an active and creative task that eschews Anthropocenic and Capitalocenic despair or reliance on humans' technological and scientific solutions fixated only on human ongoing.

The Chthulucene is an expansive alter-s/cene, perhaps an amalgam-s/cene, that demands combination of or simultaneous thinking-with multiple alternative names for the present timescape. Haraway recognizes that each alternative brings an important diagnostic and prognostic perspective. Thinking with a multiplicity of diagnoses and prognoses is essential when assessing such entangled and complex systems and processes. Haraway models this in her persistent usage of "Anthropocene/Capitalocene" in her text.[84] She thus performs her prescribed sympoiesis, the need to "compose and decompose, which are both dangerous and promising practices."[85]

I will use these many names for the current moment interchangeably, non-hierarchically throughout this text, following Haraway, in order to resist the temptation to privilege the One Name. Given the ecological crises will require individual and collective praxis and action, I will now turn to Bruno Latour's approach to this era that is based in anthropology, science studies and ecological theory, as developed in *Down to Earth: Politics in the New Climatic Regime*.

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[83] Haraway's slogan here sits in stark tension with (most) RC thought and teaching regarding babies and reproduction. RC teaches that procreation is one of the primary purposes of marriage and children are viewed as gifts from God. Further, RC holds that any use of contraception is sinful.

[84] See, for example, Haraway *Staying with the Trouble,* 47, 55, 56.

[85] Ibid.

The New Climatic Regime

From the outset of *Down to Earth,* Bruno Latour schematizes the tumultuous nature of politics today. He argues that the political climate today is inescapably linked to the changes the actual climate is undergoing, largely at the hands of certain plutocratic human classes. It is worth noting that, as Christiana Zenner puts it, "One of the things that often goes unmarked in Anthropocene treatments is the assumption that climate change is a proxy for the Anthropocene."[86] A unique element of Latour's analysis is the move towards climate-specific referents, which is a noteworthy departure from the Anthropocene discourse.

As mentioned above, Latour argues early in this text that "climate-change denial organizes all politics at the present time."[87] This is far from how the majority of the public understands political organization, however. In the United States, I imagine more people, including environmentalists, would articulate political parties as organizing politics, or perhaps economics, or defense. Latour argues that climate-change denial is the organizing principle in politics today by linking it to the way in which truth and knowledge (or varying kinds of alternative facts) are peddled by journalists and politicians alike. The webs of information, verifiable or not, that intersect at many varying points can trap individuals and groups at nexuses with oddly skewed vantages of

[86] Christiana Zenner, Email correspondence between Christana Zenner and Patrick Kelly, email, May 2025.

[87] Latour, *Down to Earth*, 24. It is important to here emphasize that the New Climatic Regime is about socio-political impacts resulting from the climatic and ecological changes occurring on the planet. It is but another way in which the planet is shaping us, as much as we are shaping it.

the world. None are free from the entanglements of these social and political webs however disparate they might seem. As a result of the dubious information wars waged by politicians, multi-national corporations, and uber-wealthy individuals, there is an inability to communicate, understand, or face up to the crises that are nevertheless persisting, and into which humans are living with one another.[88]

Given the difficulties in communicating across difference in the New Climatic Regime, radical new modes of relating and communicating are needed. Latour argues that those who (correctly) accept the science of climate change, are indeed rational people, though their engagement with those who fail to accept the science of climate change is far from rational. These "rational" folks hold that the facts of climate change simply need to be presented cogently to "ignorant" climate change deniers in order to change the latter's political and ecological positions.[89] However, he makes clear that those who accept and those who deny climate change simply live in different worlds of alternative facts from one another (worlds which, however dissonant, are altogether complicit in the current climate crisis). Thus, Latour argues, "It is not a matter of learning how to repair cognitive deficiencies, but rather of how to live in the same world, share the same culture, face up to the same stakes, perceive a landscape that can be explored in concert. Here we find the *habitual vice of epistemology, which consists in attributing to*

[88] This section, concerned as it is with the politics of ecology in an era of climate denialism raises an important question about the utility of the Anthropocene localized in how it signifies in an era of climate change. Though I will not in this section answer or resolve the question, it is one that holds significant bearing on the ways in which we understand the current era and explicitly engage it in local politics.

[89] Ibid., 25. This point is constructively taken up by Kath Weston in her chapter "Climate Change" in *Animate Planet: Making Visceral Sense of Living in a High-Tech, Ecologically Damaged World,* (Duke University Press, 2017), with which I will more fully engage later in this dissertation.

intellectual deficits something that is quite simply a deficit in shared practice."[90] (It is worth noting that Latour is a few decades behind ecofeminists in forwarding these epistemological concerns.) Echoing the decades-old arguments of ecofeminists to be detailed in chapter three, Latour agrees that epistemology and practice are at the heart of our eco-social schemes of domination and exploitation. His emphasis on the deficit in shared *practice* is particularly striking, a point that will be developed below in relation to questions of ethical formation, sacraments, and ritual.[91] There is palpable resonance between Latour's point here and calls by Haraway and other ecofeminists to focus on developing the *ability to respond* to our interspecies kin and our ecosystems that we have irreversibly damaged. This shared outlook provides a point of connection from which broader coalitions, coalitions more open to creative compromise, might emerge.

The roots of the deficit in shared practice have a painful past. They are intimately related to the legacy of colonial and imperial projects that today take the forms of globalization and extractive economics. Globalization and extractive capitalism both subject local ecosystems, communities' well-being and livelihood to the whims of impersonal, abstract global economies. The tensions between the local and global are at the heart of the problem of shared practice. In Latour's analysis, the political era of the "New Climatic Regime" is defined by insecurity and precariousness that people feel due to climate-driven migrations and explosions of inequality. Latour's New Climatic

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[90] Latour, *Down to Earth*, 25, emphasis added.

[91] We should be aware of the dangers of developing shared practices that tend toward homogenization—for example, I could point to Pierre Bourdieu's conception of *habitus,* which is conceived of as having homogenizing effects. While noting the power of this concept descriptively, using it prescriptively to forward attunement to local and global ecologies hopefully would demand internal differentiation that resists homogenizing. Pierre Bourdieu, *Outline of a Theory of Practice* (Cambridge: Cambridge Univ. Press, 1977).

Regime recognizes the critiques of the Anthropocene as a conception, though he ultimately accepts and reframes it, unlike Haraway, who critiques and offers alternative names for and conceptions of the geological era. Climate-driven migrations and exacerbated inequalities demand two movements that seem contradictory in the modern era: "*attaching oneself to a particular patch of soil* on the one hand, *having access to the global world* on the other."[92] Latour complicates this binary by differentiating between "globalization-plus," which multiplies viewpoints and complicates perceptions with variants, and "globalization-minus," which is understood to convey a homogenizing, singular vision that usually serves elites only. He similarly bifurcates the 'local' and insists that this "problem of dimension, scale, and lodging" with which we must wrestle consists in the reality that "the planet is *much too narrow and limited* for the globe of globalization; at the same time it is *too big,* infinitely too large, too active, too complex to remain within the narrow and limited borders of any locality whatsoever."[93] This state of affairs is undergirded by the lack of shared practice, ethically speaking, and it elucidates the political and economic dimensions of the climate crisis.

In *Down to Earth*, Latour insists that we redirect our attention from "nature" (globalization-minus) to "the Terrestrial" (globalization-plus). He argues that this articulation would enable "a shift from an analysis focused on a *system of production* to an analysis focused on a *system of engendering*."[94] The latter, which is an engendering of terrestrials, has the benefits of recognizing dependency, distribution of power and agency

[92] Latour, *Down to Earth*, 12, emphasis original.

[93] Latour, *Down to Earth*, 16.

[94] Latour, *Down to Earth,* 82, emphasis original.

beyond humanity, and the development of appropriate responsibilities in the New Climatic Regime. His theorization of the New Climatic Regime does not reconsider the centrality of the human—he thinks this an unimportant debate, particularly with regards to politics—but does question the destiny of humanity, one that he conceives of the human being as intimately bound up with the earth and its systems.[95] Latour thus calls humans to be earth-bound, to return to the earth, to conceive of ourselves as "*terrestrials* (the Earthbound), thus insisting on *humus* and, yes, the *compost* included in the etymology of the word 'human.'"[96] He hints towards our being bound together, composting with the planet into new ways of becoming. This will require some terrestrial (and socio-political) heat and uncomfortable proximity as we turn and turn again our politics and practices to better attune to one another and the planet.

Thinking of ourselves as terrestrials can have the benefit of coaxing us to think beyond our own species, Latour notes. He calls us to be Earthbound materialists who take into account the multiplicity of actors beyond our own species. This will require humanity to widen the "bizarre" and narrow circle of creatures with agentive capacities that humans (at least Western humanity) have conceived themselves as solely within. Unlike the geological era of the Anthropocene, Latour's New Climatic Regime is thus a political era that is highly mutable. He, like Haraway and others, suggests broadening notions of agency and looking for material, earthly solutions (with our oddkin and ecological confines) to very serious immediate threats brought about by ecological

[95] Latour, *Down to Earth*, 85. We will find below an odd connection with Pope Francis' analysis of the present ecological and social situation, when he points to the "common destination of all goods" in his arguing for a more just and equitable society that cares for the poor and those most marginalized. These might be the kind of human oddkin Haraway pushes us to sniff out and foster collaboration among!

[96] Latour, *Down to Earth*, 86.

changes. Latour offers one crucial take on socio-political impacts or inclinations during this era of ecological crisis focused on contesting a Western outlook. His creative diagnosis of how responses to climate change have come to define politics in the West is illuminating and worth composting with alter-s/cenes to situate my thinking about moral formation in this new s/cene in subsequent chapters. Indeed, Latour's emphasis on the loss of shared practice and the inability of people to inhabit the same earth in this post-truth era is insightful for such ethical considerations.

The Chthulucene, the New Climatic Regime, the Capitalocene, and the Anthropocene will inspire and conspire anew with the RC sacraments, which are themselves important and complex scenes of ethical formation for nearly one-fifth of the global population. For the present project, it is necessary to fold together these s/cenes with the life-affirming, future-oriented, ethically attentive Catholic Social Teaching and the sacraments. Decomposing the sacramental tradition in relation to these s/cenes will pull forward the interventions that the unfolding Anthropocene requires: a critical attention to human hubris; recognition of the socio-political harms and inheritances that have formed the s/cenes; the agentive power of *things* that New Materialisms seek to affirm; and the affective and emotional toll of ecological devastation. To live into the unfolding s/cenes with care, agency, critical attentiveness, and humility demands holding the many registers of these names and more: Anthropocene, Capitalocene, The New Climatic Regime, the Chthulucene. Like all humans who have benefitted from settler-colonial privilege, I mean to take responsibility for the rich compost heap of my inheritance; the power of RC theology and its sacramental pedagogy needs

reconstruction. With thought and time, oxygen, and Pope Francis' critical heat, I intend in what follows to foster theological composting for faithful reconstruction.

CHAPTER TWO: COMPOSTING AS RECONSTRUCTION

RC SOCIAL TEACHING AND THE S/CENES

> What kind of world do we want to leave to those who come after us, to children who are now growing up? This question not only concerns the environment in isolation; the issue cannot be approached piecemeal. When we ask ourselves what kind of world we want to leave behind, we think in the first place of its general direction, its meaning and its values. Unless we struggle with these deeper issues, I do not believe that our concern for ecology will produce significant results.
>
> -Pope Francis, *Laudato si*, paragraph 160

A PLURALITY OF NAMES: ALTER-(S)CENES IN CONCERT

"[N]o doubt we need many names to account for the sheer complexity and multiple dimensionality of this geo-politico-economic formation, as well as to identify effective sources of resistance and inspire emergent cultures of survival."[1] I could not agree more with Jason Moore on this point. Many names and many conceptions of the present time-space on this globe are needed. Employing a multiplicity of conceptions offers a variety of vantages into the complex of issues at play. Using a plurality of alter-s/cenes: the Anthropocene, the New Climatic Regime, the Chthulucene, the Capitalocene and others in concert demands recognition of how particular individuals and groups of individuals are uniquely responsible for the climatic changes and crises occurring today. Each of these alter-Anthropocenic conceptions has merit and highlights differently responsible agents and points to dynamics and intra-actions that invite and require

[1] Jason Moore as quoted in Demos, 87.

addressing. As such, each alter-s/cene adds to the compost heap and develops complexly the horizon onto which this study aims to think through ethical formation.

In addition to the four interventions outlined previously: interrupting human hubris; resisting colonial and capitalist capture; reimagining materiality and materialization; and facing ecological toll, we must recognize at least three critical elements within the rhetorical power of naming towards an eco-ethical consciousness: differentiation of responsibilities; injustices and erasures; and the limitations of western thought (of capitalism, and other presumed modes of "progress"). Processes of (de)composting invite us to rethink human relationships with the human language/power of naming in the present time-scape. How do we begin to practice the criticality of care and the carefulness of critique? What can we do to develop a shared sensibility toward the planet and other terrestrials? How can humans ethically, theologically, and ecologically attune ourselves and our communities to the planet with hope for future flourishing?

i) Differentiation of Responsibilities

First, each alter-s/cene enables continued differentiation of responsibilities in the Anthropocene. These various conceptions do so by assessing historical configurations that contribute more or less prominently to bringing about the planetary conditions of the present. Together these alter-s/cenes enable the identification power imbalances in and across ecologies and economies; they track contested histories bringing to the fore those narratives and imaginaries that were erased or otherwise marginalized as externalities, or worse. In doing this work they demand humans wrestle with collective histories, however

uncomfortable, to understand certain groups' complicity in these undesirable inheritances. The work of critically assessing histories and inheritances is essential in combating those that haunt us.

ii) Injustices and Erasures

Second, these alter-s/cenes, through their historical work, highlight different contributing factors to indicate injustices and erasures in the present that require responses. In other words, paying attention to the multiple conceptions and names for the present era begins to empower individuals and communities to attune to oddkin and systems to which they might have been previously oblivious. As elements of critical intellectual practice, these names and conceptions better enable responsiveness to the changes occurring planetarily, ecologically, socially, politically, by together demonstrating the radical interconnection and entanglement of ecological feedback loops, epistemologies, racism, gender injustice, and class inequity.

iii) Limitations of Western thought

Third, in showing the limitations of Western thought, of capitalism, and other presumed modes of "progress," these alter-s/cenes further critical examination about what might come to constitute flourishing or "living and dying well on a damaged planet." They together teach lessons from the pitfalls of history, and aid imaginative understanding of the world and humans' place in it, which are integral components in the project of conceiving what it means to flourish more justly and responsively.

For these and other reasons, I remain critically engaged in employing the Anthropocene/Capitalocene/Chthulucene/New Climatic Regime as the era humans

presently inhabit, the horizon upon which I conceive the future and envisage ethical formation for that future. This compost heap of intermingling, mutually de-composing of s/cenes begins my thinking about re-composing from that heap, as source and resource, a sufficiently complicated, permeable, messy, entangled ethics for the emergent era. Therefore, two questions contour the following inquiry:

What does this complex, scientific (and secularly informed) Anthropocene/Capitalocene mean for a theologically informed ethics?

Why would such an understanding of our current space-time be of concern to an ethics that is inspired by the transcendental or the divine?

Though it may strike one as a stretch to bring this discussion of the Chthulucene/New Climatic Regime into conversation with moral theology or theological ethics, the following section addresses why such a dialogue is essential. It does so by demonstrating how contemporary Catholic moral theology has methodologically attended to contemporary social and environmental conditions while becoming more attentive to worldly suffering and solidarity.

THEOLOGICAL ETHICS IN THE ANTHROPOCENE

Roman Catholicism bears great responsibility for the Chthulucene. The power and influence of the Roman Catholic Church helped facilitate the emergence of our globalized economies. Through the 15th-century "Doctrine of Discovery" (only recently formally repudiated: March, 2023—and debatably)[2] that blessed Spanish and Portuguese

[2] "Joint Statement of the Dicasteries for Culture and Education and for Promoting Integral Human Development on the 'Doctrine of Discovery,'" *Holy See Press Office*, March 30, 2023, https://press.vatican.va/content/salastampa/en/bollettino/pubblico/2023/03/30/230330b.html.

colonialism, the Roman Catholic Church shares culpability for the decimation of peoples and landscapes. This profoundly oppressive, death-dealing, extractive, and greed-driven legacy of colonial Christendom makes challenging any appeal to a Roman Catholic moral tradition. The institution's substantial responsibility for the Capitalocene is evident, as is its wielding of authority to empower other peoples to participate in equally imbricated, unethical practices that led to our present crises. The entanglements of RC's global power are many. The RC entanglements throughout this compost pile of present, historical, and future human-planetary relations are diffuse and many. RC manages to sustain and flourish in seemingly unfathomable conditions. It isn't going anywhere; perhaps that is reason enough to engage with it. Further, this perhaps surprisingly complex, multivocal, polyphonic tradition is one that might aid its own de- and re-composition and entangle others in that process. Within its heap lay potential tonics for our times, variously applied, hidden, and scorned within itself. In our initial navigation and engagement with Roman Catholicism we will look at more recent enfoldings that might belie historical misgivings.

The Second Vatican Council (1962-1965) ushered the Roman Catholic tradition into modernity (during the not-yet-recognized or -named Anthropocene). *Gaudium et Spes*, one of the four pastoral constitutions promulgated during the council, charged the Church and theologians with "the duty of scrutinizing the signs of the times and of interpreting them in the light of the Gospel."[3] Given this explicit duty, Roman Catholic theology has since increasingly addressed concrete global issues of sociopolitical

[3] Pope Paul VI, *Gaudium et Spes,* (1965), paragraph 4, https://www.vatican.va/archive/hist_councils/ii_vatican_council/documents/vat-ii_const_19651207_gaudium-et-spes_en.html accessed 16 May 2025.

injustice as matters of Christian concern. One prominent mode of progressive Catholic theology is *revisionist*, which according to theologian David Tracy is committed to "the dramatic confrontation, the mutual illuminations and corrections, the possible basic reconciliation between the principal values, cognitive claims, and existential faiths of both a reinterpreted post-modern consciousness and a reinterpreted Christianity."[4] The critical correlative method employed by revisionists is not necessarily unique to the RC tradition; many Christian theologians, in attending to issues of suffering, injustice, and solidarity, employ a critical method of correlation to draw upon the Christian tradition to meet contemporary concerns. It is in this theological vein that the multiplicity of names for the current moment (the Capitalocene, the Anthropocene, the New Climatic Regime, the Chthulucene) dynamically make plain the "signs of our times." Together this multiplicity of names identifies the current existential and moral crises which Christianity must boldly confront.

In an article addressing the contributions of Charles E. Curran[5] to the field of Catholic moral theology and the importance of one's social location, ethicist Bryan Massingale argues for more critical and fundamental changes in Catholic moral theology, specifically insisting on the importance of including more diverse voices to shape the future of theological discourse. While the white, European male perspective has been the assumed epistemological standard in European and Catholic thought, Massingale argues this is no longer the case and Catholic moral theology must embrace that actuality,

[4] David Tracy, *Blessed Rage for Order: The New Pluralism in Theology"* (The Seabury Press, 1978), 32.

[5] Charles E. Curran is a RC priest and moral theologian whose scholarly work often put him at odds with the RC hierarchy especially regarding teachings on sexual ethics.

especially with regard to race and religious diversity (and gender, I would add). The Catholic tradition today exists together with a plurality of religious and secular perspectives that offer important and valid interpretations of reality from varying social locations. Like Tracy, he argues that "the Christian tradition must now place its interpretation of reality alongside those of other religious and secular traditions."[6,7]

Massingale's incisive challenge is for the Catholic moral tradition to move beyond revisionist models of theology. He writes:

> In view of the systemic distortions, unconscious biases, and unacknowledged collusions with human evil in the Catholic ethical tradition, it is not enough to emphasize the continuity of the tradition in the midst of change. A more thorough reconstruction is needed. Thus, I propose that the project of the younger generation of Catholic ethicists is that [of] a *faithful reconstruction*. "Reconstruction" emphasizes the need for a more fundamental or "radical" (in the sense of *radix* or "root") rethinking and rearticulation of the demands of Christian faith than that conveyed by the term "revision." "Reconstruction," moreover, conveys the belief that there are certain aspects of the Catholic ethical tradition that, in the name of Christ, one should not hold "fidelity" [to] no matter how "creatively."[8]

This type of "faithful reconstruction" has been underway, primarily through women theologians, queer theologians, and theologians of color, for some time. By doing theology from their unique social locations, they have challenged many white male assumptions typically found in Catholic moral theology. Susan Ross, a Roman Catholic

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[6] Bryan Massingale, "Beyond Revision: A Younger Moralist looks at Charles E. Curran" in *A Call to Fidelity: On the Moral Theology of Charles E. Curran*, ed. James J. Walter, Timothey E. O'Connell, and Thomas A. Shannon (Washington, D.C.: Georgetown University Press, 2002), 264.

[7] The Christian interpretation of reality, in other words, must now be placed within the Chthulucene. In later chapters, this dissertation will continue with this charge by placing Christian interpretations of reality alongside other important interpretations articulated by post-modern physicists and new materialisms. By paying attention to these particular already entangled interpretations, the RC tradition will be better suited to understand and address the moral challenges of our times.

[8]Massangale, 267.

feminist theologian who has long taught at Loyola University, Chicago, has argued that feminism, for one, consistently coheres in its affirmation of "the priority of experience, attention to difference, appreciation for embodiment, opposition to patriarchal control, and care for the environment."[9] These and other themes have risen to more prominent positions within Catholic theological thought in recent years, particularly though not exclusively in Catholic Social Teaching, mainly due to the insightful and creative work of marginalized, albeit in different ways, theologians. Catholic Social Teaching is the body of official church teachings, beginning with Pope Leo XIII's 1891 *Rerum Novarum*, in which the concerns worldly justice—environmental, economic, social, political—are addressed explicitly by the faith tradition.[10]

Yet as many feminists have long recognized, the reconstruction of Catholic theology, in Massingale's sense, has not been widely embraced by RC institutional hierarchy. However, the influence of those who have been working towards radical reconstruction (or in a concomitant direction) has increasingly made its mark on some high-ranking clerics and even magisterial documents. Indeed, the promulgation of *Laudato Si'* (hereafter, *LS*), Francis' papal encyclical on environmental responsibility, faith, and human flourishing, in June 2015, and its re-emphasis eight years later in the papal exhortation, *Laudate Deum,* are surely the strongest evidences of this sway.[11]

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[9] This succinct articulation of points of alignment in feminism is James F. Keenan's take on Ross's essay "Feminist Theology: A Review of Literature" as offered in *A History of Catholic Moral Theology in the Twentieth Century: From Confessing Sins to Liberating Consciences* (Continuum, 2010), 213.

[10] See Zenner, *Just Water*, 68-71.

[11] The completion of this dissertation marks roughly the ten-year anniversary of the promulgation of *LS*. There is a tremendous amount of literature that has been and is being published about *LS*, its reception, and impacts, including Zenner's *Beyond Laudato Si'* (Fordham University Press, 2026). Even immediately after *LS* was released, responses were quickly in print, for instance: John B. Cobb and Ignacio

The modern encyclical tradition is the genre by which pontiffs contribute to Catholic Social Teaching (CST), theologically addressing social and economic issues afflicting humanity at any given time.[12] As such, papal encyclicals are an immensely significant rhetorical event in CST, insofar as these documents constitute primary occasions of explicit pastoral address from the pontiff to the 1.3 billion humans that make up the global RC church. Encyclicals are also worthy of note for the authority they possess, due to their authorship and form.[13] Thus, encyclicals are weighty documents within CST, which Christiana Zenner describes as the "mechanism" through which "Catholic theology engages with today's world."[14] *LS* is therefore an influential document in Roman Catholicism, particularly in CST and moral theology, that is meant precisely to address the moral and ethical problems of today's world, which

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Castuera, eds., *For Our Common Home: Process-Relational Responses to Laudato Si'* (Anoka, MN: Process Century Press, 2015). The essays in *For Our Common Home* were influential in my early reading and thinking about *LS.* This dissertation, though in part inspired by *LS*, is not primarily *about LS* nor is it about RC developments post-*LS*. This is in part due to the sacramental focus of this dissertation. *LS* does not extensively expound upon the work or potential work of the sacraments in caring for Earth, though it does briefly mark sacramentality (see paragraphs 233-237, for instance). I have also learned through Zenner about some resistance from within the institutional RC Church to incorporate insights from *LS* meaningfully into the liturgical calendar and ecclesiastically, for which the "Laudato Si' Movement" has worked (as a "Season of Creation") (See: Laudato Si' Movement: Catholics for Our Common Home, https://laudatosimovement.org/). Ultimately, this is a growing edge of the RC tradition and I do hope that this dissertation might contribute to its advancement in some small way.

[12] The modern encyclical tradition and CST share a common origin in pope Leo XIII's *Rerum Nevarum* (1891). This encyclical—a circular letter from the pope most frequently addressed to his fellow bishops— addressed the inhumane working conditions of laborers, an economic and social conflict embroiling much of the West at the end of the nineteenth century. *Rerum Novarum* set the standard for modern papal encyclicals to address social and economic issues by drawing on Catholic theology and ethical teaching.

[13] In magisterial authority, encyclicals are among the most authoritative pronouncements a pontiff can issue—arguably second to Apostolic Constitutions. This of course depends on the content of the document and the claims made therein. The most authoritative pronouncements issued by the pontiff are made *ex cathedra*, or "from the seat" (of Peter), which thus have infallibility, which only pertains to certain content.

[14] Zenner, *Just Water* (2018), 70.

predominantly coalesce around matters of global wealth inequality and anthropogenic ecological devastation.

The so-called Anthropocene, though a term not once used in *LS*, describes almost precisely the social and ecological situation that Pope Francis describes and addresses in his encyclical. What is clear in reading the encyclical is that Francis can and has placed his theological interpretation of reality alongside secular and other religious interpretations of reality. In doing so he has created a mutually informing ecosystem for theological, ethical thinking and attunement.[15] This is important, for, as Latour correctly observes, humans need a shared understanding of the world and what is currently at stake in attending to it in terrestrial communities. In *LS*, Francis has drawn on moral teachings that have developed out of particular socio-cultural and ecological situations: ecologically-concerned pastoral letters from bishops of Patagonia-Comahue; Bolivia; Germany; the Philippines; Paraguay; New Zealand and elsewhere. Further, he exercises a much-needed epistemological humility as he calls us to heed the knowledges of local cultures that have developed within particular ecosystems, which each uniquely value and understand their environs.[16] His citing of localized pastoral letters as authoritative and recognizing the distinct value of local cultures, which have been undervalued and

[15] Not only is the science forwarded in *LS* aligned with the scientific community's consensus, but his early citation of other religious leaders like Patriarch Bartholomew in *LS* (8-9), suggest his interpretation also stands with other religious interpretations of reality and the challenges we now face.

[16] Francis, *Laudato si',* paragraphs 143-146. It is important to wrestle with, as Christiana Zenner so aptly puts it: "it can be dangerous when the spur to recognition of pluralistic value systems comes from a centralized patriarchal authority that is historically associated with colonialism and universalism and normatively expounded by predominantly white scholars in the northern hemisphere, especially the United States." *Just Water* (2018), 157. We can also draw the connection here, politically, to Latour's call for humans to be bound to earth and more attentive and responsible to the ecosystems we inhabit.

aggressively suppressed by Western colonial powers for centuries, bolsters the situated epistemologies forwarded by marginalized theologians for decades.

In attending to the signs of the times, as instructed by an Apostolic Constitution of the Second Vatican Council, *Gaudium et Spes* (1965), Francis has powerfully turned to the existential ecological issues we differently face around the world today. It is as if he is turning peripheral edges of the compost pile into the heart of the RC heap, allowing them to enrich the thinking of the obtusely hierarchical RC tradition. The CST developed by local ecologies and communities found intermingling textually through Francis' *LS* is a powerful shift for the Capitalocene/Anthropocene/Chthulucene/NCR. Francis' critique heats up the potential to turn this messy heap into life-giving compost.

LS and Human Responsibilities on Multiple Registers

In *LS,* Francis boldly affirms humans' responsibility for the environmental crises witnessed around the planet, in agreement with the multiplicity of s/cenes. He writes, "Humanity is called to recognize the need for changes of lifestyle, production and consumption, in order to combat this warming or at least the human causes which produce or aggravate it."[17] The pope recognizes that though the planetary cycles do go through warming periods and cooling periods, humans, particularly in their harvesting and burning of fossil fuels, have jump started and aggravated those cycles to dangerously affect the planet's climatic stability. The third chapter of *LS*, entitled "The Human Roots of the Ecological Crisis," critiques the "technocratic paradigm" which "exalts the concept of a subject who, using logical and rational procedures, progressively approaches and

[17] Francis, *Laudato si',* paragraph 23.

gains control over an external object."[18] He argues that this reductive logic, which perceives nature as an endless and formless vault of extractable resources to be harvested for certain humans' gain, is the flattened epistemology at the root of the planet's ecological problems. The scientific and technological mentality that all too often is unquestioningly accepted does not recognize the intrinsic worth of the bio-physical planet or its non-human inhabitants, that is, unless they can have a calculated value within humans' globalized, transnational, corporate financial economy. In critiquing this paradigm, Francis maintains a central focus on human life that also tremendously values non-human life and the material planet which is our common home. He offers a vision that recognizes our entanglement with planetary others and the material make up of our ecosystems, drawing the tradition closer to the conversation with contemporary, scientific and creative, interpretations of the world.

Francis' critique of socio-political systems in the present age hints at connections that we might make with the New Climatic Regime, *A Billion Black Anthropocenes or None*, and the Capitalocene and Chthulucene in promising registers. Though not yet enacting a full turning of the RC heap, he is carefully adjusting the compost's composition, opening the potential to expand the compost mixture. One of the most important and specific tools for this turning is what Francis calls the "technocratic paradigm"—a term that broadly incorporates capitalism, colonialism, globalization. This dominant, technocratic paradigm objectifies creation and it fosters the racialized dehumanization of many human populations. Francis consistently argues that "[t]he human environment and the natural environment deteriorate together; we cannot

[18] Francis, *Laudato si',* paragraph 106.

adequately combat environmental degradation unless we attend to causes related to human social degradation."[19] Francis powerfully and accurately names the importance of human-ecological entanglement. I hope, as Pope Francis certainly did, that this pastoral message is received and reinforced around the globe to inspire new attention to and appreciation for the ecological settings of particular parishes, however despoiled. In Francis' attention to the intimate, and tragic, associations between forms of natural and social degradation, we witness something akin to Yusoff's diagnosis of the racist geo-logics underpinning the Anthropocene. Both argue that the extractive and capitalist practices that delivered us to this point have undervalued, or simply objectified, the "Global South," people of color, and their cultures.

LS makes for an exciting read. Francis does not let up easily. His critique is like a sweltering, humid heat in which compost flourishes. When reading, one is desirous of the palpable connections, the clear multitude of entanglements into which he is tapped—known and not. And he does not swiftly move past the devastating harms of the global technocratic paradigms (in the scope and scale of pontifical encyclicals). He names, mourns, and calls for redress of the horrific erasures of the globalized technocratic paradigm. The resonance with Yusoff deepens, though Francis' argument is inattentive to the particular horrors of the middle passage on which Yusoff is primarily focused. Francis writes, "The disappearance of a culture can be just as serious, or even more serious, than the disappearance of a species of plant or animal. The imposition of a dominant lifestyle linked to a single form of production can be just as harmful as the

[19] Francis, *Laudato si',* paragraph 48.

altering of ecosystems."[20] His care for the whole of human cultures is certainly not misplaced, given humans' entanglement with all that exists, or nonseparable difference. The loss of human cultures could gravely impact all members of the planetary community (which later chapters will explain and explore in relation to quantum mechanics). And his opposition to singular or homogenized lifestyles militantly advanced by global economic and colonial forces should be heeded. In the spirit of confronting the tremendous challenges faced by all on this changing planet, coalition building towards shared goals must be prioritized. It is important to build strong and flexible coalitions and to offer one's critically collaborative capacities to those with whom we act and work alongside in the Chthulucene.

The flattening logics of the technocratic paradigm described in *LS* feed on utilitarian logics, profiteering, and capitalist systems where all valuations are reduced to economic or monetary valuation. In response to these registers of the encyclical I can almost hear Jason Moore's non-Catholic applause. The compost pile grows as Francis' critiques meets the Capitalocene. The Capitalocene's "Law of Cheap Nature" might even falter given the heat of Francis' critique. The underlying logics of capital that bolster the uninhibited economic growth of a few in the Capitalocene is premised upon a devaluation of nature (including food, labor, energy, and raw materials) and the appropriation of unpaid labor. These are the same logics that enable what Francis deems "throwaway culture."

Throwaway culture is a part of modern industrial, capitalist lifestyle, in which people consume inordinate amounts of single-use goods that they do not (or cannot)

[20] Francis, *Laudato si',* paragraph 145.

recycle, which instead pollute our ecosystems. Throwaway culture includes more than single-use goods—it encapsulates what is deemed expendable, unwanted, and unvaluable, and thus applies to swamplands and marginalized peoples, for example. Francis paints a harsh but accurate picture, writing, "The earth, our home, is beginning to look more and more like an immense pile of filth."[21] Throwaway culture is one that assumes infinite resources are available to produce single or short-term use items and that they can continue to do so cheaply ad infinitum. Francis argues that this is in large part because "we have not yet managed to adopt a circular model of production capable of preserving our resources for future generations, while limiting as much as possible the use of non-renewable resources, moderating their consumption, maximizing their efficient use, reusing and recycling them."[22]

One might ask, however, do not capitalist markets push industry towards greater and greater efficiency, which is then reflected in cheaper products? Surely this is the logic that capitalist and free market economists would hold. However, as Moore and Francis would both (likely) counter, the low costs of products are resultant from undervalued natural resources and labor often stolen from the global south by the global north. These "externatlities" are consumed and discarded, pointing to the contradiction of "efficiency." Moore and Francis might additionally note, in agreement with Yusoff, how objectifying and extractive logics continually enable these unethical practices, which subsume all value to the valuation of a globalized capitalism that always aims at the limitless growth of capital for the few.

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[21] Francis, *Laudato si',* paragraph 21.

[22] Francis, *Laudato si',* paragraph 22.

In what we have discussed so far, Francis' *LS* offers glimmers of hope, moments of resonance with the critical renderings of Anthropocene, Chuthulcene, Capitalocene, New Climatic Regime, and what they call us towards recognizing and remedying. One crucial area, however, where Francis falls short is his writing in the language of a global "humanity," and throughout the text he describes a global reality of great power imbalances among humans and nation-states. He does not voice consistently the moral significances or powerful agencies of anyone or thing beyond humanity (save, perhaps, that of Mother Earth). However, as noted above, one of the most powerful entanglements and arguments Francis names for the collectivizing planetary composting is his clear declaration that "there are *differentiated responsibilities*" both in terms of those responsible for causing ecological degradation and those who must bear the brunt of mitigating the ensuing calamities.[23]

Interconnections and Priorities: Care for Creation is Care for the Poor

Francis' sense of moral differentiation is born from his advocacy for the poor, who suffer the brunt of ecological devastation while having done little to cause it. He describes many of the impacts of technological and financial 'advancement' benefitting a few privileged people who through those very economic and social benefits insulate themselves from the impacts of their profiteering on the environment and on marginalized communities. Though sitting upon the very *Cathedra Petri* from which liberation theologians and ecofeminist theologians were denounced and silenced, Francis in *LS* draws on their work to accurately describe how environmental degradation impacts

[23] Francis, *Laudato si',* paragraph 52, emphasis original.

the most vulnerable.[24] He writes in *LS*, "A further injustice is perpetrated under the guise of protecting the environment… the poor end up paying the price."[25]

Given these injustices and the decisive need for their cessation and remedy, Francis relies on the CST principles of "the common good" and "the universal destination of goods." Francis cites the *Gaudium et Spes* to define the common good as "'the sum of those conditions of social life which allow social groups and their individual members relatively thorough and ready access to their own fulfilment.'"[26] The common good is fundamentally about individuals' and societies' integral development and the stability that enables flourishing. In fact, Francis goes as far as to say that this type of order "cannot be achieved without particular concern for distributive justice."[27] The common goods of creation also have a common, universal destination—they belong to all people. This underscores the nod to distributive justice and strong insistence for intergenerational justice and solidarity that are central to the broad vision of Francis' integral ecology. The universal destination of all goods holds that all the goods of creation are to be equally available to all persons. This is a bold notion, about which Francis writes strikingly, "The Christian tradition has never recognized the right to private property as absolute or

[24] Writing from the context of the United States, it is important to note the connections also to the Environmental Justice Movement. Francis' work on in/justice issues particularly as relates to marginalized communities and environmental degradation (and the building of infrastructure) is reminiscent of both Robert D. Bullard's and Dorceta E. Taylor's work at the intersections of environment, race, and gender in the United States. See, for example, Dorceta E. Taylor, *Toxic Communities: Environmental Racism, Industrial Pollution, and Residential Mobility* (New York: New York University Press, 2014); Robert D. Bullard, *Dumping in Dixie: Race, Class, and Environmental Quality* (Boulder: Westview Press, 1990).

[25] Francis, *Laudato si',* paragraph 170.

[26] Francis, *Laudato si',* paragraph 156, quoting *Gaudium et Spes*, paragraph 26.

[27] Francis, *Laudato si',* paragraph 157.

inviolable, and has stressed the social purpose of all forms of private property."[28] Not only should the resources of the natural environment (which is a common good) be accessible for all to sustain and further themselves and their communities, these gifts of creation need to be protected, stewarded so that future generations may have the same beneficial access. These notions of the "common good" and the "universal destination of goods" sit at stark odds with extractive and capitalist geo-logics which objectify entire ecosystems and communities as sites for extraction of profit.

Thus, Francis forwards his integral ecology as a wholistic vision broadly encompassing ecological, social, spiritual, political, economic, cultural intersections of the planetary crisis. This vision is a highly relational one through which we are to foster rectified relations among peoples and between humans and the earth. *LS* makes plain that the cry of the earth and the cry of the poor are both born from death-dealing, hegemonic systems of the global north. This integral ecology is an ethic, a response to the socio-economic, political, and planetary changes rapidly occurring around the globe. Francis offers us no singular strategy or set of embodied practices for cultivating this integral ecology into RC populations around the globe, but he offers us hints as to what it might entail: recognition of differentiated responsibilities, preferential care and concern for poor and marginalized communities, stewarding the planet and its goods for future generations, and establishing models of equitable distribution of goods.

Pastoral Care, Ethical Formation, and Sacramental Composting

[28] Francis, *Laudato si',* paragraph 93. Here we witness a critique of the dominant capitalist mode in favor of a more communitarian understanding of the function of an economy one that would ally with Moore's.

Grounded as *LS* is in Francis' pastoral care for RC communities and his clear desire for thriving individuals and communities, locally and globally, spiritually and physically, I offer a mode of theological engagement through the sacraments that fosters ethical formation for people and communities into this integral, relational, ecological becoming. The ethical formation I propose, in its drawing on the sacramental imagination, engenders "ecological conversion."[29] Ecological conversion, in the sense that Francis develops in *LS*, is more encompassing than traditionally understood theological conversion. It resituates theological anthropology and ecology understood individually and communally, internally and relationally, cognizant of dynamism. Francis argues, with greater awareness of our interconnection with all beings "an ecological conversion can inspire us to greater creativity and enthusiasm in resolving the world's problems" through the conscientious development of our individual and communal capacities.[30] My later turn to the sacraments as scenes of moral instruction is informed by the sacramental nurturing of metanoia.

However, the sacraments as scenes of moral instruction and formation must first be radically composted and relationally reconstituted through an attunement to contemporary understandings and interpretations of reality. This composting must be plural, multivocal, and ever-changing and adaptive.

As we live into the Chthulucene, the Anthropocene, the New Climatic Regime, the Capitalocene, keeping in mind what these s/cenes signal, we must bear in mind the technocratic impulses that infuse so many of their purported solutions. By holding these

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[29] Francis, *Laudato si',* paragraphs 216-221.

[30] Ibid., paragraph 220.

differentiations we will continually attune and analyze, complicating the narratives and attending to people, places, and things we recognize most in need of relational rectification and care.

As I hope has become clear, Francis' forwarding of principles from CST in relation to ecological ethics has profound theological resonance with what Yusoff and Moore argue in their respective secular disciplinary modes. Particularly in his critique of throwaway culture and promotion of the preferential option for the poor and marginalized, Francis demonstrates alignment with both Yusoff and Moore in the disproportionate negative impacts of the objectifying and extractive logics and systems of valuation in global capitalism. Francis and Haraway seem to align in their call to greater response-ability. The common destination of goods confronts, with Moore, the destruction of the Capitalocene: "the natural environment is a collective good, the patrimony of all humanity and the responsibility of everyone. If we make something our own, it is only to administer it for the good of all."[31] Francis' harkening that we recognize the intrinsic value of all creatures—plant and animal—signals a weak, less imaginative alignment with Haraway's call to make interspecies kin.[32] There are strong entanglements between these oddkin: Francis, Yusoff, Haraway, Moore, and Latour; there is tremendous potential for developing broad coalitions between these visions, while retaining their nonseparable *difference.* Should we throw them into the common compost pile and foster

[31] Francis, *Laudato si',* paragraph 95.

[32] Remarkably, Francis cited Donna Haraway in his 2023 Apostolic Exhortation *Laudate Deum*, which Haraway responded to in an interview with the *National Catholic Reporter*, see: Aleja Hertzler-McCain, "Feminist scholar Donna Haraway reacts to inclusion in Pope Francis' climate letter" in *Earthbeat: A Project of National Catholic Reporter*, October 18, 2023, https://www.ncronline.org/earthbeat/justice/feminist-scholar-donna-haraway-reacts-inclusion-pope-francis-climate-letter.

their mutual becoming we might better recognize one another in the humus and find modes of ethical flourishing anew?

And so, in composting Francis' theological vision with the Chthulucene, Capitalocene, New Climatic Regime, and Anthropocene, I argue that any ethical vision for today must attend to the Chthulucene. Roman Catholic ethics is no exception. In *LS*, Francis has provided us a robust and complex rendering of the world and the ethical challenges we have created therein. Importantly, his analysis not only holds up to critical interrogation from other interpretations of reality, it often aligns with it. Though the Capitalocene is an era in which prevailing forms of human community have made and continue to make a trash heap of this planet, with this shared understanding there is hope for building broad coalitions to live differently into this horizon—however opaque and ever-changing it appears.

Perhaps an interdisciplinary, conspiratorial breath can offer the oxygen to this rubbish heap, which is necessary to the aerobic decomposition process of composting to spur transformation and ecological conversion. By reckoning with the inheritances storming around us and by creatively turning prophetic elements to compost the Anthropocenic debris and to nurture new stories of flourishing, we might make this Anthropocene into a short, if painful and difficult, border event and transitional period.

CHAPTER THREE: ENTANGLEMENT HISTORIES

SELECTIONS OF ROMAN CATHOLIC TRADITION PRIOR TO FRANCIS I

> Why return to these old paternal cosmo-polemics? I suggested that theology has no choice but to return recurrently and critically to its originative discourses– unless it wants to create theology ex nihilo.
>
> Catherine Keller, Face of the Deep, 44.

The Anthropocene, the Chthulucene, the Capitalocene, the New Climatic Regime: this is an emergent space-time of many names and not-fully graspable futures. Collectively these s/cenes mark the complexities of the future into which the past and present are unfolding. In the last chapter, we explored their contours. The Anthropocene marks how *homo sapiens* as a species has come to radically alter the planet in ways that will likely be legible on geological strata in future millennia. The Capitalocene points to the globalizing system of capitalism as primarily responsible for the planetary changes that mark this new period in earth's history and highlights that its extractive processes that benefit very few people. The Chthulucene, with its tentacular fabulations, envisions the present and future to be a time and place that demand the making of oddkin to creatively collaborate across every kind of limit, especially species boundaries, in order to learn to live and die well on a damaged planet. The New Climatic Regime retains the anthropocentrism about which other alter-s/cene theorists so worry (particularly about its homogenization of humans presumed equally responsible). It centers the timescape as one in which the political and social polarization, particularly around climate change denialism, must be remedied by developing shared "terrestrial" practices that can ground us—us humans—again on this planet.

The entanglements among these names for this time are many. These proposals together might prime earth-beings for broad coalitional building that (hopefully) avoids the infighting that plague so many needed movements for justice, liberation, and equality. The sacramental-pedagogical composting that this dissertation develops I hope will point towards how that might be done. In order to foster meeting of these horizons with gusto and vision, some more practical, curious, and indeed hope-filled framing must commence.

In this chapter, I will explore areas that pre-date Pope Francis of the compost in which I trudge as I look out upon these s/cenes. I stand upon a mound, a *heap* comprised of the many inheritances of largely Roman Catholic theological traditions.[1] This chapter's exploration of this ground aims to do some *turning*[2] of this composting heap in order to acknowledge and uncover some of the influential Roman Catholic folds therein to amplifying heat[3] of the pile by aerating, spreading more evenly the nourishing elements, and dissipating the concentrations of noxious accretions. In my turning, the composting process is hastened. The historical exploration of this chapter will situate this dissertation's below engagements with the RC tradition, particular with sacramental theologies, in a more constructive, hope-filled mode. To foster that later recuperation of

[1] This chapter will at times nod to significant influences or interminglings from different disciplines (as they would be marked today), while remaining focused on the Roman Catholic *habitus* formation that persists today.

[2] Throughout the chapter I will use the term in this sense – a material shifting and mixing. In so conceiving of this work, I hope to emphasize that such a re-mingling and at times diffusion of ideas within the tradition requires too a recognition of those ideas' material impacts and imbrication with the Created cosmos. In so imagining this work, I aim to reaffirm the material world and our relations to it. The turning of the compost helps to speed up the decomposition by aerating the pile – making oxygen more readily available, which enables the compost to increase its temperature and thus break down more rapidly (importantly breaking down more dangerous, toxic elements of the pile.

[3] Heat is another key element of the composting process—especially in aerobic composting.

nourishing insights from the tradition, this chapter will acknowledge and address the complexities of ethical reclamation of certain elements of the RC tradition. In the process of reclamation, I do not intend to re-inscribe the patriarchal, androcentric, and extractive harms the tradition is widely and with good reason recognized to have meted out socially, materially, and symbolically. Whether or not the portions of the RC tradition that I hope to draw forward can be fully enough reclaimed and disentangled from these socially, materially, and symbolically[4] destructive elements of the tradition will remain a question.

Theological traditions are always already co-constituting, intermixing, and mutually informing with the philosophical, political, and cultural. Turning of compost, re-mixing of the mound is often essential to foster the decomposition and re-composition of the compost's elements. This chapter's work is sifting through some of the accumulations in the RC heap and turning them together in order to foster composting and humus formation.

In approaching the vast, multivocal, internally diverse tradition that is Roman Catholicism, imagining it as an immense compost heap seems apt. It steams with tremendous moisture and heat, a sign of its ever-changing contents in various states of break-down and re-constitution. Depending on the angle of approach, I can see the mess of various elements that have been added (and maybe some things which shouldn't have made it in—the plastic wrapping that is exclusionary male priesthood; abandoned electronics of the substance metaphysics). There is at the same time beauty in the mess that should be enjoyed and celebrated for its differences in texture and color and each

[4] Throughout this chapter and dissertation, I aim to continually reaffirm the entanglement of the material, social, and symbolic, and explicitly recognize how these three mutually inform one another.

portion's unique contributions to the compost. From another angle of approach, the pile is neatly turned, homogenous and brown. At once, I catch the sweet smell of rich humus and the rancid scent decomposing road-kill. The compost would not *be*, were it not for those elements that inspire my revulsion; the *process* itself is important and thrives through the intermingling and collaborative re-constitution of the heap and its many parts.

To recognize and honor those differences and distinctions is one important way to ensure continual, critical growth and renewal. The compost's apparent unity is not actually the end or the aim. The unity is predicated on decay, though the various inputs to compost decompose at differing rates, thus what one encounters in the pile depends on one's positionality as well as the temporality of how the inputs have been steaming together. The continual process of decomposition is the end in itself. It is in this spirit that I approach the heap of my Roman Catholic inheritance, recognizing, as Keller stated in the above epigraph, that we do not think or write theology *ex nihilo*. As I read it tradition contains revolting elements: its patriarchy, its androcentrism, its history of domination and extraction. Roman Catholicism likewise holds tremendous beauty, potential, and life in its embodied sacramentality. This chapter will uplift RC sacramentality, a material culture that creates and embraces encounters with the immanent God, and contemporary RC eco-feminist theological reclamations of these traditions.

This chapter will however not turn away from the rancid parts of this RC compost heap, but it will not fixate on them unnecessarily, either. As discussed in the previous chapter, this work responds to the call to recognize and act upon one's differentiated responsibilities for the ecological destruction (as so relevantly articulated by Pope Francis

in *Laudato si'*). Many Roman Catholic institutions and individuals certainly bear significant responsibility for the current ecological crisis and have a duty to respond accordingly. To actively admit individual and institutional responsibility requires honestly assessing our nebulous past and present. To this end, eco-feminist Roman Catholic theologian Rosemary Radford Ruether prophetically wrote,

> The Christian tradition is one of those communities of accountability that has profoundly valuable themes for ecological spirituality and practice. It also has problematic defects and bears significant responsibility for the legacy of domination of women and nature. But, for that reason, its liberating potential should not be disregarded… the vast majority of…Christians of the world can be lured into an ecological consciousness only if they see that it grows in some ways from the soil in which they are planted.[5]

The promise and potential of RC traditions are mixed up with the historical failings within the compost heap of Roman Catholicism. As Ruether reminds us, the damaging components should not cause one to deny or disavow the liberating potentials within the messiness of traditions. This dissertation thus aims to help remediate the tradition and strengthen those elements of it that might inspire individuals and societies grounded in the RC tradition to develop their own ecological consciousness. It is in this ever-changing soil that this dissertation is planted, and it seeks to collaborate with others proximately planted and rooted elsewhere.

I will therefore venture into the RC tradition and begin by turning it in areas of the tradition that are most entangled with ecological thought. First, I will attend to cosmogenesis and the relation between the Creator and creation. In this section, I aim to parse out some of the complexities of the early Christian milieu dealing with its

[5] Rosemary Radford Ruether, *Gaia and God: An Ecofeminist Theology of Earth Healing* (New York, NY: Harper Collins Publishers, 1992), 206-207.

inheritance of strong dualisms. Next, I will turn to the serious limitations and separations of substance—*ousia*—Classical Greek metaphysics, especially as it takes Christian shape in the medieval period. And finally, I will explore and fold in the sacramentalism of Roman Catholicism, which will lay the groundwork for later chapters that deal with the theologizing of the sacraments (that historically occurred alongside its particular absorption of substance metaphysics). In turning over these three folds of the RC heap, I hope to embolden and spread the nourishing potentialities of collaborative, immanent, sacramental processes and theologies, which constitute the content of chapters five and six of this project.

BEGINNINGS: AN ANCIENT STRATUM

> The Word of God first clashed with Gnostic myth in the second century, and nowhere more dramatically than in the work of Irenaeus. Given the fantastic forms of the mythology of the time, it all seems exotically remote. In fact, when we look more closely, we can see that we are dealing with a confrontation which has never ended and is constantly assuming new forms. The confusion … between the spirit of man and the Spirit of God characterizes all of mankind's more ambitious religious and philosophical speculations and mysticism. It constantly devalues the sensible world, visible organization, the flesh, matter: these are mere 'appearances', either a deception or something to be seen through and overcome. Concealed behind them lies the only truth, the spirit, which must be set free and brought out into the open…We shall see how hard it was for the Fathers after Irenaeus to ward off Gnostic infiltration…The Gnostic impulse secretly or openly animates all those modern world-views which see 'body' and 'spirit', bios and ethos, nature and God, in antagonism or opposition.[6]
>
> Hans Urs von Balthasar, "Introduction" in The Scandal of the Incarnation

[6] Hans Urs Von Balthasar, "Introduction" in *The Scandal of the Incarnation: Irenaeus Against the Heresies, trans. John Saward* (San Francisco, CA: Ignatius Press, 1990), 4-5.

Ecological theology has largely flourished in the narrow confines of academic theology. Theologians and religionists for decades have increasingly recognized the existential and theological questions raised by the climate crisis and the emerging planetary s/cene. Many argue that Christian theology has always borne the markings of and potential for ecological theologies. The Christian scriptures and creeds continually reaffirm that God is the Creator of the universe and all within it—planet Earth, humans, and *all* creatures, plants, and minerals. For instance, in reciting the Nicene Creed, formulated in the fourth century, the faithful profess "I believe in one God, the Father almighty, Maker of heaven and earth, of all things visible and invisible."[7] These are the Creed's opening lines. It is clear: God as Creator of all things is undeniably a principal facet of the Christian faith. As Elizabeth Johnson writes in *Ask the Beasts,* "There is not a catechism that does not make the doctrine of creation a central teaching."[8] This central teaching and confession of the church invites ecological Christian theologies, which many theologians like Reuther and Johnson have developed.

And yet, folded within this doctrine of creation are toxins in need of intense aeration and heat for composting. In this section, I will first explore the theological development of the relationship between Creator and creation through Irenaeus's refutation of Gnosticism in order to point out how the development of creation doctrine

[7] The Nicene Creed was articulated and adopted in the mid-fourth century, and was significantly influenced by Athanasius, theologian and bishop of Alexandria, who devoted significant energies to combating heresies, especially Arianism which concerned the substance and nature of Jesus—the relation between God the Father and God the Son, thus developing RC theological orthodoxy around incarnation (and creation). Importantly he drew upon and furthered the work of Irenaeus, who is dealt with more significantly below.

[8] Elizabeth A. Johnson, *Ask the Beasts: Darwin and the God of Love* (London: Bloomsbury Publishing, 2014), 2.

complexly affirms the material world. Teachings on cosmogenesis honor the divine connection to and presence within creation. Simultaneously they dualistically and hierarchically separate the divine from the created universe in ways that, largely, are problematically gendered. I will turn to the metaphysics of substance that infused Christian theology through the influence of Aristotle in the medieval period on scholastic theologians, namely Thomas Aquinas. In doing so, I hope to demonstrate how substance metaphysics offers an inadequate accounting of the world today and fosters individualisms and separation rather than relation. Then I turn to update that metaphysic through RC Whiteheadian process theologians, David Tracy and Joseph Bracken. Finally, I re-turn to Rosemary Radford Ruether to explore sacramentalism and sacramental ecosystems as wellsprings for fostering human connection to the divine and the earth.

THE DOCTRINE OF CREATION[9]

The doctrine of creation, while expressing perhaps the earliest ecological theme in Christian theology, has complex entanglements. Given that the formation of early Christian thought drew upon and synthesized creation myths and philosophies of many cultures, entanglement is expected. The creation story in *Genesis* 1 of Hebrew scripture was readily accepted in Christian thought and serves as the basis of the Creator-creation

[9] I have chosen to focus here on the doctrine of creation for reasons that I hope are evident or will become so shortly. This focus is not exhaustive of relevant doctrines by any means. The doctrine of the resurrection of the body is certainly germane to the God's relation to creation and could likewise prove important to fostering attention to the matter of creation and ecological attunement. To pursue exploration of the doctrine of the resurrection of the body in relation to ecological themes in Christian theology, Caroline Walker Bynum's scholarship offers a vibrant and detailed history for study and consideration. See Caroline Walker Bynum, *The Resurrection of the Body in Western Christianity, 200-1336* (Columbia University Press, 2017).

relationship.[10] Ruether's representation of the synthesis that occurred in Christian rendering of this creation myth is illuminating. In *Gaia and God* she traces the influences of Greek, Hebrew, and Near Eastern cosmologies on the Christian understanding of the God-cosmos relationship. She wastes no time in addressing central questions that led quickly to philosophical theology inserting its logics and doctrines upon that relation and mythos.[11] These and similar questions continue to demand our attention: *how* did God create the cosmos? Did creation emanate from the divine? Was creation formed by God from nothing or from already existent matter or chaos? What are the theological implications of differing cosmogeneses?

In the cosmologies that inform Christian cosmogenesis, the Creator creates from already existing, though unordered, matter. In Genesis there is the *tehom;* in Plato's *Timaeus* there is *chaos.* Some*thing* or *material* already existed; God formed the cosmos from that pre- or co-existent stuff. These visions, however, posed challenging questions for Christians. If matter itself has always existed parallel to the divine, how could Christians assert the absolute sovereignty of God? Did matter exist *prior to* God? If so, is God dependent upon or even derivative of matter? Could such a God be unparalleled, powerful, absolute, and purely spiritual, sovereign? Christians were raising questions about God's excellence in relation to God's creative power as they navigated the complexities of various cosmologies while formulating their own theological systems. If God were to create the cosmos from already existing matter, would this amount to an

[10] Genesis 1 and 2 offer two different stories of creation that have been variously drawn upon throughout the history of Christian theology. See, for instance: Catherine Keller, *Face of the Deep: A Theology of Becoming* (London; New York: Routledge, 2003).

[11] Ruether, 26-31.

affront to God's power and excellence? By the early third century, Christian philosophical theologians would come to answer in the affirmative.[12]

The question of Creator-creation relation seems to already presume a dualistic frame (wherein body and soul are clearly differentiated), which Christians adopted from Hellenistic philosophy. The Hellenistic dualism functions on binary, hierarchical patterns following from the division of reality into two primary and separate spheres: matter and spirit. Importantly, and, with feminists, I argue, its powerful influence tragically continues to mark the former as less valued than the latter. A careful and skeptical approach to such an influential system is necessary. As Swiss theologian Hans Urs Von Balthasar clearly states in the above quotation—the dualisms found in these ancient myths, especially those articulated by the Gnostics, to whom we will presently attend, continue to animate modern, dualistic antagonisms between matter and spirit, nature and God. As Reuther and other ecofeminists have long pointed out, these divisions inform dynamics of gender, race, and power that pervade the RC compost heap and have historically promoted toxic social and symbolic systems of relation. For instance, the patriarchal structures of Roman Catholicism are born from this dualism applied to gendered distinctions wherein men have been associated with reason, spirit, transcendence, and women with body, passion, and matter. In this duality, women are symbolically linked to the earth, which has been continually dominated and exploited for

[12] I would like to insert that the co-eternal existence of God and matter should wonderfully inspire reverence and awe for the material universe. That its eternal existence with the Divine need not diminish the creative capacities of God. Why is the epitome of power understood as creation from nothing, if not for the desire to reduce the wonder and power of creation from something—of pro-creation, of birth (and all obvious gendered, domineering desires to reduce or precede the act of maternal, female reproduction), and in perhaps a lesser sense, in the creation of art? Why is the power of the material universe's existence necessarily partaking in a zero-sum game?

man's control and gain.[13] Domination—under headings such as universality, sovereignty, or hierarchy—as a social, symbolic, and material tendency in RC and Western thought is intimately tied to these logics. Dualistic thought and its implications are toxins within the compost heap that must be turned, deconstructed, and composted.

These noxious elements of the tradition are bound up with the persisting question of the relation of the Creator to creation—a significant question for my present concern for the planet. Intriguingly, the orthodoxy expressed by the doctrine of creation early in Christian history carries the toxins of hierarchical dualisms into the present while also offering material, cosmological affirmation.

From Hellenism to Gnosticism

The doctrine of creation as *creatio ex nihilo* was informed by Hellenistic dualisms much as it was a response to the Gnostic exacerbation of similar dualistic logics. Irenaeus' is largely responsible for this rendering of God's creation in the latter half of the second century. By the early third century, it was held as doctrine. Though not present in either *Genesis* or the *Timeaus*, *creatio ex nihilo* forwards the notion that God's creation of the cosmos was a creation of matter itself. Regarding this development, Catherine Keller writes in *Face of the Deep*, "What Christianity first presumed was the idea not of the *ex nihilo* but of a Creator effecting 'in the beginning' irreducibly new and contingent reality."[14] In other words, until the late second century, Christians generally held that God created from some form of preexisting matter, in line with Hebrew and Greek

[13] Gender exclusivity intentional.

[14] Catherine Keller, *Face of the Deep*, 15.

cosmogenesis. The divine creation from that existing matter was a creation of a new cosmos that was distinct from the previously formless matter and the existence of which was reliant upon that relation to the divine.

Why did this transformation of cosmogenesis occur? What are the implications of creation from preexistent (formless) matter that could not be tolerated? Beginning in the late first century, Gnostic Christians pursued a more definitive "flight from the world" than is present in, for example, a prior Hellenistic dualism's valuing of transcendence and spirit. Gnostics were responding to what Ruether calls a "mood of pessimism and world alienation" largely resulting from Roman subjugation.[15] Recognition of this context, which we would identify today as a colonized setting, causes me to pause. In the Gnostic devaluation of the material world, is there hidden a potentially liberative response to socio-political processes of domination? Surely this is part of what inspired their flight. And, as Ruether positively highlights, Gnostic teaching contains "nascent elements of gender emancipation", as they envisioned the transcendent and divine world as "androgynous."[16] While writing in an extended moment of political polarization, I am wary of the Gnostic polemical style and, yet, open to this consideration of the Gnostic teachings. Each encounter as we explore the RC heap may contain multitudes of entangled folds.

A more robust consideration of the Gnostic system might here be useful. Irenaeus articulated rather uncompromising responses to Gnosticism, and so knowing that system a bit more thoroughly will enhance understanding the influence it exercised on the early

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[15] Ruether, *Gaia and God,* 185.

[16] Ibid.

formation of RC theologies.[17] Though responses to Gnosticism like those penned by Irenaeus were powerful and remain influential within RC theology, Gnostic thought was elsewhere incorporated into the tradition, for example, in part, through Augustine. And, as Balthasar above reminds, the confrontation that I will recount below never really ended, but mutated into new forms. Thus, a mapping of that early and formative Gnostic confrontation of spirit and matter will aid in my recognition of the long history of festering Divine-cosmos relations and the dualisms that informed them. By so doing, I might be able to compost them and draw forth their positive potentialities for the thriving in the Anthropocene.

The Valentinian-Ptolemeaic Gnostic system[18] claimed to narrate the "true beginnings" as they occurred prior to what is narrated in the Jewish and Christian cosmogenesis myths. Gnostic cosmology has three primary realms: *Plemora*, the highest heavenly world; *Kenoma,* the lesser, but still divine world;[19] and the *Cosmos,* which consists of the material world and exists below the *Kenoma*. One character of significance for the Gnostic-Christian confrontation is Sophia, the female of the "Ages" or "Aeon" (one of 30) in the Gnostic myth who fell furthest from the *Plemora* and from

[17] It is intriguing to note that his refutation of the as heretical, inspired a robust tradition of heresiology, which is well documented and complexly rendered in Keller's *Face of the Deep.*

[18] This summary is a brief synopsis of the Gnostic system as rendered from the first seven chapters (especially chapter 6) of Irenaeus' *Against Heresies:* Irenaeus of Lyon, *Against Heresies,* Vol. 1, trans. Dominic J. Unger (Mahwah, NJ: Paulist Press, 1992); I will not attempt to fully recount the salvation drama that unfolds in this mythology, intriguing and important though it is. My rendering of the Gnostic system also relies upon Ruether's *Gaia and God*; Keller's *Face of the Deep*; and J. Kameron Carter's *Race: A Theological Account* (Oxford: Oxford University Press, 2008). There exists a vast literature on Gnosticism, an excellent starting place for studying Gnosticism and delving into the literature on it is Karen L. King, *What Is Gnosticism?* (Belknap Press, 2005).

[19] This split between the *Plemora* and *Kenoma* can be understood as an intra-divine bifurcation, rather than inclusive of the created world.

the abyss of the beginnings. The gender dynamics here are not subtle—Sophia is furthest removed from the highest heavenly realm because she is female. The distance symbolically demarcates the separation between male and female, and correspondingly in this system between mind/spirit and matter/passions—amplifying the dualisms with along clearly gendered lines. Sophia, in errantly pursuing her desires and passions, (re)produces, creating and populating the material world—the furthest removed from the *Plemora*, most proximate to darkness (material existence), and is unredeemable. From this place the drama of Sophia's redemption, more particularly the redemption of her Desire personified as "Achamoth" plays out in the material realm.

The redemption story of Desire illuminates the Gnostic anthropology that proves untenable to a number of the church fathers of the second century. The rejection of this story by Irenaeus and others is especially due to its implications for the incarnate Christ. To understand the implications, first gloss the anthropology. Desire, and, thus, humans, are composed of three substances: 1. The pneumatic, which is the truest and highest substance that belongs to *Plemora*; 2. The psychic substance, which can move either up towards spirit through education or down towards matter through corruption; and 3. The "hylic" or material substance, which cannot be elevated or educated and is completely corruptible. It is in this three-substance anthropology where we clearly see the total rejection of the matter—the "sublime waste."[20] In this anthropology, which maps to the cosmic realms, the material world is irredeemable refuse or waste. What then could

[20] I learned the phrase "Sublime Waste" in relation to the Gnostic myth through J. Kameron Carter who accredits the phrase to Mark Larrimore, "Sublime Waste: Kant on the Destiny of the 'Races,'" *Canadian Journal of Philosophy* 29, Supplementary Volume 25: Civilization and Oppression (1999): 99–125.

Christians make of the Creator-creation relation, of our own embodiment, and of Christ's incarnation, his embodiment? Acceptance of the Gnostic cosmogenesis and resultant anthropology would require Christians to reject that Christ in fact became fully human, suffered, and died for all of creation. It would mark our material lives, our embodied selves as completely fallen and eternally irredeemable, in contrast to Christ's incarnational teaching. It rejects the goodness of creation that is clearly and undeniably expressed by the Creator in scripture. In other words, the Gnostic system's implications could not be tolerated, hence Irenaeus' strong rejection of that cosmic garbage and establishment of *creatio ex nihilo*.

Stepping back from the particularities of this element of the Gnostic myth, Gnosticism more broadly is often received as a polemical, dualistic system that understands reality to be a grand clash between good and evil, redeemed and fallen. The material world (gendered female, Sophia/Desire/Achamoth) is fallen, evil, distant from the *Plemora,* and irredeemable. The spirit or the transcendent is fundamentally the highest good—and, again, is gendered male.[21] The interpretation of embodied, material existence as cast off and eternally fallen, though not entirely unique to Gnosticism, as it was pronounced in Hebrew and Hellenistic cosmologies as well, led to a conception of life as ascetic mortification in preparation of the pneumatic substance (or soul, and, possibly, the psychic substance) for a redeemed future life in the *Kenoma* or *Plemora*.

Taken together with the Gnostic potentialities as advanced by Ruether, within a Gnostic understanding of the world one finds both the radical potentiality of release from

[21] These gendered associations and hierarchies are perhaps the among the most recognizable instances that the continued influence of these systems today.

spiritual and possibly socially gendered roles and concomitant domination, *and* the strong anti-cosmic, anti-material, anti-Earth position.[22] Gnosticism proves itself a complex and nebulous part of the compost heap from which place we greet the Chthulucene. It carries with it potential for liberation from gendered modes of domination, while retaining a deeply toxic anti-ecological position. Much as it drew the heat of church fathers, it requires heat and turning for re-composition in this New Climatic Regime.

Irenaeus: An Orthodox Unfolding

It was in response to the power and appeal of the Gnostic movement, among other movements deemed heretical, that St. Irenaeus, second century Bishop of Lyon and Doctor of the Church,[23] wrote *Against Heresies*. Irenaeus might have avoided writing *Against Heresies* were the Gnostic movement less persuasive and quickly spreading. However, the movement found rapid growth not only in Rome, but also in Lyons, the community under his pastoral care. Thus, duty compelled him to address the Gnostic movement and inspired his writing of *Against Heresies*. Within this extensive and famous text, Irenaeus potently formulates and doctrinally establishes the doctrine of *creatio ex nihilo*.[24]

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[22] Indeed, Elaine Pagels has argued that Gnostics' turned Paul's doctrine of election from one that understood God's covenant with the Israelites as concerning all of creation, into concern only with the pneumatic, that is Gnostic, Christians. See Elaine Pagels, "The Valentinian Claim to Esoteric Exegesis of Romans as Basis for Anthropological Theory," Vigilae Christianae 26 (1972): 241–58.

[23] St. Irenaeus was named only the 37th and most recently named Doctor of the Church in 2022 by Pope Francis. This elevation of St. Irenaeus's position by Pope Francis is odd and intriguing wrinkle since Pope Francis, who chose his name in honor of St. Francis of Assisi the patron saint of ecology and animals and author of *Laudato si'*.

[24] Whitney Bauman offers a tremendous study into the doctrine of *creatio ex nihilo* in *Theology, Creation, and Environmental Ethics: From "Creatio Ex Nihilo" to "Terra Nullius"* (Routledge, 2014). Bauman critiques and abjures of images of 'God' and doctrines (like that of *creatio ex nihilo*) that are

The logic of this doctrine in Irenaeus, like that of the Gnostics to whom he was responding, is painfully dualistic, yet beautiful in its affirmation of the material world. It is a complex doctrine that can be read as partly noxious, partly nourishing. He sets out to affirm the *goodness* of creation as so deemed by God in the Book of *Genesis*. The doctrine of *creatio ex nihilo* articulates strong relational ties between creation and the Creator and it lays the early groundwork for ecological treatments in Christian theology. Yet this heresiological response to the Gnostics further entrenched stark dualisms.[25] As Keller notes regarding Irenaeus' logic, it strongly relied upon Platonic metaphysics, while actively limiting the "platonic spectrum of lively variation." Keller goes on to note, "Thus, ironically, [the *ex nihilo* formula] locked into dogma a clean and simple form of Hellenistic dualism, lacking the pagan aroma and evading autocritique: that between the changeless, impassionable eternity of God and the dissolute mutability of the material world."[26] While affirming creation's goodness and relation with the divine, he marks Creator-creation as hierarchically separated in order to affirm God's absolute power.

Irenaeus articulates the creation doctrine in *Against Heresies* as such:

> They [the Gnostics] do not believe that God (being powerful, and rich in all resources) created matter itself, inasmuch as they know not how much a spiritual and divine essence can accomplish…For, to attribute the substance of created things to the power and will of Him who is God of all, is worthy both of credit and acceptance. It is also agreeable [to reason], and there may be well said regarding such a belief, that 'the things which are impossible with men are possible with God.' While men, indeed, cannot make anything out of nothing, but only out of matter already existing, yet God is in this point preeminently superior

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universal and domineering as they thereby freeing persons from localized contexts and fostering denigration of right relations. In this way and others, our projects align.

[25] Irenaeus is not alone responsible for this, perhaps the strength of dualist logic is even more evident in notably St. Tertullian's (Bishop of Antioch) third century *Against Hermogenes*.

[26] Keller, *Face of the Deep*, 46.

> to men, that He Himself called into being the substance of His creation, when previously it had no existence (Irenaeus, *Against Heresies* 2.10.3-4).[27]

He is straightforward here: God created the material substance of creation. God did not create *from* already existing matter. Though humans can only fathom creating from existing material, this is not an issue for the divine who is "preeminently superior" and whose "power and will" are clearly unfathomable to humans. We see in this excerpt both the close relation of the divine to creation— "He Himself called into being the substance of His creation"—*and its radical alterity* that this is the ultimate expression of God's omnipotence, God's power *par excellence*: the ability to create *from nothing*. Irenaeus is thereby pairing the value and worth of creation by virtue of its being God's own *and* the notion of divine power and dominance.

In keeping with the intention of this chapter to recognize and wrestle with the nourishing and noxious elements of the RC tradition, I must name and compost the gendered misogyny and domination wrapped up within the doctrine of creation. Irenaeus' expression of the doctrine of creation produces what Keller calls a "masculine dominology." Keller rightly does not ascribe intent to Irenaeus' in forwarding this doctrine imbued with domination and misogyny. She does argue that the doctrine's "rhetoric of sheer power" forms metonymic links to "a specific cluster of signifiers—of masculine supremacy, of female abjection, and of unilateral domination[.]"[28] Given that the doctrine of creation is a central pillar of Roman Catholic faith and its crucial place in

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[27] Irenaeus of Lyon, *Against Heresies*, trans. Dominic J. Unger (Paulist Press, 1992), 2.10.3-4.

[28] Keller, *Face of the Deep*, 53.

the establishment or RC orthodoxy, these metonymic links have tremendous and concerning influence. Indeed, they have spread throughout the heap like a contagion.

Irenaeus' *Against Heresies* addressed not only the Gnostics' myth of cosmogenesis, but also its salvation schema and the devaluation of the material world. These Gnostic teachings contradict the assumption that Jesus' incarnation and suffering is redemptive for all of creation. Irenaeus argued against Gnostic scriptural exegesis and its interpretation of creation, which rejected the redeemability of the material world. He wrote,

> For, according to them, Word did not directly become flesh; but Savior put on an ensouled body, they say, which was fashioned out of the Economy by an unutterable forethought, so that he might become visible and tangible. Flesh, however, is the ancient handiwork made by God out of the earth as in Adam. But it is this which John points out that the Word of God truly became.[29]

Irenaeus rejects of the Gnostic position that Jesus was not truly made flesh. He understands human flesh and the Earth as made by God and states that in the incarnation, without question, God truly became human, enfleshed. The stark duality between flesh and spirit, creation and Creator is repudiated, and we grasp that nourishing, compostable angle of Irenaeus' theology.

The *Recapitulatio*: Affirmation of Christ's Embodiment

In his famous *recapitulatio,* Irenaeus affirms the full embodiment of Christ in the incarnation as the pinnacle of his salvation narrative, a narrative that includes all of creation. Through incarnation Jesus draws the whole of creation back to God, thereby

[29] Irenaeus, *Against Heresies,* 1.9.3.

reinscribing the original oneness of all in the divine. In this noted passage, Irenaeus writes:

> For the Creator of the world is truly the Word of God: and this is our Lord, who in the last times was made man, existing in this world, and who in an invisible manner contains all things created, and is inherent in the entire creation, since the Word of God governs and arranges all things and therefore he came to his own in a visible manner, and was made flesh, and hung upon the tree, that he might sum up all things in himself.[30]

This defense of the incarnation in his *recapitulatio* is a decisive theological move by Irenaeus. It marks the return of and uniting of all of creation to God through Christ's incarnation. Through his suffering and death, all things are summed up in God. Salvation is achieved through Christ for the *entire creation*—visible and invisible. Christ is for Irenaeus the climax of Irenaeus' soteriology, and, as Keller succinctly states, "He offers a precise statement of panenthism: all-in-God, and God-in-all."[31] The material creation is intimately and forever entangled with God. There is the profound potential, Keller shows in her reading of Irenaeus' *recapitulatio,* to understand the dynamic, non-linear, and iterative possibility through God's panentheistic connection with creation powerfully reiterated in Jesus' love and community.

Historically, Irenaeus' doctrine of creation and his panentheistic *recapitulatio* have proven themselves as foundational points for ecological Christian theologies. In his affirmation of creation and the continued relation between the material world and the Creator, the doctrine of creation and the *recapitulatio* remain importantly nourishing elements for ecological theologies and ethics today. The material and embodied salvation

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[30] Irenaeus, *Against Heresies*, 5.18.3.

[31] Keller, *Face of the Deep,* 55.

through Christ's passion for *all of creation* articulated in the *recapitulatio* powerfully conveys an eschatology that is inescapably material, reaffirming once more the created cosmos.

Yet, the doctrine of creation as formulated by Irenaeus also contains misogynistic dominology and female abjection. *Creatio ex nihilo* is scripturally dubious; it promotes a domineering and dualistic logic that stresses the subordination of matter to spirit with duplicitous implications for gendered power imbalances. Further, as Ruether succinctly writes,

> This doctrine [of *creatio ex nihilo*] leaves Christianity with an unresolved ambiguity about the ontological status of 'matter.' If it comes from God, then in some sense it is seen as an emanation from divine being, grounded in divine being. Yet its status as 'creation' identifies it as a kind of 'being' outside of God, non-divine and mortal by nature, having no self-subsistent principle of existence of its own.[32]

In other words, echoing Hans Urs von Balthasar, the various (and possibly valid) renderings of *creatio ex nihilo* can lead Christians to greatly differing conclusions about creation and its relation to the divine, its ontological status, and its worth. The Gnostic influence which continued to infiltrate Christian teaching lives just beneath the surface in many dualistic tensions that persist today: "'body' and 'spirit', bios and ethos, nature and God." Dualisms have long been critiqued by ecologists, feminists, and even a few theologians.

THE CATEGORY OF SUBSTANCE AND ITS METAPHYSICS

In this area of RC the compost heap exemplifies its complexly entangled topography, and I hope has made clear how difficult it is to know what portions will

[32] Ruether, *Gaia and God,* 26-27.

nourish embodied sacramentality and ecological spirituality and which might inhibit our potential flourishing in the new climatic order in which we find ourselves in the twenty first century. As I continue to navigate other regions of the RC tradition, I aim to pull forth the nutrient-rich hummus and continue composting the nebulous entanglements through a critical and generous exploration. Having identified the nurturing tenants and rich possibilities of the doctrine of creation, however intertwined with quite damaging detritus, I will move now to explore another RC traditional theme that demands attention in an age of ecological crisis: the category of substance and its metaphysics.

Whether concerned with the Arian heresy, or the particulars of Christ's nature in relation to his incarnation, or the transubstantiation that occurs in the RC eucharistic celebration: the category of substance permeates many central theological issues. However understated or merely presupposed, substance metaphysics continues to exert influence that needs addressing in this twenty first century study concerned with religious traditions and practices and how they might meet the present ecological crises. This is especially so, since "meta-" is so often read as "beyond" (rather than "with") and thus metaphysics rendered "beyond the physical." Is a turn to the meta- but another flight from the earth, a pointing past the very material creations that must concern us in the present moment challenging our flourishing? The influence of the classical metaphysics of substance has become so commonplace in the West as to influence our culturally-constructed, seemingly intuitive understandings about the nature of being, even beyond the toxic dualisms and dominologies noted previously. This is especially so as the category of substance aligns with the thinking that each human is an enduring, self-same person. Keller, who derives her critique of substance from the alternative of process

metaphysics, writes in *From a Broken Web*, "Not just the metaphysics but the common sense of the West is weighed down by the presupposition that to be a single individual is to be an enduring, self-identical substance, essentially independent from others (except God, with whom matters simply reverse themselves)."[33] The metaphysics of substance posits just this: a separated self, an enduring individual whose very being, whose essence, persists through time.

When navigating a heap of decomposing materials, we witness the dissolution of individual substances as they become increasingly difficult to identify. Materials decay through intimate interactions that soften the forms that had appeared to demarcate distinct organisms. Attention to natural process of decay draw into question the separateness of seemingly distinct individuals and objects, as presumed by substance metaphysics. A metaphysic needs to adequately describe the world as it is and do so in conjunction with the most appropriate insights we have to understand the cosmos. Many advancements in science and philosophy draw me, with many others, to call into question substance metaphysics, which continues to exercise great influence in RC theology.

Aristotle's category of substance as articulated in his *Categories* inspired RC theology through Thomas Aquinas' thorough study. The category of substance became thereby central to classical metaphysics in the West. Most basically, substances are subjects; they are individual things that can persist beyond their attributes or qualities that can change. Substances, therefore, have an essential quality, something that is self-same and enduring over time. In *Categories* Aristotle lays out the primary and secondary

[33] Catherine Keller, *From a Broken Web: Separation, Sexism, and Self* (Boston, MA: Beacon Press, 1986), 162.

distinctions in substance. The former pertains to the specific individual or subject, the latter refers to the *kind* or broader grouping based on essential (rather than "accidental") characteristics. For example, an individual magpie perched outside my window is a primary substance, while its secondary substance or its "substantial kind" is its magpie-ness. These distinctions raise many questions that have been interrogated by philosophers over the years; I will not venture into those here. What is important to grasp regarding the complex situation of substance within the heap is that substances are conceived as independent and enduring, they are subjects that are understood as the basic ontological unit; they are the subjects of all predication.

The category of substance is most potently concentrated in the medieval folds of the RC heap. Though substance has always posited a fundamental separateness, the reality of the compost pile simply could never entertain that presupposition. With Aquinas, substance metaphysics began its properly medieval germination. By the time Aquinas was teaching and writing the thirteenth century, Aristotle's corpus had been translated into Latin from Islamic and Jewish translations of the Greek. The Aristotelian influence, particularly through Averroes, caused great conceptual trouble in early university settings. Notably, in Paris, engagement with new translations of Aristotle's natural philosophy (particularly by David of Dinant) caused issues that led to the Council of Sens banning the teaching of Aristotle or commentary thereupon in 1210. Robert of Courçon, who served as papal legate and was a professor of theology in Paris, in 1215 sustained the teaching ban on Aristotle.[34] After decades, the ban eventually gave way

[34] Pope Gregory IX supported this very hesitant approach to Aristotle as is evident in his 1228 letter to the masters of theology at Paris. These cautions and prohibitions gave way in the 1250s.

since many prominent theologians and other masters continued to work with Aristotle's thought and teach it elsewhere in Europe.[35] From the late 12th century, there was a hunger among scholastics for engagement with Aristotle's full works, which led to the translation of many more of them into Latin between 1190 and 1278.[36] This hunger was born from the power and fullness of Aristotle's philosophical system. Importantly his philosophy uniquely and formidably attended to the material world, especially in his work on natural philosophy. A desire—importantly counter-dualistic—to pay attention to the material world certainly drove the medieval scholars to study Aristotle. While the use and influence of some of his philosophical categories, like substance, has arguably proved damaging, Aristotle also inspired an attentiveness to the material world, which should not be lost particularly in our ecologically attuned description and assessment of these folds of the complex RC tradition.

The infusion of Aristotelian natural philosophy, ethics, and metaphysics into Western/Latin philosophy and theology, especially in the newly formed universities, had tremendous impact on scholastic thinkers. Importantly and perhaps most lastingly, Aristotle had a marked (if contentious) influence on Thomas Aquinas.[37] Aquinas was

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[35] Notably in Toledo, Spain (particularly between 1220-1235) new translations continued to be produced and at Oxford, where Robert Grosseteste and others continued to study and comment on Aristotle.

[36] Bernard McGinn claims the primary dates of translation were between 1190-1260, however, that seems to exclude the translation work of William of Moerbeke, whose translations between 1266-1278, according to Stephen F. Brown, were likely used and popularized by Aquinas in Paris. Bernard McGinn, *Thomas Aquinas's "Summa Theologiae": A Biography*, Lives of Great Religious Books (Princeton (N.J.): Princeton University Press, 2014), 12-14; Stephen F. Brown, "Medieval Christian Philosophy", in *The Columbia History of Western Philosophy,* ed. Richard H. Popkin (New York: Columbia University Press, 2008), 219-278.

[37] We ought to recall that Aquinas' was not a philosopher, he was unabashedly a theologian. Though to the modern mind his work is strikingly philosophical, philosophy demarked a unique pursuit of knowledge for Aquinas. As Mark D. Jordan writes: "For Thomas, 'philosophy (philosophia)' names primarily a hierarchy of bodies of knowledge that can be built up as intellectual virtues in human souls.

exposed to a great deal of Aristotle's thought while under the tutelage of Albert the Great, whom Thomas likely assisted in Albert's more than two decades of work of commentating on Aristotle.[38] Mark Jordan notes of Aquinas' glossing of Aristotle, that Aquinas' expositions are "old fashioned" compared to Albert's and his contemporaries' in that Aquinas explanations of Aristotle are merely close readings of Aristotle's texts themselves, not extended commentaires. Thomas did not bring tangential questions to bear on the text nor did he engage the varying commentaries and other authorities whose work would have some overlap with Aristotle's.[39]

Aristotle's influence on Aquinas, however qualified, is evident in its frequent citation in many of Thomas' writings. Of particular import for Aquinas are Aristotle's *Physics, On the Soul, Metaphysics,* and *Nicomachean Ethics.*[40] Aristotle's impact on Aquinas is most intriguing and perhaps most important to the Western tradition in Thomas's great work of synthesis, the *Summa Theologiae*. Aristotle's *Ethics* is the most cited text in the *summa*, largely in the *secunda pars* in which Aquinas treats ethics; this is

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Philosophy is, second, a pedagogy for building intellectual virtues that is enacted in teachings and textual traditions," (Mark D. Jordan, *Rewritten Theology: Aquinas After His Readers* (Oxford: Blackwell Pub, 2006), 62).

[38] Mark D. Jordan, "Thomas's Alleged Aristotelianism" in *Rewritten Theology: Aquinas After His Readers* (Oxford: Blackwell Pub, 2006), 65-67; Jordan also points out that Thomas' writings, not a few unfinished, on Aristotle make up less that 1/10th of Thomas' corpus, while accounting for a full 3/10ths of Albert the Great's. This essay of Jordan's on Thomas' relationship to Aristotle offers important insights about approaching this relationship which had been harkened upon for years and distorted. He carefully argues that referring to Thomas as being Aristotelian is too reductive and a descriptor that would not fit with Thomas' own understanding of his relationship to Aristotle. Thus, Jordan argues the relations are to and among texts. They offer philosophical authority in as much as they provide "textual precedent deserving attention" (64).

[39] Ibid., 68-70.

[40] Ibid., 77. Jordan makes a strong case for the particular influence of these texts based on their citations within Thomas' corpus.

distantly followed by his citation of the *Metaphysics*.[41] Through his careful study of and engagement with Aristotle, which we should not equate with fidelity to Aristotle, Aquinas is often pinpointed as the theologian who infused Christian metaphysics with Aristotelian substantialism. Through Aquinas' appropriation of Aristotle's philosophical and linguistic distinction between "substances" and "accidents", Christian theology and Western philosophy began to posit an essence to each person that persists through time.[42] For Aristotle and Aquinas, the most basic metaphysical unit becomes the subject which is a unique "substance" composed of "form and matter."[43] In Aristotle, the form is the intelligible quality of a creature which provides its individuation; the matter is the distinct composition of the creature from the four elements. Aquinas in defining *person* (particularly regarding the divine person and the relations of the Blessed Trinity), argues that a person is an "*individual substance*" with a "*rational nature*" (ST 1.29.1 *corp.*). In the very next article on this question concerning what defines "person," Thomas refers to Aristotle's *Metaphysics* (v) in order to articulate the twofold nature of substance (ST 1.29.2 *corp.*). *Substantia* is, for Thomas, here following Aristotle, (1) that "which we may call *essentia*" signified by the definition of a thing and (2) "a subject or *suppositum*, which subsists in the genus of substance" (ST 1.29.2 *corp.*).[44]

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[41] Ibid., 77. Jordan notes that citations of *Ethics* account for one half of all citations to Aristotle in the *Summa;* and that is followed by the *Metaphysics*, which is cited once for every four citation of *Ethics* therein. Thomas also wrote a full commentary on Aristotle's *Nichomachean Ethics* which no doubt relates to the influence of Aristotle's impact on Thomas' thought. See: St. Thomas Aquinas, *Commentary on Aristotle's Nicomachean Ethics*, trans. C.J. Litzinger, O.P. (Notre Dame, Ind: Dumb Ox, 2009).

[42] See, Catherine Keller, *From a Broken Web*, 172-177.

[43] Form and matter correspond in Aquinas' system to essence and accident.

[44] It is important to here note that in this corpus (1.29.2) Thomas begins to also note the subsistent nature of relations (particularly building to the trinitarian relations of persons): "For, as it exists in itself and not in another, it is called *subsistence*; as we say that those things subsist which exist in themselves, and not in another." This understanding of subsistent relations is important for Joseph Bracken's rereading of

Thus, from early in Aquinas' *magnum opus* an understanding of the person is articulated in a manner heavily influenced by Aristotle which renders personhood in what we might today call essentialist terms.

Importantly, the above rendering of substantive personhood draws on sections that Aquinas wrote regarding the persons of the Trinity. Therefore it is important to ask whether this view on personhood also holds for human persons. Aquinas addresses this as well in the *Summa Theologiae* when he attending to the nature of humans, whom he asserts are spiritual and corporeal. Aquinas holds that the human is a union of an incorporeal soul and a corporeal body (ST 1.76). Drawing on multiple works of Aristotle's as well as of Augustine, Aquinas articulates that the soul is the form of the body, infusing each part of the body wholly. He argues against the Platonic notion that the soul is merely the motor of the body, "for it is not an accidental form, but the substantial form of the body" (ST 1.76.8 *corp*.). The full infusion of the body (in each of its parts) with the soul is also necessary as the soul is the body's substantial form thereby providing both "the form and the act" (ST 1.76.8 *corp*.). This formal relation between soul and body is "subsistent"; Aquinas writes, "Wherefore the unity of a thing composed of matter and form,[45] is by virtue of the form itself, which by reason of its very nature is untied to matter as its act. Nor is there any other cause of union except the agent, which causes matter to be in act, as the Philosopher, says, *Metaph. Viii. (*Did. Vii. 6.)" (ST

Thomas in order to synthesize it with the process philosophy of Alfred North Whitehead; see "Subsistent Relation: A Mediating Concept for a New Synthesis?" in *The Journal of Religion* 64, no. 2 (April 1984), 188-204.

[45] Recall, matter and form constitute a substance.

1.76.7 *corp.*).[46] It is this union of the body and soul, which in Aquinas' scheme constitute a union of matter and form, that necessarily posits a substantive self, a self-sameness understood as unified essence in each person. The union of matter and form, body and soul, Aristotle, and Aquinas with him, are working against that other pesky pollutant of classical dualism with which we wrestled earlier in relation to the doctrine of creation.

Aquinas employs Aristotle and Augustine together in a critique of the Platonists' positing of mediators between the soul and body, which is how substance metaphysics was worked into Christian theological and Western philosophical understandings of the person. Aquinas posits a person or a self as coherent and consistent through time. This rendering of the self holds that there is a substance or essence consisting of a unity of form and matter in each person. This substance or quiddity is ontologically prior to other attributes or accidents of the self. This ontological priority is reflected in grammatical subject-predicate formulations, which have garnered greater attention as a result of the linguistic turn in Western thought during the 20th century.[47] Keller writes that Aquinas' substantial form of humanness "remain[s] essentially self-identical, undergoing external, 'accidental' changes, but (except in the rare cases of 'substantial change') sustaining the underlying unity of a dominant subject."[48]

Substance metaphysics does not enable us to understand ourselves as relationally constituted, formed by and forming those with whom we are in community: humans, animals, plants, and minerals. It supports a notion that humans are self-same and

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[46] Please note that "the Philosopher" refers to Aristotle.

[47] See, for example, Judith Butler, *Gender Trouble*, 20.

[48] Keller, *From a Broken Web,* 173.

enduring over time, when in-fact humans are constantly changing. This time of ecological crisis requires embracing a more active role in our collective adaptation, so to be responsive to the needs of our ecosystems and planetary companions. Substance metaphysics will, like many contaminants, require high heat, much turning and careful attentiveness to compost it. And, still, it is important to recognize the beauty of the original draw towards Aristotle for Aquinas and others who were working to attend to and affirm the material Creation in their theologies.

Process-Relational RC Theological Composters

Post-structuralist philosophy and deconstruction have thoroughly criticized the whole Western history of metaphysical schemes and claims by arguing (in part) against any such objective, systematic description of the universe. Since the post-structuralist criticisms, metaphysics has become less central, academically, and less in vogue in recent decades (empirical sciences, simplistic materialisms, and other factors participated in causing this shift). However, metaphysical systems continue to exercise broad theological, philosophical, and cultural (popular) influence, especially, though not exclusively, in more orthodox, traditional spheres.[49] Most people do not walk through life each day refracting their experiences through a philosophically constructed metaphysical system, and, yet, I contend that many have a functioning metaphysics, or least worldview (a constellation of metaphysical concepts) even if it is implicit. Such a worldview is largely culturally-informed/constructed and it is how individuals make sense of everyday experiences in conjunction with broader cultural stories and narratives. The metaphysical

[49] Often these are unconscious influences, not, however, in RC.

category of substance is one such category that has historical influence that actively shapes our presumptions about ourselves and the world.

My continued metaphysical reflection is significantly influenced by the generative engagements of RC theology and contemporary metaphysics emerging from RC theologians and priests David Tracy and Joseph Bracken, S.J. Both theologians have creatively and meaningfully connected Whiteheadian process metaphysics and RC theology. Further, Tracy's methodological commitment to revisionist theology that confronts, corrects, and reconciles theological commitments, insights, and praxis with present day concerns continues to be important to this project. Tracy rightly bemoans the deleterious influence of inadequate metaphysical systems as they persist in the 20th century. In arguing for the importance and function of metaphysics, he advises, "In the most basic sense, any metaphysical analysis must meet two general criteria for metaphysical statements: coherence and fidelity to experience broadly and fairly understood."[50] Metaphysical analysis and Christian theology (and the concepts wielded therein) need to meet a "criteria of adequacy" that generally entails the ability to provide method and conceptions that can authentically and accurately explain our common human experience.[51] Fortunately as we navigate this area nebulous, potent area of the RC heap where substance metaphysics persists, we encounter these theologians critically considering the category of substance and turning it into the heap.

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[50] David Tracy, *Blessed Rage for Order: The New Pluralism in Theology*, 172.

[51] The notion of adequacy is robustly developed by Tracy, see for example, *Blessed Rage for Order,* 44.

In order to meet the criteria of "fidelity to experience broadly and fairly understood," modern metaphysical analysis followed Enlightenment, subjectivist analysis in the "turn to the subject." Within the RC tradition the turn to the subject has re-inscribed traditional Aristotelean and Thomistic categories. This is especially so with the category of substance, in theologies of eminent twentieth century RC theologians Bernard Lonergan and Karl Rahner.[52] Their venture at meeting the experiential criteria postulates the self as object and fundamental experience as the sense-perception of objects. Tracy, following Whiteheadian and Anglo-American process metaphysics, argues that this is in fact inadequate.[53] Hence, Tracy argues for Whitehead's "reformed subjectivist principle" which holds that our experience, which should ground our basic metaphysical concepts, is active engagement with other subjects, not eternal objects[54] as the subjectivist principle would hold. In other words, for Whitehead and for Tracy, all that exists as actual are subjects. They therefore ground their metaphysics in complex, relational, and interactive experiences in which a world of subjects is actively engaging with and bonding with one another. Concerned as I am with metaphysical aptness and attending to the planetary, ecological crisis, this metaphysical scheme provides a more apt, relational foundation for a sense of self and relation to planet and ecosystems. The climate breakdown that our planet is now experiencing informs the continual becoming of every subject. Thus, to better understand oneself in the world, I affirm this process-relational metaphysics that

[52] Tracy, *Blessed Rage for Order*, 172.

[53] See Tracy, *Blessed Rage for Order*, 173-192. Of course, this inadequacy relates to the whole philosophical scheme that then sits at odds with other developing bodies of knowledge, namely quantum physics and relativity theory.

[54] Though eternal objects in Whiteheadian philosophy are quite complex, suffice it to say here that an important characteristic of eternal objects is that they are atemporal.

more adequately encourages my self-understanding through continual attunement to place and to others.

To better compost process-relational metaphysics and move past the category of substance, understanding the relational nature of experience more robustly might prove helpful. Further, to move past the powerful influence of substance metaphysics requires concepts and language that will enable a more complex rendering of human experience. To this end, Tracy writes,

> If one shifts one's focus away from the sense-perception of objects ('experience') as the paradigm case for reality to the self's full range of unconscious, conscious, and knowing experiences of the self as the paradigm case for reality, a change in basic metaphysical categories also occurs. In place of the essentially non-temporal and non-relational categories of 'substance' and 'being' of the classical metaphysical tradition, the categories 'process,' 'sociality,' and 'time' emerge. The very meaning and hence reality of the self's full experience is intrinsically and systematically relational, social, and temporal.[55]

The metaphysics for which Tracy is arguing and which in his view meets the above criteria is one grounded in a highly relational world of inter-subjectivity, wherein subjects co-exist and co-constitute one another, which would redefine the basis of experience.

It is worth noting that the previous section of this chapter, which dealt with the doctrine of creation and the world-God, creation-Creator relationship would be markedly changed by such a metaphysics. Joseph Bracken, a Jesuit, RC process-relational theologian, also argues for a metaphysical shift away from the Thomistic and Aristotelian substance-orientation. Bracken argues for a metaphysics of intersubjectivity in Catholic theology as the "worthy successor to the all-embracing of being worked out by Thomas Aquinas and his successors." He contends that this successor must be a "consciously

[55] Tracy, *Blessed Rage for Order*, 173.

conceived metaphysics of intersubjectivity…with its starting-point in the coexistence of subjects of experience in dynamic interrelation at different levels of reality[.]"[56] Bracken's Whiteheadian proposal is a stark move away from the classic RC individualistic and substance metaphysics to one that stresses an interpersonal God-world relationship grounded in a social ontology that prioritizes "corporate or social realities over individual entities as their constituent members."[57] Bracken thus develops the societies, which are spatially and temporally organized groups of momentary subjects, as equally grounding to his metaphysics as are Whiteheadian actual entities.

Bracken takes care to note particular differences between and his development from Whitehead's schema and that which he advances here. He works explicitly in the RC tradition and also draws important distinctions between his work and those who argue for reimagined relational conceptualizations of RC theology, notably Elizabeth Johnson and Catherine LaCugna, Jean-Luc Marion and Louis-Marie Chauvet. He distinguishes himself from the former, by arguing that Johnson and LaCugna offer intersubjective models for the God-world relationship that continue to rely on Thomistic metaphysics; the latter, he argues, pursue non-metaphysical intersubjective theologies. Both, he argues, would be strengthened by full development of and commitment to intersubjective, relational metaphysics.[58] In so doing, what Bracken helps to make evident that many very prominent RC theologians continue to understand and articulate the RC tradition in Thomistic, substance-oriented terms, while stretching them towards a more highly

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[56] Joseph A. Bracken, S.J., *The One in the Many: A contemporary Reconstruction of the God-World Relationship* (Grand Rapids, MI: Eerdmans Publishing Co., 2001), 17.

[57] Ibid., 2

[58] See Bracken, *The One in the Many*, 31-47.

relational, intersubjective metaphysic. In certain areas of the RC heap, in other words, the composting is in process. These theologians though working within the confines of RC theology, beholden as it traditionally is to substance metaphysics, have been turning the tradition, introducing relationality, weakening the hold of substance, beginning the transformation towards process-relationality.

Thus, theologians like Tracy and Bracken, Johnson and LaCugna have worked to responsively theorize human beings' co-constitution with all creation. They have devoted considerable mental acuity to better develop our sense of self-in-society, self-in-creation deeply impacted by and imbricated in the climatic changes we are undergoing. The inheritance of substance metaphysics is deeply embedded and widely disbursed in the RC heap. It is potent, pervasive, and persistent. Substance metaphysics, given its power, continues to require further attention (turning, intermingling, breaking-down) to decompose and permit the fostering of more apt metaphysical systems. Yet also, I hope to have made apparent that the category of substance has been turned and worked upon by many formidable RC theologians. Composting is in process, and process is composting.

Today, doing theology in a similar spirit requires a different metaphysics, one that adequately describes our experiences in conjunction with contemporary sciences and philosophies. The Church is fortunate to have so many remarkable thinkers already reworking substance metaphysics' social, symbolic, and material impacts. When working with and within the RC sacramental and ecological tradition to better flourish in the Anthropocene, I will rely on these thinkers and further decompose the individualistic, separatist influence of substance metaphysics.

Stepping back from the vein of substance within the heap, my focus incorporates nearby folds: embodied sacramentalism. It appears thickly enmeshed with the category of substance, yet further along in its decomposition. That dense entanglement (especially during the medieval period), is in part due to the systematic approach to and delimitation of the sacraments by Hugh of St. Victor and Peter the Lombard in the RC tradition. The sacramental folds in the heap are eminently turn-able and even tentacular, inviting intermingling. In these accumulations, the heap teems with life, highlighting the beauty and potential of all elements with which it is actively intermingled.

The following section will serve as a precis to the subsequent chapters, especially chapter four, which explores the inheritances of sacramental theology spanning the medieval and modern periods. In focusing on the sacramentalism, however, the present argument will remain adjacent to theologically and doctrinally limited sacraments and think more about sacramentality and sacramentals. In other words, we will focus on the broader approach to creation that recognizes the ever-present potential for encounter with the divine in and through the material world.

SACRAMENTALITY

I am drawn to RC sacramentalism like a worm is drawn to moist and cool soils rich with decaying material. No matter the accretions within the RC heap explored, one can find sacramentality throughout the pile. In this sacramental mode, sacraments can be understood as John Hart describes them: "*Sacraments* are signs of the creating Spirit that

draw people into grace-filled moments permeated by a heightened awareness of divine presence and engagement with divine Being."[59]

The sacraments have drawn perennial theological attention in the history of RC theology, which is no surprise as the sacraments are regular touchpoints for religious communities that draw people together into the mystical body of Christ. We might understand localized RC communities as one mode of sacramental ecosystem—parishes are grounded in the particularities of planetary places and at once the liturgical calendar comprises the yearly and weekly sacramental systems. Most broadly, the sacraments have been conceived as particular and prescribed religious rituals observed in a church by an ordained religious leader. That person guides a congregation, individual, or set of individuals through said religious ritual in which God's grace is said to be conferred through visible signs or symbols. In early periods of Christian history these ceremonies and practices were more diverse and less strictly scripted, and thus they even more easily permeated that smaller instantiation of heap. For instance, Augustine, who lived and wrote in the late fourth and early fifth centuries, famously defined sacraments simply as "visible forms of invisible grace." In the twelfth century, however, Hugh of St. Victor began the process of delimiting the number of sacraments within the RC tradition, which were limited to seven by the Council of Trent (1547-1563).[60] In other words, the RC tradition has always recognized the importance of the divine presence and revelation through material and symbolic means as sacramental principle.

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[59] John Hart, *Sacramental Commons: Christian Ecological Ethics* (Lanham, MD: Rowman & Littlefield Publishers, 2006), xiv.

[60] It is worth noting that though this number has remained constant within the RC tradition, it has not been so simple through for Christian history since Trent – Protestant reformers like Luther limited the sacraments to two, Baptism and holy communion.

The insights of sacramentality are continually recalled through the enactment of the sacraments in the RC Church, about which Thomas Aquinas influentially developed theological understanding of their work. As a RC theologian, Thomas Aquinas' theology regarding the sacraments is important to engage as it developed the foundation for the sacraments are understood as effective causes of the grace that they signify (3.60.2). Further, and importantly for the argument of this dissertation, Thomas, in his *Summa theologiae*, reaffirmed the instructive work of the sacraments: they teach embodied humans through their bodies their likeness to the Divine through Christ's incarnation. In the next chapter, I will explore Thomas' sacramental theology in significant detail, in part because of his authoritative stature, and, in part, because his articulation of causality is both insightful and in need of updating. Before doing so, I will offer significant framing for engaging his theology, drawing upon contemporary theorists like Mark D. Jordan and Theresa Burger, as well as the insights for historical *ressourcement* from *nouvelle theologie*.

This principle of sacramentality has always been an important element of the RC heap. It is theologically grounded in the creation and reaffirmed in the divine incarnation. Jesus's incarnation, as Hart reminds, is itself a sacrament according to the logic of sacramentality. Jesus revealed and mediated the divine being, who became embodied within history as Jesus: the "materially invisible Creator of the cosmos [who became] materially visible[.]"[61] The notion of sacramentality marks the divine presence in the cosmos and the unique ability of the divine to Self-reveal and Self-mediate through and in the material cosmos in significant ways in relation to humanity. Sacramentality's

[61] Hart, 8-9.

intercession in divine-cosmos relation offers important insights for contemporary ethics regarding the formation of individuals in relation to the material world and recognition of its inherent worth.

In the penultimate chapter of her *Gaia and God*, Ruether aims to return to the fore what she calls the "cosmological tradition." This holistic tradition regards Christ as "creator and redeemer of the cosmos" and the "immanent divine source and ground of creation" and, she argues, has been largely ignored since the late medieval period.[62] In her tracing the complex history of sacramental and cosmological traditions in the RC heap, Ruether notes how the tradition constantly worked to synthesize. One of the more challenging instances of synthesis regarded the union of the body with the soul given powerful platonic influences wherein the soul belonged to the higher realm than the body. She draws upon Irenaeus, discussed above, as an important grounding for RC understanding of the creation as itself an incarnation. Ruether recounts how Irenaeus "rejected Gnostic anti-cosmic dualism" and "affirmed the cosmos as the expression of immanent divinity, within which humans stood as microcosm to macrocosm."[63] She thereby helps to understand Irenaeus as offering a theological perspective wherein creation is infused with the divine, which is reaffirmed through historical incarnation of Christ. Through this permeation by the divine of the cosmos and our very bodies, "the bodily becomes the sacramental bearer of the divine."[64]

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[62] Ruether, *Gaia and God,* 229.

[63] Ibid., 230.

[64] Ibid., 235.

The story of redemption, Irenaeus' soteriology, was and continues to be a central concern of Christian faith and theology. It also provides important insights for understanding the God-cosmos relationship. Notably, the materiality of the creation and whether or not it is a part of salvation is an active and regular question. Given the dualisms informing the tradition, it is easy to assume, for example, that only one's soul could and would be redeemed for life eternal. However, this is not the tradition's teaching. Christian theology has understood Jesus' incarnation to exemplify the opposite: all of Creation, the entirety of the cosmos will be made whole, transformed into a new heaven and a new earth.[65] Within the RC tradition, the sacraments are, as Ruether states, "paradigmatic of this deeper mingling of body and spirit, renewing the life and power of creation."[66] Mortality and sin are overcome through God's infusion of their immortal life within Their creation in this salvation narrative.

As I will trace in coming chapters, through the incarnation, Jesus was read as having established the sacraments and the efficaciousness of their embodied pedagogy. The theological reasoning undergirding the ostensible embodied pedagogy of Jesus' life and its insights for the ethical formation of embodied humans are central to my argument for the potentials within the RC tradition for ecological attunement and ethical adaptation for the Anthropocene.

Sacramentality, understood as the mystical notion that all of creation is infused with the divine spirit, centrally features in ecological theologies and remains a pillar for

[65] One could make a strong case that resurrection, in fact, does this work, even more so than the incarnation. Further exploration of the resurrection in particular in relation to the work of this dissertation is a hope for future projects.

[66] Ibid., 235.

Roman Catholic ecological spirituality. For instance, at the Green Mountain Monastery, the Sisters have adapted sacramentals like the rosary to more readily recall the Divine's oneness with creation in their "Earth Rosary;" and Genesis Farm has created an "Earth Meditation Trail" with prayer stations, similar to the Stations of the Cross, to foster and perform communion with the sacred Earth and cosmos.[67] Sacramentality enlivens the inexhaustible, radical, and hope-filled potentialities of the RC tradition. By exploring the doctrine of creation and substance metaphysics in this chapter, I sought to show how many portions of the RC heap are complex mixtures of ideas, intentions, systems, and historical outcomes that are neither wholly good nor bad. The intermingling of creation-affirming teachings of Roman Catholicism with those that have proven stagnant, toxic, or at times deadly makes working within the tradition challenging and worthy of attention and remediation. Composting my tradition to amplify the sacramentalism present throughout is one way that I hope to reclaim that tradition. Such remediation and reclamation, however, requires facing the tradition in its fullness, recognizing toxins, and disavowing them through assisting in the composting process.

The sacramentality that infuses the RC tradition is like an ancient wellspring of liveliness, it resembles worms teeming through a compost heap as spirited bodies accelerating the decomposition and reclamation of waste for nourishment, while producing waste, worm castings, that nourish others, particularly plants. The liveliness and potentialities found in RC sacramentality inspire the next chapter's engagement with the notion of tradition itself. It remains important, however, to continuously recall and reject toxic elements of the RC sacramental system, for instance, that the sacramental

[67] See McFarland Taylor, *Green Sisters*, 149-154; 236-247.

system is one of "mediated" grace, that the sacraments are misogynistic and exclusionary (think especially of Holy Orders), and that they rely on (exclusively male) priestly sacerdotal power the sacraments have historically been a source of division within Christian tradition. Tradition conceived as dynamic informs this dissertation's reading of the complex theological history of the formalization of RC sacramental theologies that have attempted to tap into and harness more straightforwardly the spirit of sacramentalism: God's presence throughout the material world.

CHAPTER FOUR: ROMAN CATHOLIC SACRAMENTAL THEOLOGY

PEDAGOGIES FROM AND FOR TIMES OF CHANGE

> Men make their own history, but they do not make it as they please; they do not make it under self-selected circumstances, but under circumstances existing already, given and transmitted from the past. The tradition of all dead generations weighs like a nightmare on the brains of the living. And just as they seem to be occupied with revolutionizing themselves and things, creating something that did not exist before, precisely in such epochs of revolutionary crisis they anxiously conjure up the spirits of the past to their service, borrowing from them names, battle slogans, and costumes in order to present this new scene in world history in time-honored disguise and borrowed language. Thus Luther put on the mask of the Apostle Paul, the Revolution of 1789-1814 draped itself alternately in the guise of the Roman Republic and the Roman Empire, and the Revolution of 1848 knew nothing better to do than to parody, now 1789, now the revolutionary tradition of 1793-95. In like manner, the beginner who has learned a new language always translates it back into his mother tongue, but he assimilates the spirit of the new language and expresses himself freely in it only when he moves in it without recalling the old and when he forgets his native tongue.
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> Karl Marx, *The Eighteenth Brumaire of Louis Bonaparte* (1852)

> Practices carry the traditions that shape people, and people shape the practices and the traditions they carry.
>
> Terrance Tilley, *Inventing Catholic Tradition*, 65

The Roman Catholic (RC) composting heap is rife with material both nourishing and noxious. My exploration of a few deep layers of the RC heap in the previous chapter surveyed complexities entailed in sifting through entanglements within Roman Catholicism. Focusing in on the doctrine of creation, the relationship between Creator and creation, the category of substance and its metaphysics, and finally RC sacramentalism, chapter two demonstrated how even those portions of the heap that seem most nourishing for ecological theologies are entwined with harmful legacies. I will not claim that even the most promising portions of the tradition can be completely disentangled from the toxins that have informed/infused them, and yet I will argue that

the RC heap, with its complex entanglements, is worth exploration, turning, and reclamation.

In this chapter I will more thoroughly explore RC sacramental traditions and theologies, though this recounting will be far from comprehensive. In doing so, I will first pay close attention to the notion of 'tradition' itself. I focus on the active processes that constitute tradition to open up space for folding in and cultivating creative engagements with portions of the tradition, especially the sacraments. I contend that Roman Catholic sacramental theologies inform effective embodied pedagogies that are brimming with potential to meet the formative ecological and ethical challenges of present planetary and ecological horizons. Nuanced conceptions of tradition, power, practice, and embodiment will inform how I argue the RC sacraments have carried and continue to carry the seeds for embodied ethical formation in the Anthropocene. In this chapter, I will think with Yves Congar, Theresa Berger, Terrance Tilley, Susan Ross, and Siobhan Garrigan historically and constructively, in order to revisit and reimagine thirteenth and twentieth century, Scholastic and Neo-Scholastic, theorizations of the sacraments.

Marx's above opening to his *The Eighteenth Brumaire of Louis Bonaparte* (which may seem odd as an opening to this chapter) informs the mode of my thinking in this chapter. He reminds the reader that revolutionary aims are always complexly tied to the past and future. The systems, institutions, and infrastructures in which we live today are largely the result of previous generations' imaginations, desires, hardships, technological advancements, and responses to changes geopolitical, economic, and environmental. The unpredictable crises variously described in the s/cenes[1] of chapter one demand creative

[1] s/cenes are the horizons or backdrops in which I suggest we can understand the various potential unfolding climatic crises. The first chapter detailed the formation of our present geological era and possible

improvisation regarding how to live with other humans and all planetary inhabitants and ecosystems in a radically altered world. To chart paths for meaningful change, I will continue to turn to the past to compost ideas, rituals, and rhetoric that transmit applicable guidance through RC tradition for the Anthropocene. Turning to the past and composting inheritances may be less than revolutionary; some may write it off as merely pragmatic, as non-prophetic, as compromise, or worse, as capitulation. However, I hope that this creative reclamation might cultivate support and build coalitions for necessarily augmented futures within the Church and beyond.

The alter-s/cenes detailed in chapter one constitute the horizons into which I am envisioning modes of embodied ethical formation. These futures are not of my (or of any one's own) choosing and sole making. The previous chapter and the present one together aim to in some small way reclaim and reimagine the complexities of the RC sacramental tradition for hope-filled futures. Chapter two trudged through three areas of the RC heap, identifying the complex putrid and pleasant entanglements of RC eco-theological precursors. That chapter, in beginning to turn the heap to aerate and foster decomposition, primed this chapter's closer consideration of tradition as such. Chapter two, in navigating some of the toxicities historically entwined in the RC tradition, opens the possibility for my more generous attempt to reclaim portions of RC sacramentalism. This process of course is an unwieldy and compromised one—there is nothing pure, simple, or merely

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names for it pointing towards the powerful contributing factors and the different responsibilities of various groups of people and systems as relates to each unique conceptualization. In particular, chapter one deals with the Anthropocene, the Capitalocene, the Chthulucene, and the New Climatic Regime, in an attempt to name the human, economic, imaginative, affective, and political influences in forming the present and immediate future.

good about it. It is complex and always already imperfect. I will thus attempt to navigate harms and reclaim, with hope, a small part of my tradition.

In this chapter, I will argue that the sacraments and the embodied pedagogies they employ are redeemable insights from the RC heap. Further, this embodied sacramentalism is apt for addressing contemporary ethical crises through its ability to aid in forming more responsive, responsible, and ecologically attuned persons in the Anthropocene. In order to make this argument, I will delve into RC sacramental and embodied pedagogies that were developed and formally articulated and theologized during the medieval period. At that time, the sacraments had already been understood as sanctifying and ethically formative ritual practices. Whether or not these practices and their forms can be effectively disentangled from the inexcusable wrongs and inaccuracies of the tradition that informed their development remains an open question.

This chapter attends to the pedagogical aims of the Roman Catholic sacraments as articulated theologically and theoretically in the thirteenth, twentieth, and twenty-first centuries. The sacraments are among the older and highly influential Western material, and embodied forms of instruction within Christian traditions. As such, they are not bound by or fully encapsulated by one explanatory schema, metaphysic, or anthropological understanding. They are more pliable than any one articulation of their work and efficacy can articulate. In that space of potentiality, I will draw on contemporary discourses about ritual and sacrament to imagine an ethical pedagogy for the Anthropocene informed by embodied sacramentalism.

Before diving into historical sacramental theological expressions, whose prominent voices (that continue to exert influence) were privileged, elite, male clerics, I

will offer as guide a contemporary approach to Christian and Roman Catholic *tradition*. In the latter half of the twentieth century, Roman Catholic *nouveaux* theologians interested in *ressourcement*, a "return to the sources," offered robust guidance to more capacious interpretation of "tradition." With Terrance Tilley and Siobhan Garrigan, I will build on their conception of tradition to appropriately honor worship, liturgy, and ritual as sites of primary theological expression and thought. I will move swiftly beyond the binary of tradition as either received or constructed, a false binary however applied, in order to understand it as a process and a practice that is embodied, always already changing, and necessarily complex. Then I will be able to engage critically and creatively with historical sacramental articulations that might prove beneficial to continuing or applying the insights of the RC tradition in the Anthropocene.

WHAT IS "TRADITION?"

In Roman Catholic thought one of the most important theorists of "tradition" today remains twentieth century theologian and French Dominican priest Yves Congar.[2] He wrote a number of texts on "tradition" including *The Meaning of Tradition* (1964) and *Tradition and Traditions* (1966), which parse in detail the *process* of tradition as well as its content. Importantly for Congar, the content of tradition extends well beyond the

[2] Yves Congar (1904-1995) was a French Dominican priest who faced similar silencing as Henri de Lubac during the 1950s due to his theology and was also appointed an expert consultant in preparation for the Second Vatican Council in 1960 by Pope John XXIII. He was a student and then colleague at Le Saulchoir of Marie-Dominique Chenu, O.P. who was one of the earliest *nouvelle* theologians and reformists. Congar began pursuing the priesthood as a diocesan seminarian at the young age of 17; he moved to Paris and studied under eminent Catholic theologians like Jacques Maritain, and at 21 he chose to enter the Dominican Order. Congar is perhaps best known for his writings on ecclesiology—he founded the *Unam Sacntum* series of books on ecclesiology in Roman Catholicism—and for his ecumenical work, which proved hugely influential in the Second Vatican Council's documents on ecumenism. His approach resembles that of de Lubac in its historical style.

confines of the Bible.[3] Congar's conception of tradition, particularly as he develops it with regards to Christianity, includes liturgy, sacraments, patristic writings, catechisms, conciliar pronouncements, writings of the Magisterium and popes, types of action and attitudes, even bodily postures within worship. As we will see, Congar's theorization is a complex and rich one, and it provides an important grounding point for our theological conceptions of tradition, which will be furthered and nuanced below in conversation with Terrance Tilley, an emeritus professor of theology at Fordham University.

In *The Meaning of Tradition,* Congar begins his thinking on tradition by drawing on the sociological definition as offered by French philosopher, Mikel Dufrenne: "Tradition, in the true sense of the word, implies a spontaneous[!] assimilation of the past in understanding the present, without a break in the continuity of a society's life, and without considering the past as outmoded."[4] This definition suggests continuity between past and present at social or communal and individual levels. Dufrenne's definition also suggests that as communities and individuals confront novel situations and social changes, the weight of past understandings, habits, and attitudes inform our responses and adaptations. Though Dufrenne's definition jumpstarts Congar's opening thoughts, Congar quickly makes clear that the definition is too broad for his consideration of the Christian tradition. In Congar's reflection on the written and unwritten elements of the Christian tradition, he investigates tradition as "something unwritten, the living

[3] That Congar's conception of tradition extends beyond the Bible is an explicit recognition that the protestant mantra *sola scriptura* does not capture in fullness the Christian faith. He is, with other *ressourcement* theologians, rejecting the opposition between tradition and the Bible.

[4] M. Dufrenne as quoted by Yves Congar, *The Meaning of Tradition* (San Francisco: Ignatius Press, 2004), 4. This definitional springboard for Congar aligns with the sense of historical weight of social and cultural and religious *habitus* as forwarded by sociologist Pierre Bourdieu, which has factored into my thinking in this dissertation.

transmission of a doctrine, not only by words, but also by attitudes, modes of action, and which includes written documents, documents of the Magisterium, liturgy, patristic writings, catechisms, etc., a whole collection of things which form the evidence or monuments of Tradition."[5] He points to the Latin roots of "tradition" from *traditio,* which is the noun form of the verb *tradere*, which literally means "to transmit" or "to deliver."[6] What Congar emphasizes in this etymological and definitional exercise is that *tradere* (and tradition) entails, on one hand, an intentional handing off or parting with, and, on the other hand, a reception or an acquisition of the object. In other words, there is always a giver and receiver in the *process* or *action* of tradition.[7]

In *Tradition and Traditions*, Congar adds that "Tradition is not primarily to be defined by a particular material object, but by the act of transmission, and its content is simply *id quod traditum est, id quod traditur.*"[8] This definition, which he continues to nuance and specify in relation to RC tradition, importantly emphasizes the communicative process of transmission, it is the practice of passing on, of communicating—offering and receiving—that marks a tradition. Traditions are active and living, as he underlines:

> Tradition is living because it is carried by living minds—minds living in time. These minds meet with problems or acquire resources, in time, which lead them to endow tradition, or the truth it contains, with the reactions and characteristics of a living thing: adaptation, reaction, growth and fruitfulness. Tradition is living

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[5] Congar, *The Meaning of Tradition*, 10.

[6] Tradition, as a concept is complex, as Jesse Mann has further nuanced, the term can also suggest "handing down" or, more negatively, "handing over."

[7] See Congar, *The Meaning of Tradition*, 9-10.

[8] Congar, *Tradition and Traditions: An Historical and Theological Essay,* trans. Michael Naseby and Thomas Rainborough (New York: Macmillian, 1967), 296. Latin roughly translates: "what is handed on."

> because it resides in minds that live by it, in a history that comprises activity, problems, doubts, opposition, new contributions and questions that need answering.[9]

Tradition, like a compost pile, is adaptive and responsive, intra-acting in time and space, filled with doctrines and doubts, questions and conflicts, always growing and changing. Congar's understanding of tradition focuses on the active, processual nature of traditions, eschewing any kind of dogmatism about the content passed along. In other words, any tradition, including Roman Catholicism and any other faith, is what Terrance Tilly calls "communicative practice," drawing on Alasdair MacIntyre's definition on a living tradition as "historically extended" and "socially embodied."[10] Given the s/cenes of social and planetary change experienced and anticipated, Congar's rendering of tradition as something that like a "living thing" adapts, reacts, and grows is invaluable for approaching the heap of the RC tradition. I aim to emphasize the adaptability and response-ability in my exploration and turning of RC traditions.

Terrance Tilley further reconceptualized tradition nearly 40 years after much of Congar's writing. He holds up Congar's basic insight that tradition is not primarily about the material object or stable, punctual content passed on (which he notes can be a tremendous variety of things: "attitudes, doctrines, visions, skills, practices, virtues, etc.").[11] Rather, tradition is about the process—"a communicative process."[12] Tilley even adds to the basic etymological definition of tradition offered by Congar (and others). He

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[9] Congar, *The Meaning of Tradition*, 77-78

[10] Terrence W. Tilley, *Inventing Catholic Tradition* (Eugene, Oregon: Wipf & Stock, 2011), 50-51.

[11] Tilley, 9.

[12] Ibid.

writes, "In Latin, the word *tradition* means not only what was handed on but also *treason.*"[13] Tilley draws upon the Italian motto *Tradutore, tradditore* ("The translator is a traitor"), noting that this does not mean that "those who transmit tradition are traitors, but that attending merely to the barest concept of tradition as *id quod traditur* without close attention to context and particular circumstances of the practice of *tradition* is bound to fail to explicate the rich meanings of the concept of tradition."[14] When I later attend to and work on advancing and adapting the RC sacramental tradition to meet contemporary needs, dogmatists might receive my propositions may as traitorous or heretical. Adaptation, growth, and change are not traitorous, but necessary for the life, survival, and continuity of traditions.[15] Just as the connotations and meanings of certain words change over time, every tradition develops and acclimates to changing times and challenges in order to keep the spirit and meaning of that tradition alive and vibrant and accurate in relation to its core teachings.[16] Tilley guides us in that work in *Inventing Catholic Tradition*, as he approaches tradition in a new way, bringing together a wide array of conceptual tools, which aid in understanding, working with, and adapting the RC sacramental tradition to meeting the ethical needs in the Anthropocene.

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[13] Ibid., 9-10.

[14] Ibid., 10.

[15] Theologians including John Henry Newman and his interpreters would include or perhaps categorize this as the "development of doctrine." See John Henry Newman, *An Essay on the Development of Christian Doctrine* (University of Notre Dame Press, 1989).

[16] The notion of "core teachings" of the tradition sits in tense relation with Congar's and Tilley's theorization of tradition as dynamic. It also raises again the quintessential questions of orthodoxy and orthopraxy, which I would argue are mutually informing. Thinking here about the sacraments in particular and their central teachings throughout time, I would emphasize a few for initial consideration: the inherent participation of humans (and all of creation) in the divine; the salvific mystery of Christ's incarnation, passion, and resurrection; humans' moral likeness to Christ.

In my digging around certain accretions of the RC heap, turning it from my vantage in the Chthulucene, Tilley reminds me that this process of composting—adding to, turning amidst, and living out—is what constitutes traditions. They are meant to be lived, applied, and adapted. Traditions that are alive and effective are known in and through *doing*—less so by simply knowing and being able to reiterate or apply dated, if important, doctrines. Tilley succinctly argues that what other theories of tradition have gotten incorrect is their centering on the "what" of traditions. Instead, he articulates an approach that "presumes that knowing a tradition is much more fundamentally a knowing *how* to live in and live out a tradition. If traditions are recognized to be networks of enduring practices, then one knows them when one knows how to participate in them. Traditions are not reified 'things' that can be known apart from practices[.]"[17] Thought and practice are mutually informing and necessarily intertwined. That traditions are networks of enduring practices suggests the multifaceted nature of traditions as both abstract and embodied, transcendent and immanent. They are systems, ways of being and understanding that must be lived out and living—they cannot be stagnant, rigid *things*.

I thus envision my work with the tradition that is the RC composting heap as a receiver and cultivator, reaffirming the nourishing portions and activating decomposition through turning—reconnecting isolated and reified doctrines, and renegotiating them in the process. The role is not unique to me but is rather the process in which all parishioners are actively a part. Tilley's approach to tradition recognizes the historical strength of practices and ideas within traditions, while also appreciating their flexibility and their necessary and regular revision. He articulates clearly that (1) "people are shaped

[17] Ibid. 45.

by traditions" and (2) "people can and do reshape traditions as they receive them by enacting them."[18] My work now, then, is to continue shaping this powerful and seemingly intransigent tradition of the RC Church to better meet the needs of the planet and its inhabitants in this era of rapid climate breakdown.

While many other theorists of tradition—whether focusing explicitly on religious traditions or not—speak to the ways in which traditions are structured by systems of communication and play important roles in individual and communal identity formation and meaning,[19] Tilley guides greater focus to *practice*. There are three elements of shared, social practices (which constitute a tradition) that Tilley develops: 1. The group of people who participate in practices have a "shared vision"[20] or "web of convictions" which includes a goal or end at which practices aim. 2. Participation in practices "develops dispositions appropriate for persons involved in the practice." In other words, practices themselves inculcate affects. And 3. Practitioners by and through their participation learn the "'grammar' of the practice, a set of inferred rules that show how means (material means and skills) and ends are connected in the patterns of actions that constitute practice."[21] Tilley thus offers traditions as enduring sets of linked practices that

[18] Ibid., 46.

[19] See, for example, Alasdair C. MacIntyre, *After Virtue: A Study in Moral Theory*, 3rd ed (London: Bloomsbury, 2011); Eric J. Hobsbawm and Terence O. Ranger, eds., *The Invention of Tradition*, 28th printing, Canto (Cambridge New York Melbourne New Delhi Singapore: Cambridge University Press, 2019); Clifford Geertz, *The Interpretation of Cultures: Selected Essays*, 3rd edition (New York: Basic Books, 2017); Kathleen C. Boone, *The Bible Tells Them So: The Discourse of Protestant Fundamentalism* (Albany, N.Y: State University of New York Press, 1989), among others.

[20] Tilley emphasizes that religions tend to place great emphasis on a shared vision that expresses the goals of a given practice. He makes clear that religious vision is not necessarily the defining characteristic of a religious tradition, but rather that it often distinguishes religious traditions by its strength and centrality.

[21] Tilley, 53-54.

are communicative and identity shaping; practitioners are linked often by a shared vision or set of beliefs particularly about the aims of their shared practices, and through practice practitioners cooperatively develop appropriate affects and foster more robust and complex forms of communication through the rich material, aesthetic, linguistic, and bodily elements of the sets of practices. Tradition as developed by Tilley is rich and nuanced, layered and multifaceted. It involves embodied and extremely personal components along with social and communal ones. His vision of tradition as interlinked sets of practices also points to their complexity and complicity through their nebulous connections that extend well beyond the strict confines of set rituals. In this way, Tilley's vision of traditions as always changing and adapting, can also inspire (or subtly coax) broad change through the interconnection of the practices that make up traditions.

Though practices, whether religious or not, are often intimate and personal—as is especially evident in confession, marriage, holy orders—the communal, public element of practices should not be understated. As Tilley bluntly writes: "Practices are not private."[22] For even when an individual practices alone, that practice was informed by and learned from, and thus continues to participate in, community. Learning to flourish and ethically navigate the Anthropocene, the Capitalocene, the Chthulucene, and the New Climatic Regime will continue to demand immense individual and communal—social, political, economic, and cultural—work of human communities. Euro-American, white, Western, men bear unique responsibilities in that they, as a broad collective, have disproportionally caused and benefitted from the systems—including the sacramental system—that are resulting in these unfolding s/cenes. Traditions like Roman Catholic

[22] Ibid., 56.

sacramentality hold important insights for navigating difficult circumstances that uniquely impact different members of communities.

Within Christian traditions and the RC tradition in particular, I argue that the sacraments are one nexus of enduring practices best primed to reimagine, reinhabit, and practice those traditions to meet the Anthropocene. The green sisters, whose practices we encountered with Sarah McFarland Taylor in the introduction of this dissertation, poignantly demonstrate adaptability and applicability of RC traditions to meeting the Chthulucene through eco-spirituality. The sacraments, as material and bodily practices, participate in Jesus' incarnation and the Spirit's continued movement, and are thereby already intertwined in human flourishing in the present moment.

Communicative Power in Traditions as Linked Practices

Tilley offers a tradition as a set of linked and enduring practices that communicate a shared vision and, in doing so, they are formative in establishing individual and group identity. This has useful insights and powerful implications for developing materially attuned and ecologically attentive collectives in the unfolding climatic regime. Tilley's communicative model resonates strongly with what Siobhan Garrigan depicts as Hannah Arendt's communicative conception of power that Jurgen Habermas then developed. In this conception of power, "power is built up in communicative action; it is a collective effect of speech in which reaching agreement is an end in itself for all those involved."[23] This notion of power is one cultivated and maintained by a group or collective of people

[23] Jurgen Habermas, "Hannah Arendt's Communications Concept of Power," *Social Research* 44, no.1 (1977): 6.

through communication. Agreement is thus an end in itself, and consensus and agreement are more important than the successes/dominance/will of any individual. This model is one of empowerment and solidarity—the group communication can enable or empower others to achieve the group's determined goals.

This notion of power as collectively cultivated and held through communication strikes me as a model of power that we need to seek out and develop in these precarious times of climate instability and political polarization that is leading to the rise of authoritarianism globally. Additionally, and perhaps more importantly, it is a transformative understanding of power that is non-violent and cooperative.[24] Power thus conceived charges humans to work in communion for change in meaningful and practical ways. In a globalized, pluralistic society, the power through communication of diverse perspectives necessarily demands the actively wrestling with inherited institutions, modes of thinking and action, and individual and collective ways of being in relation to the planet. This theorization by Habermas and Arendt supports the type of adaptive and creative practicing within traditions that I argue is needed. For in creative practicing there

[24] This modality of power aligns with ecclesiological and liturgical changes made in by the RC Church after the first and second Vatican Councils, wherein greater emphasis is made to include and celebrate theological insights of the faithful. Particularly of note is are *Lumen Gentum* and *Sacrosanctum Concilium*, which are both constitutions of the Second Vatican Council. The former notably marked emphasized the importance of the laity, the people of God, in the RC Church (Pope Paul IV, "Lumen Gentium," November 21, 1964, https://www.vatican.va/archive/hist_councils/ii_vatican_council/documents/vat-ii_const_19641121_lumen-gentium_en.html). The latter, which pertains to the sacred liturgy and is thus particularly important for this dissertation, likewise catalyzed changes in liturgy to ensure "fully conscious, and active participation in the liturgy" signaling a more inclusive, slightly less hierarchical trend in power flows within RC (Pope Paul IV, "Sacrosanctum Concilium," December 4, 1963, https://www.vatican.va/archive/hist_councils/ii_vatican_council/documents/vat-ii_const_19631204_sacrosanctum-concilium_en.html). One might also consider the synod on synodality convened by Pope Francis between 2021-2024 as a move in this direction; early indicators suggest that Pope Leo XIV is going to continue in that direction. See, for instance, his first speech as pope, wherein he claimed "we want to be a synodal Church" (Pope Leo XIV, "Pope Leo XIV: Peace Be with All of You," *Vatican News*, May 8, 2025, https://www.vaticannews.va/en/pope/news/2025-05/pope-leo-xvi-peace-be-with-you-first-words.html).

is potential to stimulate social change, as the green sisters and place-based communities like those developed at Genesis Farm attest. Traditions are communicative practices that are always adapting and being remade through the process of transmission which entails a community and links to other communal practices. The collective practice of tradition is intrinsically ecological in its enmeshment with context.

Shortly below I will turn to the sacramental and liturgical aspects of Roman Catholic tradition as loci of ethical formation, embodied pedagogy, and practices for both individual and communal envisioning and living out a shared vision. Liturgy and sacramental rituals are inherited practices that exemplify and convey that shared vision. They remain a particularly promising component of the RC tradition that I believe is worth further interrogation, both historically and constructively for a revisioning of embodied ethical pedagogy for the Anthropocene. As discussed above, Rosemary Radford Ruether argues in *Gaia and God* that in "the covenantal tradition and the sacramental tradition" Christianity contains "reclaimable resources for an ecological spirituality and practice."[25] Further she writes that many Christians could be "lured into an ecological consciousness only if they see that it grows in some ways from the soil in which they are planted."[26] A creative and thorough engagement with this tradition might aid the powerful and far-reaching RC Church in luring congregants towards ecological consciousness to meet the unpredictable challenges of the Anthropocene. An ecological consciousness arising from the embodied sacramentality of the Church might also, if carefully and nondogmatically conveyed, foster collaboration with other groups beyond

[25] Ruether, *Gaia and God*, 205.

[26] Ruether, *Gaia and God*, 206-207.

Christianity—religious and not—to think about the bodily, material, and aesthetic aspects of ethical formation in this era, which will demand communities find new and creative ways to reattune themselves to local ecosystems as well as to planetary and climatic systems.

SACRAMENTS AND PUBLIC THEOLOGY

The sacraments are among the most public, outward-facing forms of ritual in which Roman Catholics partake (unlike more private, devotional practices, like *Lectio Divina*, praying the Examen or novenas). Siobhán Garrigan, professor of Catholic theology at Trinity College Dublin, compellingly argues that "worship is theology, a very public form of theology, and that corporate acts of worship are therefore powerful intellectual agents in the public sphere."[27] Garrigan makes clear, however, the challenge of worship as powerful, public mode of theology remains its experiential basis. Theologians have worked and continue to work textually—a mode which retains its primacy of place in dogma, doctrine, and academic theology. Though theologians and philosophers have recognized at various times in history that personal and communal experience is at the root of human understanding and expression, textual preeminence remains.[28] While the work of these pages is textual and discursive, with Garrigan, I

[27] Siobhan Garrigan, "Theology, Habermas and Corporate Worship," *Irish Review 32* (2004), 39.

[28] This dissertation certainly would fall prey to the same critiques: my focus is largely textual—though pointing to the importance of embodied knowledge, expression, and learning—and I have chosen not to pursue, at this juncture, field research in order to give the subjective, embodied forms of expression in worship equivalent treatment as the texts, for various reasons. I however would argue that the imaginative work that I am working towards would not so readily and simply divide the textual from the embodied production of knowledge. Still Garrigan makes a strong critique and valid points in naming the ways that in this dissertation I continue to function within problematic Greek and Thomastic metaphysics

challenge myself and others to ponder our experiences and the possible experiences of participation in the liturgy and sacraments for epistemological and pedagogical wisdoms, for insights on consensus building and identity formation, and for expressions of dissent and living into different futures. Worship, as *the* public expression of theology by the people, is the site where communities creatively adapt theologies and practices to address the local needs through communal consensus.[29] In other words, through bodily worship communities enact the process of tradition, in which congregations compost theologies to meet the localized needs through attentive and regular communication and consensus building.

My focus on sacrament, ritual, worship draws on Garrigan and French theologian Louis Marie Chauvet who argue that theological thought does not commence from some knowledge of a concept or its application to God in some eminent form. Rather, functioning within a postmodern framework, theological thought begins from the experience of each person in relation to the divine, though partially mediated by language. Garrigan and Chauvet elevate the corporeality of worship and ritual to the primary site wherein our relations with the divine are realized and understood. Theology, in other words, is developed and expressed through unique, embodied, subjective, experiential knowledge of the divine.[30] This assertion of the primacy of the body in theological work is radical and challenges the historical ontological and metaphysical

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that function with harmful dualisms centering around ontological difference. I hope that my constructive work which draws on Whitheadian thought begins to remediate some of those issues.

[29] Places of worship can be isolated and even closed to outsiders, troubling the claim that worship is public theology in the sense that it extends beyond the immediate community. It would be worth further considering the public expression theology by communities through service and mission work.

[30] See Garrigan, 41-42.

bases of many theologies. Garrigan writes, "Chauvet's work on sacramentality has thoroughly exploded the myth of a split between intent and action, arguing with the philosophical categories of the twentieth century that reality is mediated by language and thus theology needs to locate its interpretation of things liturgical in the body – and not in ontology."[31] She quickly points out the challenges of interpretation of things known by and in the body, though she proceeds to offer some convincing, non-instrumentalist proposals and examples from field work done in Ireland. Her mode of analysis is one that I would like to attempt to practice and develop elsewhere.[32] This return to the body as site of theological knowledge production is appropriate to the Anthropocene and aligns with ecofeminist epistemologies like that articulated by Ivone Gebara as well as critical scientific developments of scholars in many disciplines who are attempting to meet the challenges emerging in this unfolding s/cene.

Returning to her interpretive work of liturgy, worship, ritual as communicative action, Garrigan draws again on Habermas' argument that *interaction*, rather than some independent *action*, is a more apt "basic unit of social analysis[.]"[33] This model of interaction not only better holds the intersubjective nature of all actions, grounding them in a context with other actors, but it also recognizes the imbalanced terrains of power in which we all exist and navigate through our interactions. Further, grounding social

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[31] Ibid., 42.

[32] The fieldwork required for such a pursuit is beyond the scope of this particular dissertation. Drawing on Habermas and Chauvet, Garrigan employs a three part "formal pragmatics" to assess validity claims interactions, wherein language-usage is given greater priority over language-meaning. See Garrigan 44-48. This could also align well with E. Schillebeeckx's theory of the sacraments as "encounters," see: Edward Schillebeeckx, *Christ the Sacrament of the Encounter with God* (New York: Sheed and Ward, Ltd, 1963).

[33] Ibid., 42

analysis in interaction aptly appreciates our ecological mutuality, that we are organisms dependent on and enmeshed with others. Habermas' notion of interaction as the basic unit of social analysis removes some of the more ideological issues of the communication theory of power, which he developed from Arendt's classical philosophy. It also marks each individual, subjective experience as a *product* of the interactions which take place between the various subjects, human and non-human, engaging in actions or exchanges. Such a frame more accurately represents the variety of power dynamics at play in any interaction. Using this model to analyze a sacrament, for example, would more readily enable the clear identification and analysis of a priest's authority in a sacramental rite in relation to the congregant. The strength of Garrigan's use of Habermas in conjunction with Chauvet is the way in which she is able to analyze and understand interactions and participation in worship by various parties to grasp group values, beliefs, hopes, and aims as expressed through their embodied exchanges with one another. She holds that "the validity claims transcend their particular social location not by appeal to an abstract ideal, but by virtue of their immersion in the rational world we inhabit[.]"[34]

Garrigan demonstrates that worship is an effective and efficient mode of interactive communication in and to the public sphere. Her analysis makes explicit that which is otherwise implicit in the embodied and experiential claims, understandings, and impacts of ritual and sacramental practices. Through her study, Garrigan argues that the weekly worship and shared lived experience of individuals and communities is a poorly understood and far more potent mode of theological expression and formation than

[34] Ibid., 43

doctrine.[35] Her attention to how ritual worship engages the whole of our inter-subjective selves in community, in relation to others and the tradition(s) we inhabit is a key insight. Her theological analysis pushes beyond Biblical texts and theology, beyond doctrine and the formulae of sacraments, pointing to the strength which resides in the resilient ambiguity and imaginative adaptivity of worship, liturgy, and sacramental practices.[36] In her thinking about the sacraments, Garrigan also names that in ritual and in liturgy, groups produce and live into fictions or ideals through the patterns of their practices. In this, especially, Garrigan points to the power of practices, of ritual, of liturgy, of the sacraments to be sites wherein we can collectively imagine what flourishing, living the good life, living into the Anthropocene might require.

Garrigan's work can be read in relation to a trend in the latter half of the twentieth century in which many theologians, drawing upon the patristic adage *lex orandi, lex credendi,*[37] turned away from doctrine and towards liturgy as a primary theological site.

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[35] Garrigan does not appear to conceive of doctrine in as capacious a manner as Congar, who, as noted above, argued that tradition is the living transmission of doctrine includes what Garrigan is here describing in her analysis of worship as public theological expression. Her formulation raises questions about the tensions between orthodoxy ("right belief" or "correct doctrine") and orthopraxy ("right action" or "correct practice"). Should the vicissitudes of practice within Roman Catholicism as they might vary across the globe take theological precedence over the consistency and robust formation of Christian doctrines across place and time? Could a singular, unified, "catholic" church persist if orthopraxy takes precedence? Certainly, orthodoxy and orthopraxy can and have complemented one another, though overemphasis of both have informed issues perennially.

[36] I am here pointing to the work of Susan Ross and David Tracy on the ambiguity and plurality in the sacraments, as well as Tilley's notion of the potential for "imaginative transgression" of the community's shared vision through adaptation of traditional practices, both of which I hope to develop some later.

[37] Theresa Berger offers a few translations of this axiom as "The law of praying is the law of believing. Or, worship shapes belief. Or, as you pray, so you believe" in *Gender Differences and the Making of Liturgical History* (168), she also deals more extensively with the axiom in *Theology in Hymns? A Study of the Relationship of Doxology and Theology According to "A Collection of Hymns for the Use of the People called Methodists" (1780)* (Nashville, TN: Abingdon, 1995).

Her work importantly focuses on the intersubjective nature of worship wherein power fields, assent and dissent, consensus and discord are meaningfully and actively navigated by and with the collective or congregation through various modes and manners of participation in liturgy (or lack thereof). Her careful attention to the multiplicity of ways that congregants participate in the worship to express their relation to the claims of the practices, as well as to their relations to others present, points toward the multitude of meanings that traditional practices like the sacraments can hold. The ability of the sacramental and liturgical tradition to contain and hold space for vastly differing meanings and affects is not novel in Garrigan's work. David Tracy and Susan Ross also offer explorations of that complexity and ambiguity of the sacraments, their morality, and their history.[38] Each of these authors' analysis of the liturgical tradition and the sacraments renders them as fundamentally relational; it is ecological. The era of climate breakdown will stretch humanity in many ways and developing our own ability to hold difference, ambiguity, and possibility through practices will likely prove an essential skill set in the years ahead. And importantly, humans will need to continue to recognize that our well-being is caught up in the well-being of other humans, other animals and plants, indeed in the well-being of ecosystems.

Ambiguity, Multiplicity, and Feminist Sacramental Theology

[38] See David Tracy, *Plurality and Ambiguity: Hermeneutics, Religion, Hope* (Chicago: University of Chicago Press, 1994) and Susan A. Ross, *Extravagant Affections: A Feminist Sacramental Theology* (New York London: Continuum, 2001).

The Roman Catholic sacramental tradition is a multifaceted tradition with flaws and shortcomings one might expect when encountering such an old, large, and internally diverse tradition. Tracy writes that the "historical ambiguity…has now become a montage…of startling beauty and revolting cruelty, of partial emancipation and ever-subtler forms of entrapment."[39] For Tracy, these complexities must be wrestled with in the hermeneutical mode of "conversation." This is the project which his *Plurality and Ambiguity* is after—setting out a comprehensive hermeneutic based on a threefold conversational model that triangulates the phenomena being interpreted, the interpreter, and the exchange or interaction between them. This parallels the model of engagement taking place in the sacraments as described by Garrigan. What Tracy offers is the potential for transformation through the radical plurality of the many participants and the demands of the historical moment that require reinterpretation of seemingly timeless and permanent traditions that surround us—especially religious traditions. He makes the case that the morally ambiguous history of these traditions inspires thought and action while at once demanding those participants wrestle with the flaws and shortcomings of the tradition, historically and in the present. For Tracy, the ability of a religious traditions to name and affirm and wrestle with the plurality and ambiguity within their communal past and present is what enables them to also cultivate hope. Tracy identified the necessity for hope as the central question of religion at the time of the book's writing (1987). Nearly forty years later, climate breakdown and climate grief (not to mention the culture wars and political polarization) make the cultivation of hope all the more necessary today… especially when recalling that over 50% of all carbon emitted by humanity into the

[39] Tracy, *Plurality and Ambiguity*, 70; also quoted by Ross, 85.

atmosphere historically has occurred since 1990 (after the publishing of *Plurality and Ambiguity*).

Tracy offers a hermeneutical model based on transformative, agonistic conversation that can cultivate hope and reform traditions to meet contemporary needs. It is a hermeneutic of "retrieval" and "suspicion." Hermeneutics aligned with the model he offers has been well-articulated and even more profoundly practiced by marginalized people throughout history—and their work has gone largely unrecognized and unrecorded. They are most certainly *not* unimportant.

Scholarship on sacramental and liturgical traditions in recent decades has demonstrated the many roles women have historically played in navigating the complex terrain in Christian spaces. Theresa Berger, to whom we will turn below, explicates in great detail the role of women throughout Christian history with particular attention to their liturgical contributions; Susan Ross documents well how feminist theologians have been wrestling with this tradition in theological settings in recent decades; Ivone Gebara expands the notion of religious, theological practice beyond the rigid confines of institutional churches and emphasizing the profound, everyday religious, "re-linking" work of women in particular. Ross writes, in relation to Tracy, "The moral ambiguity of the sacramental tradition is one that needs further exploration. Like their colleagues in biblical, historical, systematic, and moral theology, feminist sacramental theologians are confronted with a tradition that both draws and repels, invites and excludes."[40]

Some might argue that the historical and moral ambiguity of the RC sacramental tradition is a valid reason to do away with the tradition. Alternatively, a fair number of

[40] Ross, *Extravagant Affections*, 85.

feminist theologians have embraced the ambiguity and plurality of the tradition as an alignment with their rejection of simplistic dualities. RC sacramentality consists of complex practices that can retain space for conflict and dissent, as Garrigan has made evident. These practices are worthy of retrieval with a healthy dose of suspicion. For example, the sacraments often become sites of power for the maintenance of clerical power; they are also communal sites where congregations have established community, expressed the need for equality, and struggled with persistent histories that oppose these things. Ross draws extensively on the creative and critical work of her fellow feminist theologians like Rosemary Radford Ruether, Elisabeth Schussler Fiorenza, Sallie McFague, and Mary Collins to demonstrate how women can and must continue to work with and through the tradition. Ross writes against the formidable power of "classic" understandings of the RC tradition and the sacraments, which omit women, non-binary people, and other lay and marginalized groups from its history. In doing so, authoritative interpretations and histories present a far-from-adequate understanding RC sacramental tradition. In the face of such dominant stories, she writes, "we are obligated to risk genuine conversation with [the Christian] tradition: facing up to its complexity and responding to it."[41] In light of this obligation, Ross develops a feminist sacramental theology that is already unfolding and realized in women's "*practice* of the sacraments."[42] This "renewed sacramental theology" has four key elements: it is "one that is open to and appreciative of ambiguity, one that honors women's embodiment, one that is sensitive and aware of the multivalency of symbols, and one that seeks to do

[41] Ibid.,

[42] Ibid., 209, italics original.

justice."[43] In grounding her sacramental theology with these four pillars, she offers a sacramental vision well primed to inspire sacramental practitioners and participants to attend to the climate crisis in the name of justice and care for the material well-being marginalized communities.

Ecofeminists, and ecofeminist theologians, whose work is important to my thinking and to Ross', demonstrate how emerging fields draw upon the "sacramental principle" to reimagine a more just, equitable, and accurate relationship between humanity and the natural world. Ecofeminists recapture, to varying degrees, a "sacramental worldview" that holds all of creation is inherently sacred. The ecofeminist employment of the sacramental principle demands a shift in the ways that humans relate to nature, which has been and continues to be instrumental, extractive, and destructive—especially in the Capitalocene and with the rise of mechanistic cosmologies that have dominated in the West since the Enlightenment. Rather than understanding creation as raw material for human use, ecofeminist theologians recognize the sacrality of creation—literally God's presence in nature—and our interdependence upon it, which requires our care and care-filled attention.

Ecofeminist perspectives offer an interdependent worldview that centers embodiment and relationality to shift us from an instrumental or "use-value" assessment of the planet to one of care. As Ross has noted, liturgy and worship have not been the primary mode by which ecofeminists have more narrowly drawn upon and affirmed "sacramentality as a principle[.]"[44] In other words, Ross argues that ecofeminists have not

[43] Ibid.

[44] Ibid., 179.

maintained sacramentality in order to re-envision or transform liturgy, worship, or the sacraments, but rather to attune humanity to respect and to respond to our ecologically ravaged planet. Yet I would nuance this claim: The green sisters, among many others, have actually done the work of transforming liturgy, worship, and the sacraments, as Sarah McFarland Taylor's text details. And yet, there remains work to be done in cultivating a broader theological and sacramental movement enacted within the RC Church. Nevertheless, the sacramental worldview might enable individuals and communities to recognize their interdependence with non-human bodies, inculcating a desire to learn to care for those bodies. This is a central reason why I argue for a retrieval and re-envisioning of the sacraments, to compost their bodily and materially attentive practices to confront the ecological calamity of the Anthropocene.

For Ross, what the ecofeminist approaches primarily elucidate is the "relation between sacraments and ethics: the need for justice not only in word but in deed, a recognition of the formative power of worship, the need to broaden sacramentality beyond the human to the wider world."[45] The embodied mode of sacramental pedagogy and ethics is central to the ecofeminist appreciation and cultivation of sacramentality—it is the return to the body and materiality that can enable us to connect with and respond to the material changes in our ecosystems. Further, the sacramental worldview enables a proper valuation of our planet, ecosystems, and our bodies which have historically been rendered of significantly lesser value within the Christian West, as discussed in detail in the previous chapter. These connections—between sacramentality, sacramental embodied

[45] Ross, 179.

pedagogy, and ecological care and ethics—are precisely the nexus in which this dissertation aims to continue composting and cultivating.

Pope Francis explicitly invites continual nurturing of ecological attentiveness through "ecological conversion." In his model of ecological conversion, Francis describes how encounters with Christ need to become "evident in their relationship with the world around them."[46] Certainly, one way that we can understand a sacrament, especially the Eucharist, is as an interpersonal encounter with Christ.[47] Further, through ecological conversion, Francis states that humans can come to understand "our vocation to be protectors of God's handiwork is essential to a life of virtue[.]"[48]Though neither sacramentality nor the sacraments are a central concern in *LS*, in it, Francis does touch upon the importance of sacramentals in encountering the Divine through creation as part of and inspring for a virtuous, ethical life.

Ross' feminist sacramental theology additionally draws upon the ritual theory of Catherine Bell, which will play an important role in the next chapter's turn to sacramentally informed, materially attuned ethical pedagogies. In particular, Ross turns to Catherine Bell's theorization of ritual to frame her work with marginalized women's worship groups. Bell argues against traditional renderings of ritual as either ways of

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[46] Francis, *LS*, paragraph 217.

[47] One could develop a compelling argument about ecological conversion in *LS* understood through sacramental encounter by drawing on Edward Schillebeeckx's *Christ the Sacrament of the Encounter with God,* in which he offers an understanding of the sacraments that is interpersonal and relational, grounded in the world and the incarnation of Christ. He writes, for instance, "man reaches God only in and through creation, actually as something belonging to creation; that is to say, as the absolute principle of its being" (Edward Schillebeeckx, *Christ the Sacrament of the Encounter with God* (New York: Sheed and Ward, Ltd, 1963), 4).

[48] Francis, *LS*, paragraph 217.

acting out belief or as merely the "embodied dimension or a religious belief system[,]" which depend of traditional dichotomies between thought and practice, mind and body, belief and action.[49] Thus Bell develops a theory of ritual in which ritual is understood as "strategic practice."[50] Her theory understands the creation and enaction of ritual (or ritualization of certain practices) as marking these social actions apart from other actions. Consequently, these practices or rituals strategically participate in the embodied contestation of power relations.[51] Practices that draw on private experiences and beliefs must be strategic in making certain of those practices public so as to most effectively remake relationalities and challenge the status quo in the name of justice. Ross draws on Bell to offer a feminist sacramental theology that leans into the messiness of traditions, emphasizes the importance and validity of embodied experiences, generously and critically attends to the use of symbols, and always aims to enact and inspire a more just enactment of the sacraments and their relation to the broader world.[52] Her vision is one that has tremendous resonance with my own, though is perhaps more tightly aligned with the RC tradition and a number of its values—like the centrality of the Western nuclear family—than my project.

Ross provides a useful model that expands understandings of the sacraments and how their historical complexity and ambiguity can be leveraged to "creatively transgress," to use David Tracy's words, and contest the traditional power relations and

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[49] Ross, 223-224

[50] Ross, 224.

[51] Ibid. See also Catherine M. Bell, *Ritual Theory, Ritual Practice* (Oxford: Oxford University Press, 2010), Part I.

[52] Ross, 225.

classical renderings of the sacraments. Her harnessing of the historical, moral, symbolic ambiguity of the sacraments to relate to the embodied ambiguity of women to the sacraments historically points to the potent flexibility and fluidity of the sacraments which are always being transformed and uniquely understood. Ross elucidates how ecofeminists have drawn on the sacramental principle to attend to ecological concerns, and with Catherine Bell she nods to the ways in which ritualization and rituals are strategic practices to contest power relations and norms through bodily practices. Finally, and importantly, she reaffirms the linkage between the sacraments and ethics.

Theologians like Ross illuminate the compostable elements of the RC sacramental tradition. They have spurred my thinking about the potentialities for transforming these inheritances. However, transformation—decomposition and reconstitution—requires continued work. It involves dealing, like Ross and Ruether and Schussler Fiorenza, with the potent and persistent voices from the distant past, who carry with them authority, some insights, and some toxic obduracy. Treating the public form of worship as theology requires caution and conscientiousness about whose embodied experiences of worship and theological iterations of liturgy are centered and authoritative. Most influential liturgical theologies have been articulated by privileged men, often clerics, who make recourse to historical, ungendered "facts" in an androcentric epistemological manner. Theresa Berger's scholarship on the role of gender in liturgical history and theology is therefore crucial for my understanding the embodied pedagogy of the sacraments, liturgy, and ritual more fully and accurately. I certainly do not want to reinscribe the androcentrism and dominating logics of RC theologies into pedagogies and practices hoping to foster thriving in the New Climatic Regime.

MEDIEVAL SACRAMENTAL HERITAGES: DIGGING INTO LAYERS OF THE COMPOST HEAP

In her revisionist history of Christian liturgy, Theresa Berger articulates how liturgical theologians have represented the history of Christian worship and liturgical tradition as "gender-devoid." Her scholarship has tremendously complicated and more accurately recounted these histories. She rightly argues, as do many of the authors upon whom I have drawn in this dissertation, that no liturgical history can be fully truthful without attention to gender. The most blatant and uncontestable example of this is "the strong insistence on priestly masculinity and celibacy" within Christianity historically and in a number denominations today, notably Roman Catholicism.[53] Any history of liturgy (or theology based therein) devoid of gender is severely limited or lacking in its wholeness and veracity.[54] When turning to liturgy and worship as embodied practices, attention to gender is paramount; in worship, one's gendered performance and gender-mitigated participation in worship is undeniable.

As I begin my journey to some of the earliest systematic sacramental theologies as articulated in the medieval period, Berger's insistence on the centrality of gender in understanding liturgy and the entailed bodily practices need to remain in the foreground. This is because sacramental and liturgical theologies of prominence have not accurately represented the embodied and gendered reality of liturgical and sacramental practice. By

[53] Berger, *Gender Differences*, 169.

[54] I would add that the history of liturgy should also include to cultural, ethnic, geographical, and ecological differences in liturgy and worship, though doing so here is beyond the scope of this dissertation.

harkening to Berger's historical work, we may glean a more full and robust understanding of contemporary and historical liturgical and sacramental theologies and their pedagogies. Following Berger, Vincent Miller, and Michel de Certeau, the historical narrative I present here, my constructive appeals to it and *lex orandi* will necessarily be a composting, a gathering together of remainders.[55] Whenever composting in this way, the process is rarely comprehensive and never complete; it is always ongoing.[56]

How can we harness Berger's attention to gender in sacramental and liturgical histories when parsing the insights of medieval theologians, like Thomas Aquinas, who retain tremendous power within RC theology and institutions? As I have argued, wrestling with these inheritances might limit continued festering of their toxins beneath the surface.

Before rehearsing the famous thirteenth century articulations of sacramental theology by Thomas Aquinas, which continue to have significant influence in official RC teaching on the sacraments, I will situate the connections between the medieval period and today for the RC tradition. RC understanding of the sacraments today is grounded in the revolutionizing thought of the medieval period. Directly connecting Western theology of the eleventh through thirteenth centuries to that of the twentieth century may seem

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[55] For Berger, she follows de Certeau in thinking of her work as *bricolage*, a "gathering of fragments." See Berger, *Gender Differences*, 171; fn. 41.

[56] My writing participates in the practice of "traditioning" by gathering together historical precedents, rereading and reorganizing them, turning them within the compost heap of the RC tradition, in hopes of recuperating and reconstituting it more fully, hopefully, responsively, vivaciously. My composting recognizes traditions, with Tilley and Congar, as living practices which are always already changing and adapting. The aim of my present traditioning is to de- and re-compose the sacramental tradition for and in the Anthropocene. Doing so requires venturing rather deeply into the historical compost in order to more thoroughly turn and aerate the pile.

quite a leap. However, within the RC context these periods are closely related. This is in part due to the rapidity of changes witnessed in each era: the former period witnessed and responded to the Gregorian Reform, rapid urbanization, the establishment of universities, the rise of the mendicant orders and the shifting role of monasticism, and the reintroduction of Aristotelian thought. The latter period responded to cultural and technological changes of modernity by reaching back to the medieval period to ground theological thought firmly in scholasticism, the culmination of which took place in the 13th century.

This response to modernity however was not a neutral one: in the late 19th century, the developments of modernity were perceived by Pope Leo XIII as a threat. He aimed to "defend" the RC tradition by establishing Thomas' theology as authoritative within the tradition. While Thomas' work was highly influential, it was not considered official teaching until this point. Leo's aim was to use rigorous intellectualism based in Thomas' high Scholastic thought to rebuff the zeitgeist of change emanating from the modern world. What resulted was the development in the latter half of the nineteenth and twentieth century of neo-Thomistic and Neo-Scholastic schools of theology that did little to meet the changing needs of the faithful. These theological schools are guilty of theological abstraction that did not adequately take into consideration gender and embodiment when constructing their theological systems. Though not properly attentive to gender, *nouvelle théologie* did aim to contextualize their theologizing and rendering of RC history in ways that move towards what Berger, Ross and others later called for.

Nouvelle théologie constituted a group of theologians in the twentieth century who aimed at responding to modernity through a "return to the sources" from the RC

tradition. Their insights already alive in this chapter, as exemplified by Yves Congar, a formidable member of this school of thought, shaped my thinking and writing about "tradition" above. Many of the thinkers grouped under this school, like Yves Congar, Edward Schillebeeckx, and Marie-Dominique Chenu were, like Thomas, Dominican priests whose formal religious training was deeply Thomistic. Despite the Thomistic training these theologians received, *nouveaux* theologians often rejected strict forms neo-Thomism and neo-Scholasticism and returned to the origins elsewhere (though they draw upon Thomas, as well).[57] Their thinking through the complexities of doctrinal development within the Roman Catholic tradition with attention to broader contexts paved the way for the Second Vatican Council, which is largely responsible for much of the revitalization of the sacramental tradition in the latter half of the twentieth century.

These twentieth century theologians focused on change particularly understood between the complex relationships between theology and historical and social contexts. Twelfth and thirteenth century theologians witnessed and responded to great ecclesial and social changes, and indeed these historical developments spurred further ones.[58] The twentieth century *nouveaux* theologians, in their historical considerations, were particularly attentive to the changes that occurred in the twelfth and thirteenth centuries and how the impacts of those socio-cultural, ecclesial, theological, and political changes continued to impact theological thought and practices centuries later. Tracking all of the

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[57] Hans Boersma, *Nouvelle Théologie and Sacramental Ontology: A Return to Mystery* (Oxford: Oxford Univ. Press, 2009), 1-9.

[58] Particularly regarding the twelfth and thirteenth centuries, see, for instance: Giles Constable, *The Reformation of the Twelfth Century* (Cambridge: Cambridge Univ. Press, 2002), 4-5; and Marcia L. Colish, *Medieval Foundations of the Western Intellectual Tradition, 400-1400* (New Haven, CT: Yale University Press, 1997), 265-269.

differences between these temporally disparate articulations of sacramental theology is well beyond the scope of this chapter, though I hope to bring a number of distinctions and similarities into relief, in order to draw upon certain theological retrievals for my composting.

The sacramental theologies developed during these two periods make clear that changes in the doctrines and liturgy of the Church *respond to* and *reflect* broad social changes. Theology, liturgy, and doctrines do attempt to meet the historical and social challenges presented uniquely in each era. In other words, theology, even in its more abstract forms, is not divorced from the world around it.[59] Theologies may speak to and about transcendent, timeless absolutes, but they always do so in the language of its socio-cultural milieu.

Adaptation of tradition is always occurring, and, still, elements of traditions persist through tumultuous times, even when they sit at odds with social, intellectual, cultural, and political developments. Often what does survive periods of change are elements of tradition that tend to benefit of those in power and their legitimating logics. Fortunately, not all that persists is negative. In turning to rehearse some sacramental thought of the medieval period, particularly as articulated by Thomas', I want to focus on what I hold to be the most beneficial insight inherited: his understanding of the Sacraments as forms of embodied pedagogy, using the logic of *convenientia*. From there, I will quickly name some of the modern critiques of Thomas by commentators and interlocutors who also work constructively with his thought.

[59] Whether it avows is own contextualization, however, certainly makes significant differences in the theology produced.

CONVENIENTIA: SACRAMENTAL EMBODIED PEDAGOGY

> *It follows, therefore, that through the institution of the sacraments man, consistently with his nature, is instructed through sensible things; he is humbled through confessing that he is subject to corporeal things, seeing that he receives assistance through them; and he is even preserved from bodily hurt, by the healthy exercise of the sacraments.*
>
> -Thomas Aquinas, *Summa Theologiae* (3.61.1)

Thomas' theology builds directly on the work of his immediate theological predecessors, notably Hugh of St. Victor and Peter the Lombard, in the eleventh and twelfth centuries. Hugh of St. Victor defines sacrament in *On the Sacraments of the Christian Faith* by quoting Augustine: "A sacrament is the sign of a sacred thing."[60] Hugh explains, however, that the sacraments are more complex, they consist in two parts—one visible and one invisible. "What is visible without and material is a sacrament, what is invisible within and spiritual is the thing or virtue of the sacrament…"[61] For Hugh, sacraments must be considered in terms of both their material and spiritual elements: the *sacramentum tantum* (sacrament itself*)* and the *res sacramenti* (the thing or virtue of a sacrament). Sacraments are more than just *signs*. Hugh's explains in more complex definition of sacrament: "A sacrament is a corporeal or material element set before the senses without, representing by similitude and signifying by institution and containing by sanctification some invisible and spiritual grace."[62] The key constitution of each sacrament according to Hugh includes their material manifestations, which must in

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[60] Hugh of St. Victor, *On the Sacraments of the Christian Faith (De Sacramentis)*, 2nd rev. ed., trans. by Roy J. Deferrari (Fontibus Company, 2016), 154, quoting "the doctors," namely Augustine.

[61] Hugh, 154.

[62] Hugh, 155.

some way resemble and instruct participants in an immaterial, non-immediate, but more ultimate, reality.

Thomas Aquinas draws on Hugh and others in the *Tertia Pars* of his *Summa Theologiae*. The *Summa* has long attracted commentators and continues to inspire readers to think more deeply and complexly about the Christian faith and reality more broadly. Mark D. Jordan is a preeminent reader of Thomas and a professor of Christian theology and ethics, European philosophy, and gender studies at Harvard University. He offers a unique reading of the *Summa* in *Teaching Bodies* that focuses on Thomas' prioritization the institution of the sacraments for the purpose of teaching.[63] Or as Jordan puts it: "God becomes incarnate because embodied human beings need bodily teaching especially when lost in the middle of their historical journey. The sacraments then carry on Christ's embodied pedagogy after his bodily departure at the ascension."[64] In other words, Jordan argues that for Thomas sacraments are an extension of the embodied pedagogy of Christ. Much as Christ took flesh through incarnation because it was *conveniens* or befitting--appropriate in form--for the instruction of embodied persons, the sacraments are appropriate as embodied practices and performances of moral instruction (*Summa* 3.2). Thomas advances an Aristotelian understanding of human learning, refracted through the Fall: he holds that humans must rely on sensation to learn because they no longer have direct access to the divine through their intellect as they did in the Garden of Eden.

[63] Jordan, *Teaching,* 50. There is a great deal of emphasis on the institution of the sacraments in medieval theology. The institution provides legitimacy and authority to the sacraments. The three reasons for the institution of the sacraments as articulated by Hugh and later Peter the Lombard are: humiliation/humbling, instruction, and exercise.

[64] Jordan, *Teaching,* 18.

Regardless of the metaphysics and theology behind such assertions, I believe that most persons, Catholic or not, can agree that humans are embodied, physical beings. As such, the logic of this embodied pedagogy is one that I argue can beneficially inform the development of moral pedagogies to confront our new planetary situation. Thomas' consideration of the efficacy of sacraments towards this end is worth closer consideration.

The *tertia pars* of Thomas' *Summa* deals with the incarnation, the life and works of Christ, the sacraments, which are attended to in the latter half of the *tertia pars,* and eschatology. His writings on the sacraments are marked by notable shift from his predecessors in a few ways. Firstly, he attends much more closely to concerns about causation.[65] This is likely due to his familiarity with Aristotle who deals extensively with differentiating causes. Secondly, as Jordan notes, "Thomas then erases the Lombard's structural division between things and signs, bringing the sacraments and the end of history into the third part, immediately after the teaching of the incarnation. The classical topics of Christology are joined to the sacraments by meditation on the life of Christ."[66] Thirdly, while adhering to the three-part logic for the institution of the sacraments articulated by Hugh and Peter, Thomas subtly amends the ordering of the reasons for instating the sacraments from: humiliation, instruction, and exercise to *instruction*,

[65] I should here note that Mark Jordan emphasizes that for Thomas, and in Thomas' writings, sacraments were first and foremost signs and, secondly, they were causes. Jordan notes that the focus on Thomas' writing about sacraments as causes came out of the Reformation period. Thus, Jordan emphasizes that for Thomas "a sign is a material aid to expression—in this case, the expression of teaching" (52-53). Nevertheless, his complex articulation of sacraments as causes is a notable element of his theology particularly in comparison to his immediate predecessors.

[66] Jordan, *Teaching Bodies,* 18. In making this shift Thomas does not parse the sacraments as done by Hugh and Peter.

humiliation, and exercise (3.61.1).[67] This is perhaps an indication of Thomas' own emphasis on pedagogy, though it also signals that in his understanding of the sacraments they are firstly about instruction. This emphasis on sacraments as instructional is one primary reason why Thomas' theology is an important traditional thread to draw upon in considering the sacraments as a model for embodied ethical pedagogy in the Anthropocene.

Thomas begins his "Treatise on the Sacraments" (3.60-90) by addressing questions regarding sacraments in general as signs. Following the lead of the Lombard, he opens by citing Augustine's definitional aside that a sacrament is a sacred sign (3.60.1 corp.). Thomas, like the Lombard, expands upon this definition. He holds that a sacrament is "the sign of a holy thing so far as it makes men holy,"[68] or perhaps more succinctly if less precisely, a sacrament is a sign that causes what it signifies (3.60.2). For example, Baptism, signified by washing with water, causes the forgiveness of sin and birth into new life in the mystical body of Christ. This seems to be a take on what the Lombard articulated as the definition of sacraments, for he too notes that sacraments are a cause of grace. Thomas, however, spends a great deal more space thinking through precisely what it means that sacraments are causally efficacious. Though there are many different meanings of *causa*, which he likely learned from his study of Aristotle, Thomas focuses, to a large extent, on sacraments as instrumental causes.

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[67] This point is noted and interrogated by Jordan, 50-51. Emphasis added.

[68] With Berger and Ross, we should note that the gendered "men" which is meant to sand in universally for humanity, is another indication that we need to pay better attention to gender in our theological inheritance—abstract as it might often be.

The manner of causality is important for understanding the sacraments for a number of reasons. In RC theology, sacraments are necessary elements in the economy of salvation; thus, the manner in which they heal humanity's rift with the divine is of the utmost importance. Firstly, Thomas notes that sacraments are "efficient causes" which he then defines in a twofold manner: principle and instrumental (3.62.1). He articulates the former thus: "The principal cause works by the power of its form, to which form the effect is likened; just as fire by its own heat makes something hot" (3.62.1 corp.). In this he is forwarding that the principle cause of grace in the sacraments is God and God's institution of the sacraments, which Thomas sees as theologically grounded in the incarnation. The latter manner of causation, as instrumental, "works not by the power of its form, but only by the motion whereby it is moved by the principle agent: so that the effect is not likened to the instrument but to the principle agent: for instance, the couch is not like the axe, but like the art which is in the craftsman's mind" (3.62.1 corp.). Thomas is here saying that the sacraments cause grace insofar as God has chosen to instate them as the means by which God sets out to confer grace. It is the material expression and instrument that brings about a more than material effect: grace.

Thomas argues from *convenientia*—that something is befitting—which is also the logic behind the necessity of the incarnation and the entirety of the *tertia pars* (3.1). He argues that the incarnation was the most befitting manner in which the divine could restore humanity to Godself, because it was the way in which God could best *teach* embodied persons to seek God and restore their relationship with the divine (3.1.5-6). Jordan states most clearly that, "The Sacraments then carry on Christ's embodied

pedagogy after his bodily departure."[69] This aligns with Thomas' general position that humans learn primarily through the senses (another position arguably strengthened and more prominent due to his engagement with Aristotle). God, who is assumed to know the manner in which embodied humans best learn, instituted the sacraments through the incarnation of Christ because such a material manner of teaching was most befitting to human nature. Thus, God chose to institute the sacraments as material signs that at once cause a more than material effect—that being the bestowal of God's grace and sanctification. They are instrumental causes of grace, of which God is the primary cause. This logic also makes clearer the theological importance of pinpointing God's institution of the sacraments in history, which Thomas, like Hugh and Peter before him, take time to do.

Given that humans are embodied and require embodied modes of instruction, these Medieval theories need to better attend to the differing modes of human embodiment—particularly as regards gender and ability. Berger instructs that attention to gender, and I would add ability, is essential to the unique kinds of instruction particular bodies receive through pedagogical rites and practices like those found in RC sacraments. In folding together these realities within the RC heap, I hope that the instructional insights might compost to better meet the present unfolding and its ecological embodiment.

Thomas' treatment of the sacraments as signs (3.60-3.61) also highlights the instructional potency of the sacraments. He holds that the sacraments as signs are "a material aid to expression" (3.61) and that sacraments are instruments used to bring about

[69] Jordan, *Teaching Bodies*, 18.

more than material effects.[70] Thus the signs use material things to signify something not simply material or bodily, and this Jordan points out requires a "learnable connection" between the sign and what it signifies.[71] There remains, however, an ambiguity in the signs that require the specification of signs' meanings by words, according to Thomas (3.60.6-8).[72] While the words are important, I wonder in what ways they are secondary in the pedagogy of the sacraments.

Jordan conceives sacraments as "teaching events" thereby highlighting the efficacy of the sacramental pedagogy as articulated by Thomas.[73] Sacraments are repeated performances, "a sequence of actions that must be repeated in action, as actions" to attain their goal; sacraments have "their fullest effect—which is their consequential meaning—in relation to bodies."[74,75] Thus Jordan calls on theologians and ethicists to re-member *scenes* of instruction in the moral texts we write that aim to instruct—events of bodily teaching are efficacious. Sacraments in this way point to the *type* of embodied practices that we need to develop in order confront the Anthropocene.

David Tracy's and Susan Ross' thinking encourages embracing the ambiguity of the sacraments as an invitation to conversational participation with the sacramental

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[70] Jordan, *Teaching,* 53.

[71] Jordan, *Teaching,* 54.

[72] As noted above by Ross and Tracy, the ambiguity of the signs perhaps does not need further specification as Thomas argues.

[73] Jordan, *Teaching,* 61.

[74] Ibid.

[75] It is worth noting that not all sacraments are repeated, at least not for the same person. Indeed, to re-baptize would be heretical under most circumstances. Thus, for some sacraments it would be proper to consider repetition as pertaining to the ongoing practice of the ecclesial body (not just the individual body).

tradition and our embodied experiences of those practices. Sacramental ambiguity paired with intellectual humility—a recognition of humans' inability to fully comprehend or articulate the work of the sacraments—could foster more capacious communal composting of tradition and theology through worship. Composting the very capacious sense of tradition, with its many components, material and immaterial, passionate and discursive offered by Tilley and Congar, I aim to cultivate a sacramentalism that opens beyond the (already unruly) range of theological reasoning.

Resourcing, with Jordan, the insights of Thomas' treatment of the sacraments strengthens my contention, shared with ecofeminist theologians and practitioners, that the embodied sacramental instruction and sacramental outlook is a rich and nourishing component within the RC heap prepared to foster ecological consciousness for the ensuing era. Ross reminds that this renewed sacramental tradition can and should appreciate ambiguity and embrace the multivalence of symbols, honor women's embodiment and seek to do justice. If these feminist insights are well incorporated, the communal, communicative, theologically productive, and locally-responsive embodied pedagogy of the sacraments is precisely the kind of pedagogy communities need as we venture into the Chthulucene.

CHAPTER FIVE: CAUSALITY AND SACRAMENTAL PEDAGOGY

TURNING IN WITH POST-NEWTONIAN PHYSICS

> In little more than a century, well over one hundred subatomic particles have been discovered…yet this quantum realm seems scarcely less strange than that of medieval theology.
>
> Diana Coole and Samantha Frost, *New Materialisms* 11-12.

> Matter is neither fixed and given nor the mere end result of different processes. Matter is produced and productive, generated and generative. Matter is agentive, not a fixed essence or property of things. Mattering is differentiating, and which differences come to matter, matter in the iterative production of different differences. Changing patterns of difference are neither pure cause nor pure effect; indeed, they are that which effect, or rather enacts, a causal structure, differentiating cause and effect. Difference patterns do not merely change in time and space; spacetime is an enactment of differentness, a way of making/marking here and now.
>
> Karen Barad, *Meeting the Universe Halfway*, 137.

> I too, following many and follow'd by many, inaugurate a religion […]
> Each is not for its own sake,
> I say the whole earth and all the stars in the sky are for religion's sake.
>
> Walt Whitman, "Starting from Paumanok" in *Leaves of Grass*, 20.

The previous chapter's turning of rich seams from deep within RC compost have uncovered and enfolded the insightful inheritances of the sacraments' embodied pedagogy. Thomas' logic of *convenientia* offers cogent wisdom. Liturgical practices have always been different embodied and gender experiences in liturgical practices that mark uniquely the theological wisdom of congregants' particular liturgical and sacramental participation. The dynamism of the RC tradition which encapsulates sets of linked and enduring practices enlivened by embodied communication and collaboration of all participants in the tradition. All who partake in the liturgical process are stewards of

tradition. This radical and democratized vision challenges ecclesial notions of power and highlights the agentive potential for individuals to enact change through participatory accretions in the ever-growing heap of the RC tradition.

In the small temporal period that has passed since the theological composters of the previous chapter who complicated tradition wrote, human understanding of the cosmos, of human nature, and of metaphysics has advanced. This chapter aims to consider carefully the worldview and physics that underpins the traditional rendering of sacramental efficacy and pedagogy and fold in contemporary insights with those underpinnings. By folding together their rather disparate fields of thought, I hope to make connections and build coalitions beyond RC and other Christian traditions, to think about and articulate an embodied ethical pedagogy that has broad appeal religiously and culturally.[1]

Thomas Aquinas set out to understand and articulate what precisely the sacraments do and how they do it in the *Tertia Pars* of his *Summa Theologiae*. The sacraments are broadly understood as signs that cause what they signify. Given the instructional nature of the sacraments, it is appropriate—*conveniens*—that we should continue to apply our intellects—gifts of the Creator—to the task of understanding the sacraments and the genius of their pedagogy.

In the centuries that followed Thomas' articulation of the work and workings of the sacraments, his understanding remains as close to a doctrinally authoritative stance as

[1] As this dissertation moves towards a consideration of broader connections and coalitions with Walt Whitman as cultural pedagogue, like Whitman it will consider and hold body and spirit together as crucial to holistic human formation. I will say more about my selection of Whitman in subsequent chapters.

exists within the RC tradition.[2] The question of Thomas' understanding of the sacraments' instrumental efficacious causality and its complex relationship with Aristotelian physics, a precursor to Newtonian physics, needs unpacking.

Mark D. Jordan emphasizes that when trying to understand Thomas' thinking on the sacraments, as articulated in the *Summa*, one should recall that Thomas first accentuates that sacraments are signs, then they are dealt with as causes.[3] Jordan elsewhere notes importantly that "Thomas speaks of sacraments as signs when he has in mind the whole range of human and religious ritual. When he wants to restrict himself to the seven sacraments of the Christian church, he speaks of sacraments as causes."[4] Thomas places significant consequence on sacramental causality, particularly in regards to the formal sacraments of the Church, though he is not the first to consider the sacraments as causes. Considered in relation to his contemporaries and immediate

[2] Ibid., 77.

[3] Notions of instrumental and efficient causality are extremely important and widely debated by RC sacramental theologians, even those focused on the work of interpreting Thomas' *Summa*. Though we will get into this further in the body of the text, it is worth noting that Mark D. Jordan writes, "Many readers of Thomas, especially since the Reformation, have been preoccupied to establish what exactly the *Summa* says about sacraments as causes. A reader does better to notice that Thomas defines sacraments and justifies their divine provision in the *Summa* before he analyzes their causality. Indeed, he begins by placing sacraments among signs rather than among causes (3.60.1 arg1, ad1). The sacraments are signs first, causes second" (Jordan, *Teaching Bodies,* 52-3). M.-L. Chauvet also harkens to this point—the subordination of efficient causality to final or formal causality. Chauvet writes, "This clear declaration of intention, from the very beginning of the 'Treatise on the Sacraments,' does not mean that Thomas intends to abandon the idea of efficient causality; it will return – and with what force! – in question 62, where the first article's main body begins with the following peremptory declaration, 'it cannot be denied [*necesse est dicere*]: the sacraments of the New Covenant in some fashion cause grace'" (Louis-Marie Chauvet, *Symbol and Sacrament: Sacramental Reinterpretation of Christian Existence: Sacramental Reinterpretation of Christian Existence* (Pueblo Books, 2018), 12).

[4] Mark D. Jordan "Philosophy in a *Summa of Theology*" in *Rewritten Theology: Aquinas after His Readers* (Malden, MA: Blackwell Publishing, 2006), 165.

predecessors like Peter Lombard, Bonaventure, and Albert the Great, the prominence of sacramental causality within Thomas' thinking is unsurprising, as Jordan observes.[5]

The specificity of Thomas' rendering of sacramental causality certainly owes something to his familiarity with Aristotle. However, Jordan astutely notes that in the questions 62 and 63 in the *tertia pars* of the *Summa* which explicitly address sacramental causality, Thomas makes 60 explicit citations, only five of which are to Aristotle.[6] In other words, Thomas' account of sacramental causality cannot simply be explained as a transposition of Aristotelian physics. Thomas' own account of sacraments as instruments importantly increases the potency of instrumental power from that as articulated in Aristotle. As Jordan would articulate it, this is a transmutation of philosophy into theology. To better elucidate this, let me first briefly offer a brief summary of causality in Aristotle's *Physics*.

Instrumental, or efficient, causality is differentiated in Aristotle's *Physics* from three other forms of causality: material, formal, and final.[7] The efficient cause is,

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[5] See Ibid., 163-168.

[6] Ibid., 165

[7] From Aristotle, differentiating the four types of causality: "Now that we have established these distinctions, we must proceed to consider causes, their character and number. Knowledge is the object of our inquiry, and men do not think they know a thing till they have grasped the 'why' of (which is to grasp its primary cause). So clearly we too must do this as regards both coming to be and passing away and every kind of physical change, in order that, knowing their principles, we may try to refer to these principles each of our problems.
In one sense, then, (1) that out of which a thing comes to be and which persists, is called 'cause', e.g. the bronze of the statue, the silver of the bowl, and the genera of which the bronze and the silver are species.
In another sense (2) the form or the archetype, i.e. the statement of the essence, and its genera, are called 'causes' (e.g. of the octave the relation of 2:1, and generally number), and the parts in the definition.
Again (3) the primary source of the change or coming to rest; e.g. the man who gave advice is a cause, the father is cause of the child, and generally what makes of what is made and what causes change of what is changed.
Again (4) in the sense of end or 'that for the sake of which' a thing is done, e.g. health is the cause of walking about. ('Why is he walking about?' we say. 'To be healthy', and, having said that, we think we have assigned the cause.) The same is true also of all the intermediate steps which are brought about through the action of something else as means towards the end, e.g. reduction of flesh, purging, drugs, or

according to Aristotle, “the primary source of the change or coming to rest” (Aristotle *Physics* II, 3). The efficient cause is the immediate or material agent of change and this will occupy much of the space devoted to the relationship between Aristotle and Thomas.

Thomas articulates the causal efficacy of the sacraments in 3.62.1 resp. in which the influence of the Aristotelian distinctions among causes on Thomas is rather evident. Thomas writes:

> We must therefore say otherwise, that an efficient cause is twofold, principal and instrumental. The principal cause works by the power of its form, to which form the effect is linked; just as fire by its own heat makes something hot […] But the instrumental cause works not by the power of its form, but only by the motion whereby it is moved by the principal agent: so that the effect is not likened to the instrument but to the principal agent: for instance, the couch is not like the axe, but like the art which is in the craftsman’s mind. And it is thus that the sacraments of the New Law cause grace: for they are instituted by God to be employed for the purpose of conferring grace. (3.62.1 resp.)

For Thomas, the sacraments do not simply cause grace by virtue of their form. They cause grace because the principal agent (God) established the sacraments in order to confer grace. As such, they are the instruments designed for the purpose of conferring grace upon the human soul, which is an effect that relies on Christ’s incarnation (3.62.5). The success of that conferral, or the sacrament’s efficacy, through the sacrament’s “motion” is not primarily reliant on the form of the sacrament as the (formal) cause of grace, but rather on the movement of grace from the principal cause (God) through the instrument (sacrament, in many components: materials, actions, verbal formulae) to the human (soul, in particular). Sacramental causality is complex. Jordan perhaps summarizes the complexity most succinctly: “To understand sacramental causality

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surgical instruments are means towards health. All these things are 'for the sake of' the end, though they differ from one another in that some are activities, others instruments.” Aristotle, *Physics* II.3, in *The Complete Works of Aristotle*, 2 vols. (Princeton: Princeton Univ. Press, 1995).

requires conceiving instruments composed of many kinds of material things or motions that receive and contain their causal power from a remote being of a different order, in order to pass that power along to beings of yet another kind."[8]

In working through the twofold nature of sacraments' instrumental and efficient causality, Thomas' exposition marks several innovations. Firstly, Thomas, in agreement with other medieval Scholastics, harkens to the causational work of the sacraments thereby amending the traditional rendering of sacrament as "the sign of a sacred thing" to become "the sign of a sacred thing insofar as it sanctifies human beings" (3.60.a2). This however sat in some tension with his argument that the sacraments are firstly, signs, and secondly, causes, as detailed above. Thus, Thomas diminished the differences between sign and cause as much as he was able while also retaining a necessary distinction.[9]

Secondly, his theorization makes sacraments true causes. Though they are subordinated to the "principal cause" (God) who ultimately confers the grace, the sacraments are necessary in their instrumental nature. Thomas compares this work to an artisan, who is the principal cause and whose vision is being born out. That artisan, say a painter, still requires the brush to accomplish that vision. Similarly, or analogically, God uses the sacraments instrumentally to see through the conferral of grace to those embodied creatures who participate in them.

Thomas develops the notion of instrumental or efficient causality beyond that which Aristotle briefly established. For the instrumental causality of Thomas allows the instruments to possess or carry and produce effects that are far beyond the instruments'

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[8] Jordan, "Philosophy," 166.

[9] Chauvet, *Symbol and Sacrament,* 18.

material or formal capabilities. For instance the ability of water in baptism, oil in holy orders, or unleavened bread in the Eucharist together with the verbal formulas and bodily motions cause the sanctification of human souls, which water, oil, and bread do not on their own possess the ability to cause—formally or materially.

Given this complexity and the layered synthesis in Thomas' *Summa*, caution is required in reading him. For, from the outset, as Chauvet entreats, Thomas "reminds us repeatedly that he is using this only as an analogy. This has been true from [Thomas'] first article of his treatise on the sacraments; for from the start he maintains that it is only *by analogy* that the sacraments can be grouped under the genus of 'sign.'"[10] This analogical method is one for which Thomas is well known, though, as Elizabeth Johnson notes his "various uses of analogy have kept generations of commentators busy."[11] Recall, Johnson quite concisely names the "threefold movement of analogy" as one that is "opening through affirmation, negation, and excellence a perspective onto God, directing the mind to God while not literally representing divine mystery."[12] In other words, analogy enables us to make claims about the divine, though not literally. Instead, we negate those claims after affirming them, and then we negate the negation, reaffirming the quality or understanding of God as being in Her eminently—beyond our ability to comprehend the perfect form of that understanding or quality. That Thomas

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[10] Louis-Marie Chauvet, *Symbol and Sacrament: Sacramental Reinterpretation of Christian Existence: Sacramental Reinterpretation of Christian Existence* (Pueblo Books, 2018), 21. As discussed above, Jordan helpfully specifies that Thomas' use of sacraments as signs for broad construal and as causes for consideration of the seven formal Christian sacraments alone. This is not to say that the analogical method need not here apply, but rather that attention should still be paid to Thomas' particular formulations.

[11] Elizabeth A. Johnson, *She Who Is*, 113.

[12] Ibid.

approaches the sacraments analogically complicates this engagement with his thinking on the sacraments.[13] However, I aim to participate in the analogical approach while attempting to improve analogical understandings of the sacraments by updating the concept of efficient causality with post-Newtonian physics.

Turning to contemporary advancements in new materialities requires critical assessment of sacramental pedagogy, particularly in relation to Thomas' rendering of sacramental causality. In particular, contemporary physics seems to prompt a need for revised expression of the theoretical elements of sacramental causality and thereby sacramental pedagogy. Though there are many avenues through which one could do this work, in the below sections we will turn to a few in particular: post-Newtonian physics/ quantum mechanics, new materialisms, and affect theory. Drawing together the traditional insights of the pedagogy of the sacraments with the insights of these emergent fields will demonstrate that these contemporary theories can render anew the efficaciousness of the sacraments. At times, these theories clash with the traditional insights or the assumptions that inform them. In such situations, I propose to

[13] Though I am working largely within this analogical method in keeping with contemporary constructive RC theological methodology, as noted from the outset of this dissertation, I am also thinking with compost metaphorically. The distinction between these two methods is subtly and important. Theologically, beyond the works of Elizabeth Johnson and David Tracy on analogical theology, Sallie McFague provides important insights in *Metaphorical Theology*. She writes compellingly that the analogical method in theology depends on a medieval sacramental universe and "symbolical mentality" to which most people cannot return because of the increasingly secular imaginary of modern societies. She argues that the modern sensibility is metaphorical rather than symbolic. The former being skeptical and tensive, finding similarities among presumed dissimilarities, while symbolic analogy, she argues, is dissimilarities "harmonized" in understanding "'this' as *a part* of 'that.'" Sallie McFague, *Metaphorical Theology: Models of God in Religious Language* (Philadelphia: Fortress Press, 1983), 5-6; 10-21, especially 16, emphasis original. While McFague may be correct that our return to a sacramental universe is unlikely, New Materialisms and post-Newtonian physics seem to be opening the door to more sacramental-like relations between humans and the material world, which is not to say that linguistically analogy is likely return to prominence over metaphor in its communicative power.

constructively conjoin these theories to compost, to turn, to rethink and redescribe the workings of sacramental rites.

One of the foundational shifts in modern thought began with the advent of Einstein's theory of relativity in the early 20th century, along with later developments in quantum theory.[14] These theories transformed and continue to transform our understanding of the material world. Scientific developments such as these, which are born from intensive study of the physical, material world, have seemingly become *less* material. Indeed, their implications have extended well beyond their disciplinary bounds—they have challenged the assumptions of many disciplines and demanded the attention of philosophers in order to reconceive many notions of reality, metaphysics, ontology, ethics, politics, and more. Much as the quantum realm continues to be explored, these implications continue to develop and impact a wider range of disciplines, theology included.

Classical physics (or mechanical/mechanistic physics, Newtonian physics) retains common sense appeal and broad influence in human understanding of the world. Newtonian physics generally proposes matter as non-living substances, self-evident and inert, quantifiable and measurable. Material objects are discrete, bounded things that occupy space. Passive, material objects move when acted upon by an outside force and their trajectory is linear and calculable, based on the simple (Newtonian) logics of cause and effect. The things which traditionally constitute non-living or dead matter appear to

[14] For more detailed insights into the science, its history, and broader cultural implications, see: Jeremy Bernstein, *Quantum Leaps* (Cambridge, Mass.: Belknap Press, 2011); Walter Isaacson, *Einstein: His Life and Universe* (New York: Simon & Schuster, 2007); Manjit Kumar, *Quantum: Einstein, Bohr and the Great Debate About the Nature of Reality* (New York: Norton, 2011).

be stable things which do not themselves *act* or change according to any sort of *will* of their own. These material objects have been considered static substances, and they are reliable and predictable for that reason. When someone leaves home for vacation, the material objects in and of their home are unlikely to change drastically, in fact, most would not think at all about the possibility that the objects themselves might change or transmute (save plants or pets, *living* things, if unattended) during the relatively short time that one is away. And this is reasonable: our daily interaction with objects reinforces, generally, their reliability and general inertness—if not acted upon by some outside force. This general understanding of matter and the classical physics that aided in developing our understanding of matter, have been thrown into question as a result of relativity theory, quantum mechanics, and requisite developments.

What are the implications of relativity theory and quantum mechanics in how we understand and relate to the material world of creation? And how do those implications then come to impact the theological understandings of how the sacraments work on enfleshed people?

TURNING SACRAMENTAL CAUSALITY WITH POST-NEWTONIAN PHYSICS

Theoretical physics, like quantum mechanics, and science studies together, to which I cannot here do justice, call into question classical physics. Classical, Newtonian physics explained in theory macro-level physical objects and their movement. Post-Newtonian physics developed after Einstein's theory of relativity demonstrated mass and energy are equivalent in that they can be transformed into one another. This theory caused physicists and philosophers to think again about the stability of physical objects, and the understanding that persistent things have quantifiable spatial qualities—depth and

height and weight—which would remain inert unless acted upon by an outside force; at which point, motion would be understood and predictable according to physics' theories. Einstein's theory of relativity led, in the 1920s, to the development of quantum mechanics and later to quantum field theory, all of which focused more on the characteristics of microscopic, atomic, and subatomic particles.

The behavior of subatomic particles proves challenging—they are not stable, quantifiable, observable, as one might have assumed given the character of the physical objects they compose.[15] Rather, subatomic particles and microscopic matter is emergent, changing, and quite unpredictable. Diana Coole and Samantha Frost, who have responded to these developments by theorizing (and drawing together others' theories as) "new materialisms", state, "'particles' are more like vibrating strands of energy, strings that oscillate in eleven dimensions, than like small versions of the sand grains suggested by their name."[16] In other words, the general understanding of our material world, its composition, and the movements of physical objects therein does not correspond to or align with what contemporary theoretical physics teaches. These layers of emergent complex causality in some ways seem analogous to the kind of potent efficient causality of the sacraments. For much as Thomas indicated, the impacts of physical instruments and their verbal counterparts are more than physical—much as is their principal cause.

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[15] Particularly when considering particles that require tremendous machinery in order to observe them, the "observer effect" wherein the presence of the observer/of observation has notable impacts upon the observed system, known philosophically by the famous thought experiment known as "Schrödinger's cat." Indeed, subatomic particles (quarks, leptons, bosons, as well as, protons, neutrons, and electrons) are only "observable" through their traces in cloud or bubble chambers using complex instrumentation like electron microscopes and particle accelerators. This is also Heisenberg.

[16] Diana Coole and Samantha Frost, "Introducing the New Materialisms" in *New Materialisms: Ontology, Agency, and Politics*, edited by Diana Coole and Samantha Frost (Durham, NC: Duke University Press, 2010), 12.

The unpredictability, unknowability of the subatomic components of our physical reality pushes our human epistemological and metaphysical limitations analogously to the nebulous workings of sacraments as signifiers and causes.[17]

The implications of this disjointedness in our knowledge and understanding of the physical world are far reaching and have enlivened novel theoretical approaches in many disciplines. Physicists have continued to delve into the quantum realm—in the last one hundred years or so we have discovered over one hundred subatomic particles.[18] Within the humanities a number of the responses to these scientific advances have been loosely categorized as "the new materialisms." New materialisms aim to develop a sense of materiality that is agentive, informed by the insights of theoretical physics, as well as science studies, affect theory, and feminist epistemology. These new materialisms consider matter as vibrant, agentive, emergent, and active. They have uniquely articulated notions of the agency, autonomy, ontology, causality and raise important questions about the implications of these new understandings for theologies and ethics.

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[17] Mark D. Jordan emphasizes that one trying to understand Thomas' thinking on the sacraments, as articulated in the *Summa*, should recall that Thomas first accentuates that sacraments are signs, then they are dealt with as causes. Notions of instrumental and efficient causality are extremely important and widely debated by RC sacramental theologians, even those focused on the work of interpreting Thomas' *Summa*. Though we will get into this further in the body of the text, it is worth noting that Mark D. Jordan writes, "Many readers of Thomas, especially since the Reformation, have been preoccupied to establish what exactly the *Summa* says about sacraments as causes. A reader does better to notice that Thomas defines sacraments and justifies their divine provision in the *Summa* before he analyzes their causality. Indeed, he begins by placing sacraments among signs rather than among causes (3.60.1 arg1, ad1). The sacraments are signs first, causes second" (Jordan, *Teaching Bodies,* 52-3). M.-L. Chauvet also harkens to this point—the subordination of efficient causality to final or formal causality. Chauvet writes, "This clear declaration of intention, from the very beginning of the "Treatise on the Sacraments," does not mean that Thomas intends to abandon the idea of efficient causality; it will return – and with what force! – in question 62, where the first article's main body begins with the following peremptory declaration, 'it cannot be denied [*necesse est dicere*]: the sacraments of the New Covenant in some fashion cause grace.'" Louis-Marie Chauvet and Madeleine M. Beaumont, *Symbol and Sacrament: Sacramental Reinterpretation of Christian Existence: Sacramental Reinterpretation of Christian Existence* (Pueblo Books, 2018), 12.

[18] Ibid., 11.

Karen Barad: “Diffraction” and “Agential Realism”

If sacramental efficacy, as detailed by Thomas, is central to the salvific and teaching work of the sacraments, how precisely do post-Newtonian notions of causality challenge or change the work of the sacraments? In order to pursue this question, I will begin by expounding upon some of the philosophical implications and developments resulting from post-Newtonian and quantum physics, particularly as developed by Karen Barad.

Karen Barad, theoretical particle physicist and professor of feminist studies, philosophy, and history of consciousness, has thought through much of what Niels Bohr’s philosophy-physics, which was born from early understandings of theoretical quantum physics, means for our understandings of agency, causality, ontology, ethics, and the fabric of our world more broadly. Barad’s agential realist ontology springs from Bohr’s calling into relief and question the subject-object division that grounds most scientific work on a distinction between objects and subjects, the latter of which are perceived to have agency. Their thinking through the implications of quantum physics requires that she reject representationalism (and its dependence on the metaphor of “reflection”) and the metaphysical individualism and humanism that go hand in hand. Through these profound rejections and rethinkings, Barad calls into question standard Western worldviews of separateness and distinct individualism, which are held in place by representationalism, metaphysical individualism, and humanism.

To avoid the errors of these systems and to think more accurately with the insights of quantum physics, they employ a diffractive methodology and metaphor (in place of

reflection, as often dominates our language) to enable her emphasis on patterns of difference, while also facilitating our ability to understand the entanglement and mutuality of subjects and "objects." Barad's diffractive methodology is importantly transdisciplinary and specifically aims to foster robust and meaningful developments between scientific advances and those occurring in unrelated fields.[19] Replacing reflexivity with diffraction, importantly places the knower within the equation of knowledge production (objects, representations, and knowers) where the former tended to remove the knower from it. In doing so Barad's method enables more robust reckoning with the social implications of knowledge production and the construction of nature as understood by various disciplines. Indeed, in this way the diffractive method incorporates the observer effect into the knowledge production process. Diffraction as an intra-active material phenomenon informing Barad's methodology is not merely analogical as a method, however, it is meant to disrupt the homologies and analogies that optical metaphors so widely relied upon inscribe. Instead, diffraction "attends to specific material entanglements."[20] In developing her diffractive methodology she importantly emphasizes that "*practices of knowing are specific material engagements that participate in (re)configuring the world"* thereby requiring responsiveness and attentiveness to material entanglements of that which one studies.[21]

In their philosophizing from the entanglement experiments first proposed by Einstein, Podoloksky, and Rosen (in their 1935 paper now referred to as "EPR"), Barad

[19] Barad, *Meeting the Universe Halfway*, 25. A diffractive methodology was first proposed and put to use by Donna Haraway, Barad's colleague at UC Santa Cruz.

[20] Ibid., 88.

[21] Ibid., 91, emphasis original.

hurdles forward towards a "posthumanist performative" account of material bodies, apparatuses, and the universe's dynamic materiality that she influentially develops as "agential realism."

Intra-action

Agential realism and its ontology theorize from the indeterminacy principle and posit material bodies as fundamentally relational *phenomena,* which constitute the "primary ontological unit"—not inherently bounded, individual, and propertied *things*.[22] Fundamental to their agential realism is their development of "intra-action" as the "mutual constitution of objects and agencies of observation within phenomena."[23] Intra-action is distinct from *interaction*, because interaction normally proceeds from a physics that posits a world of discrete subjects and objects or things that respond to one another in predictable ways according to Newtonian understandings of cause and effect. However, as Barad makes clear time and again in *Meeting the Universe Halfway*, "intra-action constitutes a reworking of the traditional notion of casualty."[24]

But what exactly does that reworking entail? How does it impact understandings of the sacraments as instrumentally efficacious causes of grace? And how does it help us to think about the sacramental pedagogy as instructive for ethical formation in the Anthropocene?

Barad holds that in (1) rejecting the Western metaphysics of individualism, which works with the traditional and, seemingly, common-sense notions of cause and effect,

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[22] Barad, *Meeting the Universe Halfway*, 139.

[23] Ibid., 197.

[24] Ibid., 140.

and through (2) the development of agential realism, we come to know the world through a worldview of radical entanglement that shifts how we think about everything—physics, metaphysics, causality, agency, ethics… Thus, they offer us "an alternative meta/physics that entails a reworking of the notions of causality and agency. Traditional conceptions of causation are concerned with the causal relationship between distinct sequential events. In [Barad's] agential realist account, causality is rethought in terms of intra-activity."[25] What this means is that through each intra-action new structures are formed and new connections are made that enable novel possibilities and shift what matters. At the same time certain possibilities are foreclosed, some things cease to matter. There is a more full and complex mattering and differentiating that takes place when we see the material world as fully entangled and caught up in the emergent becoming of all matter. Intra-actions do not simply set in motion any kind of predictable (in the strong sense of predeterminable) series of events, but rather help to forge structures that animate certain possibilities. Or as Barad puts it: "Intra-actions do not simply transmit a vector of influence among separate events. It is through specific intra-actions that a causal structure is enacted. Intra-actions effect what's real and what's possible[.]"[26] In keeping with their understanding of time, space, and matter productive, produced, and performative, the non-separability of all intra-acting objects emerges into clearer focus.

Thus, notions of causality, responsibility, and accountability are muddied and entangled—there are no "singular causes" or "individual agents of change."[27] But we

[25] Ibid., 393

[26] Ibid.

[27] Ibid., 394.

humans are not off the hook! Instead we are charged with the challenging task of developing modes of response-ability, or "an ongoing responsiveness to the entanglements of self and other, here and there, now and then…entanglements bring us face to face with the fact that what seems far off in space and time may be as close or closer than the pulse of here and now that appears to beat from a center that lies beneath the skin."[28]

Causality

Are present day entanglements with medieval, scholastic sacramental theology emerging more tenably in our world of entanglements? Do these inheritances continue to intra-act with our world and worldviews through the very material discursive practicing of them in RC and other Christian communities? Even if so, the sacramental theology and the ritual enactment of the sacraments, might work differently than Thomas and many others had described them, that is, as *instrumental efficient causes* of grace. Though, this scholastic view might strengthen the logic of *convenentia*. Our radical entanglement with "spacetimematter" clearly necessitates more focused attention to the habitual, ritual, material-discursive practices that we call sacraments—whose choreographed intra-actions most certainly teach our bodies and involve more entanglements than we can know with any certainty.

In light of Barad's reworking of causality and their thinking through the implications of theoretical physics, should we even consider the sacraments as *causal* in any way? Given the vision of our material world that Barad presents, wherein there are

[28] Ibid.

no stand-alone agents, "no discrete 'I' that precedes its actions,"[29] considering what sacraments and their material-discursive practices *cause* presents an important if challenging problem. Barad makes clear that we are *of* the universe and that through our intra-actions we are crucial parts of the world's dynamic becoming.

As intra-acting beings of this physical cosmos, the cumulative sacramental practices of 1.3 billion persons currently and many billions more historically strikes me as likely influential in the unfolding of this planet and its many inhabitants, most certainly humans'.[30] The impacts of these complex and meaningful intra-actions are no doubt –at least--significant in the formation of individuals who partake in the sacraments and the communities that form around them. Further, given the highly relational worldview Barad unveils through their understanding of post-Newtonian physics, relegating the impacts of those accumulated material-discursive practices to only those persons, communities, and spaces wherein they occur, seems highly suspect. Thus, interrogating the causal capacities of sacramental intra-actions remains an intriguing, indeed important, line of enquiry.

Apparatuses

Within Barad's agential realist ontology, they understand reality as composed of "things-in-phenomena" and in order to understand how phenomena come into being or unfold causally, one might say, we have to first understand their notion of "apparatus." Apparatuses are the structures that create the conditions for intra-actions, and, yet, they

[29] Ibid., 394.

[30] In Eliadean terms, sacramental practice collapses time (and space) and connects across temporal divides with the original moment (in illo tempore).

are a "productive of (and part of) phenomena."[31] Barad writes, "*phenomena are differential patterns of mattering* ('diffraction patterns') produced through complex agential intra-actions of multiple material-discursive practices or apparatuses of bodily production, where *apparatuses are not mere observing instruments but boundary-drawing practices—specific material (re)configurations of the world—which come to matter*."[32] Apparatuses are clearly not outside of the dynamic unfolding of the cosmos, nor are they merely the material conditions that produce certain phenomena (as some objective, non-impacted physical situation). Apparatuses are phenomena and are a part of the phenomena they provide the structures to help produce through intra-actions. Still, they are the "material conditions of possibility and impossibility of mattering; they enact what matters and what is excluded from mattering."[33] They are material discursive practices that mark the possibilities and impossibilities of properties and becomings of phenomena.

If we then think about the sacraments as apparatuses—boundary-making, material discursive practices—there is a level of causality at play in them. They create the possibilities for reconfiguring the world and differently enacting our becoming within that world. Through their boundary making and their unique reconfiguring and orienting phenomena towards certain possibilities while limiting others they possess the potential for enabling or ceasing our becoming in certain trajectories. In this way, they remind me of what Mark Jordan identifies in analyzing the pedagogy of Thomas' *Summa*: scenes of

[31] Ibid., 142

[32] Ibid., 140.

[33] Ibid., 148

moral instruction. Much as Jordan identifies the liturgies and sacramental rites as scenes of instruction, we might also consider them as apparatuses for moral instruction and formation. For the material confines or hyper-constructed material configurations of liturgical and sacramental rites, like apparatuses, draw clear boundaries and aim to set practitioners on a certain trajectory of becoming. Regardless of the success of sacramental rites, their conscientious construction and aim at identifying what matters and what does not through material discursive practices, makes quite clear, at least to me, that sacraments and liturgies should, in the verbiage of Barad's agential realism, be considered "apparatuses."[34]

This understanding of apparatuses as material-discursive practices that create and mark the contours of possible becomings through intra-actions I argue should inform an understanding of sacraments' causal efficacy. Barad writes that agential realist accounts of causal relations

> entail a specification of the material apparatus that enacts an agential cut between determinately bounded and propertied entities within a phenomenon. The larger apparatus (e.g., the specific configuration of barriers, slits, particle sources, and screens) is causally significant…what is important about causal intra-actions is that 'marks are left on bodies': bodies differentially materialize as particular patterns *of* the world as a result of the specific cuts and reconfigurations that are enacted. Cause and effect emerge through intra-actions. Agential intra-actions are causal enactments.[35]

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[34] It may also be worth noting that the apparatuses in her analysis are grounded to a good extend in thinking about the physical and conceptual set up of laboratories for "observing" and conducting scientific experiments. What she is getting at in her analysis of the lab set up, is that the very materiality of the lab does indeed matter—it impacts the running of the experiments and what is perceived in their being observed. This is Heisenberg's uncertainty principle at work!

[35] Ibid., 176. As is clear in her parenthetical, her discussion of apparatuses, especially here the larger, causally significant apparatus, she is writing in particular about the running of scientific experiments and the observation and measurement of results, which she marks as an intra-action in which one part of the cosmos is making itself intelligible to another.

There is much to unpack in this quote. Understanding the "larger apparatus" is essential in determining the various agencies at play in a given intra-action: the agencies are those material phenomena that are intra-acting. Discrete agencies or entities who come to intra-act impact the very materialization of one another—they leave marks on the bodies of one another. Their intra-actions are causal relations in that their engagement with one another reconfigures the materialization of each.[36] For instance, during the Mass the particular materials of the bread and wine are transformed into the Eucharist, the Divinity incarnate. When recognized as such believers relate to those things uniquely; they demonstrate respect and reverence through bodily postures and in consuming both components of the Eucharist. The "agential separability," however, "is a matter of *exteriority within phenomena*."[37] They are mutually co-constituted prior to any given phenomenon or intra-action, by virtue of quantum entanglement, but the intra-actions that constitute a phenomenon *cause* unique materializations of each participating/present agency.

SACRAMENTS AS APPARATUSES

That matter is agentive as it materializes and rematerializes through its intra-active becoming means that the notion of agency postulated here breaks free from the traditional human-centric views of agency. Matter is alive, vital, agentive. The real presence of Eucharist, in part resultant from intra-actions with the congregants, priest,

[36] The entanglement of the agencies/entities/objects is important to note. Within the ellipses of the quote earlier in the paragraph she notes that "it is not that a preexisting entity receives a mark from a separately determinate entity but rather that the marking or specific materializing 'effect' identifies the agencies of observation as agentially separable from its "cause" (the 'object') within the phenomenon" (Barad, 176).

[37] Barad, 177.

and liturgy, the grapes, wheat, and water, also acts upon the constituent intra-actant phenomena, mutually shaping the becoming of all.[38] Apparatuses mark what is included and excluded from mattering at any intra-action, and thus the material reconfigurations that occur at any intra-action are limited by the apparatuses—the Eucharist is not just *any* bread and *any* wine. Yet of course, there are limitless possibilities for material reconfigurations of the world, given the dynamic vitality of the material world. Nevertheless, the apparatuses are particularly powerful in that their boundary drawing limits what is possible at any given moment. Still, those possibilities (and impossibilities) are ever-changing. Thus, "the notion of intra-actions reformulates the traditional notions of causality and agency in an ongoing reconfiguring of both the real and the possible."[39]

If we think of the sacramental rituals as apparatuses (material-discursive practices) that draw the boundaries of what comes to matter within the intra-actions of the liturgy, the sacraments come alive in new and exciting ways. The sacramental rituals and liturgy have always been carefully orchestrated; in performing sacraments, the RC Church is attentive to the materials that are or become the sacraments, the cultivation of the space as consecrated, adorned with the proper aesthetics and sacramentals that inspire appropriately solemn affects in congregants. Indeed, that attention and care ought to extend to the grapes and grains, how they are grown and those who cultivate them, all of

[38] Laurel Kearns raised some important questions worth further consideration about the way in which the matter of the sacraments (in the Eucharist, bread and wine, in Baptism, water…) plays into the sacred intra-actions of the sacraments. Kearns asked, "what does it mean to be baptized with polluted water?" "How does pollution, toxic spraying that affects workers, plants, and ecosystems come to matter in the sacramental intra-actions?" Though I hesitate to presume or aim for purity in the intra-action of the sacraments that I would argue is false and unattainable, I think that these are important considerations that need further thought on my part.

[39] Ibid.

which participate in the sacramental intra-action. The orchestration of the sacramental rites, verbal and bodily participation, and attention directed towards particular material agents, together bring about certain material intra-actions. The sacraments, in this model of causality, cause what they signify not instrumentally, but intra-actively. They open participating agencies to the possibilities of grace and communion with the divine, while aiming to exclude distractions that might divert one from this trajectory (i.e., occasions of sin).

At the climax of Eucharistic Liturgy, the priest who stands in for Jesus in the reenactment of the Last Supper, speaks the words of consecration: "Take this, all of you, and eat of it, for this is my body, which will be given up for you" while elevating the host (and repeats this act and parallel phrasing with the wine). In this performance, the bread and wine are believed to be transformed into Jesus' literal body and blood. During these prayers, congregants signify their reverence and respect by kneeling and responding in unison to the priest's acclamations with their own, scripted acclamations. Then congregants, partake in the Eucharistic celebration, literally receiving and ingesting the host/body and wine/blood. Boundaries are drawn by the special configuration of the sacred ritual: congregants face the altar and the sacrament; the particularity of the contents of the chalice and paten, the precise "this" of the consecration are raised, revered, and eaten. Altogether every Eucharistic celebration is a unique ecological apparatus, a spontaneous sacramental ecology perhaps, wherein the particular bodies uniquely intra-act as they attend to the host and the wine transformed into the body and the blood of Jesus. The Eucharistic body and blood then become a part of each of congregant. Participation opens congregants to unique possibilities of grace, and thereby

to transformation of self and community, as they understand themselves to be spiritually and physically entwining themselves in God made flesh.

Sacraments like the Eucharist have always been understood as transformative and active in that the RC belief is that the material "accidents" are transubstantiated into the body and blood of the Christ. The essentialism of the substance metaphysic that informs this belief sits at odds with the ontology and meta-physic developed by Barad. Theoretical physics today would not mark "essences" of any "thing;" it would not describe the agencies of the world in terms of "substance" and "accident."[40] And in distinction from the imported metaphysics, the sacramental principle that also constitutes the RC worldview, which posits the material world as God's *creation* possessing links to the divine and possible conduits of grace, can be read as strikingly similar to the vitalist, agential realism that Barad conveys. As such, theoretical physics might challenge the traditional RC metaphysic while also offering a metaphysic more properly aligned with elements of the worldview that matter tremendously to the embodied, sacramental practice and pedagogy that constitute the life of the church.

Liturgical practices, such as the sacraments, are apparatuses or boundary configurations that aid in focusing the iterative materialization that might occur during the intra-actions that take place within the church. The material configurations, like the literal eating of the Eucharist, that constitute sacramental rites are those material-discursive practices or apparatuses. They determine what *matters* or comes to be of

[40] Concerns about substance metaphysics in the RC tradition is dealt with by many other formidable thinkers in great detail – see, for example, David Tracy's *Blessed Rage for Order,* or Joseph Bracken's *The One in the Many*.

importance during intra-actions. In terms of thinking about the alignment of Barad's agential realism and the sacramental principle, one might be concerned about the need for the sacraments, since all of creation is a viable conduit for the reception of grace. However, if we look more closely at the work of the sacraments, they have never set out to attempt to limit God's ability to confer grace upon anyone or anything for any reason outside of the church's official teaching and practices. Further, the sacraments call attention to the reality that all of creation is held in the Divine's grace.

What sacraments offer—traditionally and when considered as apparatus—is a structured means for encountering and reuniting the Divine and redeeming oneself for eternal union with God in part by remediation and reformation from our moral ineptitude. Considered as apparatuses, they create the conditions of possibility for encountering grace. The sacraments construct boundaries that foster meaningful intra-actions that cause or enable more grace-filled and ethical reconfigurations, materializations, and trajectories as a result of the phenomenon. In other words, sacraments create discrete ecosystems in which the intra-actions among human individuals and with material things, like the host and wine, become imbued with greater meaning and transform our relations and becoming.

The sacraments, diffracted through Barad's agential realism, remain causally efficacious—they are signs that bring about what they signify. They do so not as *instruments*, as scholastics or traditional RC theology would argue. Instead, they do it as agents intra-acting with congregants, with other material agents, and the systems of belief and hope that bring agents to the sacraments for grace-filled encounters with the divine. They reconfigure possibilities through the intra-actions, wherein every material element

of the sacraments—from the presider to the other congregants, to the chalice and paten, the bread and wine, candles, incense, stained glass, music sung, and words spoken—is transformed via the intra-actions, reiteratively materializing through their becoming together toward grace. Through our agency humans are called to responsible, ethical intra-action with the world's becoming in the process of participating in and reconfiguring the material-discursive apparatuses of bodily production—as are all agents. This is because "we are responsible for the cuts that we help enact not because we do the choosing (neither do we escape responsibility because 'we' are 'chosen' by them), but because we are an agential part of the material becoming of the universe."[41] Cuts and enactments and intra-actions occur from within; they occur within because of our entanglement and co-constitution. Much as we are entangled and co-constituted by the material agents with whom we intra-act, we are also entangled with the divine, who through Christ's incarnation became deeply enmeshed in the spacetimemattering of the sacramental rites.

Karen Barad's agential realism, which she developed from the insights of contemporary theoretical physics, advances the work of shifting our perspective on the material world. As noted above, her work is aligned with many others who have devoted recent years to thinking again about the vitality of matter. Regarding the work of the sacraments, diffracting the sacraments through her intra-active agential realism, certainly proves challenging. The complex concepts, neologisms, and layered theoretical work, certainly demands our rethinking of how the sacraments work. Many would argue that such work is not worthwhile, and that the sacraments and their pedagogical approach

[41] Barad 178.

should be left behind or at least largely discarded. However, given the immense power of the church and the 1.3 billion RC adherents (over $1/7^{th}$ of the total global population) suggests otherwise. The church is not likely to dissipate in power or influence or followers any time soon. The sacraments, likewise, will remain powerful modalities for ethically forming humans for years to come. Thus, the project of continuing to think with and about them freshly should be pursued.

Barad enables my understanding that the sacraments' instrumental causality, as traditionally understood, is based on an outdated physics and metaphysic that understands matter as brute, dead things. Barad's agential realist account of matter challenges us to rethink causality at every level, especially as it pertains to the agential role of matter in our dynamic becoming. Matter intra-acts in agential ways with humans and nonhumans alike. The material world is fully entangled and co-constitutional. Through intra-actions matter in all its forms, bread, wine and humans included, is reconfigured and opened to new possibilities of becoming. In thinking about causality through intra-action, the sacraments can be understood as fully embodied material-discursive practices that inform our ethical becoming through every ritual enactment. Their prescribed setting makes them especially attuned to this end.

Ecologists, environmentalists, ecofeminists and many others concerned about long term planetary well-being and the habitability ecosystems for all planetary beings, humans included, have long called for greater attunement and response-ability to matter. Attentiveness, fluidity, adaptability, response-ability, these are modes of being that humans need to cultivate in order to flourish in the Anthropocene. In terms of the ethical aims and ends of sacramental pedagogy I am here after, they would be aligned more

consistently and explicitly with the cultivation, living into, and seeking out of the Kingdom of God here on and with *earth*.

Given the human causes of the Anthropocene, we as a species need to take responsibility and action to ensure the possibility for the continuing flourishing of God's creation in the near and distant future. We need to change our ways of being and becoming while also adapting to the planetary, atmospheric, ecological, and climatic changes already unfolding due to the extractive and consumptive cultures of some humans, largely driven by capitalism and fossil fuel consumption of a few economically and politically advantaged persons. This requires developing an ability to ethically and appropriately respond to changes in our ecosystems as they happen. In order to do this, we need to intra-act with our material surroundings in a way that recognizes when they are flourishing and when they are not, and to understand our role in that health or lack. It means conscientious humans should develop the practices and skills to recognize how we intra-act and how our intra-actions effect those agents with whom we intra-act.

This is a tall order. It is a skill set that requires attunement to our bodies and our bodily movements, the bio-physical world around us and intra-actions. To develop these skills, I argue that we will need to work on them in more controlled and familiar settings, building the skills over a lifetime. The sacramental pedagogy embedded in ritual practices offers models and insights about this type of learning. Likewise, feminists, ecofeminists, ecologists, affect theorists, and new materialisms offer insights that in conversation with the sacraments can develop the type of ethical pedagogy needed to meet these challenges. In the below sections I will turn to thinkers who are not easily pinned to any one of these fields, but that often intersect many. The work will be

bricolage in form—I cannot do justice to all the theories that influence my thinking and my working with them here will be fragmentary, piecemeal, a constructive pulling together of what is now at hand and enabling of my thinking through cultivations of attunement and response-abilities and becoming-with.

A POST-NEWTONIAN SACRAMENTAL STAYING WITH THE TROUBLE

How do we attune ourselves to our bodies, which are themselves multitudes? How do we learn to live with and in and among a world constituted by agentive matter? What does such work inspire and engender?

Charging us to "stay with the trouble" by "making odd-kin" through collaborations and combinations with "more-than-human" others, Donna Haraway creatively thinks into the mess of the world as it is today in hopes of its flourishing newly and differently. *Staying with the Trouble* draws on and lives into diverse modes of thinking, what she offers us is *bricolage*: fragments of creative possibility for thinking and living in the "trouble" posed by the Anthropocene, Capitalocene, Chthulucene—our planetary ecological mess. As she spins around the "ubiquitous figure" of "SF: science fiction, speculative fabulation, string figures, speculative feminism, science fact, so far […]"[42] Haraway channels capacious ways of knowing, being, and becoming that might enable humans to response-ably confront the tall order of attunement in the Anthropocene. She does not cut her thinking off from any promising sources, but instead leans into the swirling currents of ecology, myth, science fiction, science studies, evolutionary developmental biology, art, and more. Fundamentally she argues that we

[42] Haraway, *Staying with the Trouble*, 2.

need to make "odd-kin" by living-with, making-with, dying-with unexpected collaborators—from string figures, to pigeons, and characters from science fiction. Through sympoiesis (making-with) and symbiogenesis (the life-making creativity of inter-being collaboration), Haraway challenges us to live into the troubles confronting us in order to become differently through "multispecies worlding" in the "thick present."

Haraway potently draws upon the work of Belgian philosopher Vinciane Despret to elucidate how to think with, what Haraway calls, "odd-kin" in ways that render all parties more capable and develop the skills for greater attunement between unfamiliar beings. Drawing together the work of Despret and Hannah Arendt, Haraway thinks imaginatively about going "visiting" as a challenging practice of deeply learning from others with curiosity to transform oneself in the process—a practice of cultivating attunement with others. She is clear in stating, however, that "Visiting is not an easy practice; it demands the ability to find others actively interesting, even or especially others most people already claim to know all too completely, to ask questions that one's interlocutors truly find interesting, to cultivate a wild virtue of curiosity, to retune one's ability to sense and respond—and to do all this politely!"[43] Attunement is an essential skill and practice to cultivate if we want to develop the ability to respond to the vital, effervescent matter with which we are swiftly moving into the uncharted territory of the Anthropocene. Haraway also draws upon Barad's thinking here in arguing that the encounters of "visiting" require a curiosity and openness to the uniqueness of the encounter, or the "cultivat[ion] of the virtue of letting those one visits intra-actively shape

[43] Haraway, *Staying with the Trouble,* 127.

what occurs."[44] This attunement she describes is intimately related to Barad's rendering of intra-action, as the practice is one that relies on "dynamic, moving relations" in which those intra-acting are both enabled by one another and their worlds enlarged and expanded by the intra-action.[45]

The challenges of this kind of attunement are many. Perhaps most immediately trying in this fast-paced, technologically advanced, and ecologically ravaged planet is learning to trust in our own bodily sensations: especially regarding what our senses can inform us about climate change. Kath Weston details this beautifully in her chapter "Climate Change, Slippery on the Skin" in *Animate Planet.*[46] It is in this chapter that she details the challenges at the intersection of embodied empiricism and climate change. Western sciences have become increasingly finely calibrated and reliant upon instruments that measure at a scale largely beyond the sense-perceptibility of the naked human senses. As this transition has occurred in the sciences, appeals to the body as a reliable scientific instrument have been called into question and undermined.[47] This need not be necessarily so. For instance, the disruptions of climate change on readily perceptible weather patterns—causing extremes and erraticism— can readily be registered on the body and provide important embodied data points about weather. While this data may be distinct from (and might even challenge or contradict) more complex accountings of climate change as understood by professional scientists, that need not pit embodied knowledge

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[44] Ibid.

[45] Ibid., 128

[46] Kath Weston, *Animate Planet: Making Visceral Sense of Living in a High-Tech, Ecologically Damaged World* (Durham: Duke University press, 2017).

[47] See Weston, 105-108.

against climate science. Rather it presents an important challenge to make *sense* of the disjuncture.

Weston suggests that what we need is to find ways to have "recourse to the body as technology for adjudicating truth claims about the world" in order to relate the embodied skepticism of climate change deniers with the work of climate researchers.[48] In other words, she calls for a re-attunement of our bodies and how we understand their sensations in relation to contemporary climatic and weather realities. We need to dial in our bodies to respond to newly forming and rapidly changing patterns of weather and climate. At the more local, individualized level, Weston argues for embodied empiricism and its "bio-intimacy of detection and assessment, which registers conditions through membrane, skin, and retina[.]"[49] The scientific work of embodied empiricism then is the application of reason to assess and understand the results of those sensations: "Everyday attunement to the flesh of humidity, wind, and hydration[.]"[50] This work of course raises many questions about the social context in which these sensations are had and interpreted and about how much the sensations depend upon knowledge of climate change—the things we might not notice if we were not alerted. Drawing on Maurice Merleau-Ponty, she writes, "[Merleau-Ponty] argues that bodies participate in a dialectic that situates them as a 'third term' somewhere between subject and object. Sensation depends on relationality."[51]

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[48] Weston 107-108.

[49] Weston 119.

[50] Ibid.

[51] Ibid., 120.

Yes! Sensation depends on bodily relationality, and we need to live into that relationality intra-actively. The socio-cultural challenges persist: politics and cultures wars in particular pose tremendous challenges. Still, Weston promisingly describes how "people who use eyes, wrists, and perspiration to search out evidence of changing climate conditions may not always be 'confusing' weather with climate so much as puzzling out the relationship between the two."[52] And that node of complex relations between bodily sensation, weather, climate change, climate science, political and cultural narratives, is one that the insights of sacramental pedagogy are uniquely positioned to help us navigate. Sacraments and sacramental theologies, updated for a post-Newtonian age, can be technologies of transformation.

In an intriguing parallel with the sacraments, Weston is here looking to attune bodies and thought not only to the very immediate circumstances and surroundings, but also to the affective and not fully understood relation of those bodily experiences to effervescent, ever-changing materiality and atmospheric volatility in the Anthropocene. The sacraments aim to rejoin our embodied and limited experiences of reality to the larger transcendent, mysterious, and incomprehensible reality of the divine. This sacramentality can be read as analogous to the learning and rejoining required to attune our embodied experiences to the nebulous and nearly inaccessible realities of the Anthropocene that impact us and our ecosystems at every level—perceptible by our bodies and not. The concentrations of greenhouse gasses in the atmosphere, the rising oceanic and atmospheric temperatures, and the acidification of the ocean are typical purview of climate sciences. The data produced by these sciences are beyond individual's

[52] Ibid.

ability to immediately comprehend through their singular, embodied experiences in our lifetime. Such data tracked and the impacts described by climate sciences are achieved through extra-bodily apparatuses, technologies designed to capture this information. The relation between individual experiences of weather to atmospheric and molecular scientific data parallels the relation of embodied sacramental practices to a mysterious and transcendent soteriology.

Among the many challenges of diffracting sacramental theology through agential realism and other theoretical implications of post-Newtonian physics is the linguistic one. Apparatuses, as complexly signified and choreographed as the sacraments, will require linguistic reframing and novel description in order to begin to break the hold of our understanding of them as informed by classical physics' notions of causality. New materialisms and affect theory are two contemporary theoretical trends that name and conceptualize the vitality of matter, the mysterious embedded in the immanent, the agentive activity of the physical world so long perceived as dead, inert. In so doing, these theories provide tools to approach the planet anew, ready for intra-active encounters, prepared to go "visiting" (a la Haraway) in hopes of attuning to the material world in order to flourish with it.

Reimagining matter as lively and agentive is crucial to transforming the destructive human attitudes that have in part caused the Chthulucene. Political theorist Jane Bennett clearly articulates the why a new materialist rendering of matter is crucial to living differently into the future. It is one that would open us to sacramental apparatuses, as well. Bennett writes in *Vibrant Matter*,

> Why advocate the vitality of matter? Because my hunch is that the image of the dead or thoroughly instrumentalized matter feeds human hubris and our earth-

> destroying fantasies of conquest and consumption. It does so by preventing us from detecting (seeing, hearing, smelling, tasting, feeling) a fuller range of the nonhuman powers circulating around and within human bodies. These material powers, which can aid or destroy, enrich or disable, ennoble or degrade us, in any case call for our attentiveness or even 'respect[.]'[53]

In this formulation, she highlights how traditional or classical understandings of matter have enabled humans to act in the unjust and unethical ways that have propelled us to the Anthropocene. As this quote suggests, she demonstrates how our perception of matter comes to matter in how we live in and relate to our ecosystems and our planet. Our understanding of matter and its abilities, its *liveliness* impacts how we intra-act with it. For instance, conventional Western conceptions of the matter or physical stuff of ecosystems as inert, nonliving, or, in the case of many plants, as "resources" has enabled humans to interact with the material world in predominately destructive ways modality.

In *Vibrant Matter,* as a new or vital materialist, Bennett offers us a picture of the material world as vibrant, effervescent, lively. This perspective illuminates a world teeming with agents and Bennett considers the ethical demands of this understanding of the world—in ways not dissimilar to Barad. She too argues that for vital materialists, "[t]he ethical task at hand here is to cultivate the ability to discern nonhuman vitality, to become perceptually open to it."[54] Importantly this task of cultivating the perception of and attunement to vital materiality is couched in humanity's participation in the world. Bennett draws on the work of Theodor Adorno and his "negative dialectical" materialism, which "includes intellectual as well as aesthetic exercises."[55] The practices

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[53] Jane Bennett, *Vibrant Matter: A Political Ecology of Things* (Durham: Duke U Press, 2010), ix.

[54] Bennett, *Vibrant Matter*, 14.

[55] Ibid.

which she describes as his pedagogy could serve as another description of what it means to "go visiting." These include recognition of the inadequacy of concepts and critical reflection on them to understand what conceptualization conceals: "nonidentity."[56] In conceiving of nonidentity, Adorno, as Bennett relays him, argues that we can begin to cure the all-too-human "hubris of conceptualization" and better sense the nonconceptualized and nonconceptualizable realities within which we are embedded. Adorno's pedagogy also includes techniques like employing "one's utopian imagination" in order to attempt to conjure that which the conceptualization has obscured.[57] He also prescribes the technique of play—which certainly aids the imagination and curbs the hubris of human's tendency towards mastery and conceptualization.[58]

Each of these pedagogical techniques is grounded in aesthetic and intellectual attentiveness. Simone Weil would helpfully remind us that "attention" is the "rarest and purest form of generosity" and is a mystical practice that orients one's soul towards the divine.[59] Indeed ecofeminist theologians and panentheists have combined these practices and argued that attention to the creation in which God resides is in fact the orientation of oneself toward the divine.[60] Bennett's vital materialism is, however, thoroughly

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[56] Ibid., 14-15.

[57] Ibid., 15. This notion also connects to the unknowability of the divine and the need for apophasis or the negation (in the threefold process of theological analogy) and it parallels Haraway's speculative fiction/fabulation as found in the "Camille Stories" concluding *Staying with the Trouble.*

[58] Ibid. Also interesting to think about the notion of play in conjunction with Brian Massumi, *What Animals Teach Us About Politics* (Durham (N.C.): Duke University Press, 2014).

[59] "Reflections on the Right Use of School Studies with a View to the Love of God*"* in Simone Weil, *Waiting for God*, trans. Emma Craufurd, First Harper Perennial Modern Classics (New York: Harper Perennial Modern Classics, 2009), 57-66.

[60] The "Green Sisters" whose work Sarah McFarland Taylor detailed in a book of that name and which I recounted in the introduction evidences how some ecofeminists and panenthists have oriented prayer and attention to the Divine as Their presence in the planet. One might also look to Sallie McFague's

nontheistic—in many ways what she offers is a secular correlative to spiritual and mystical experience and expression. For these reasons Bennett will continue to guide my thinking as I aim at articulating pedagogical techniques that are not bound to a religious setting or tradition but find broader applicability.

While illuminating the vital materiality of the planet, Bennett's political and ethical project continually emphasizes humans' responsibilities. In this way she is perhaps pragmatic in her theorization and goals—she is, after all, a political theorist. Though one could argue that the alteration of planetary systems by anthropogenic climate change will ultimately have the final say, since Gaia's forces will forcefully respond in their own time to humanity's indiscretions. This, however, will have been at the expense of many "things" whose vibrancy and agency Bennett theorizes, an outcome we should aim to prevent. She states, "The political goal of a vital materialism is not the perfect equality of actants, but a polity with more channels of communication between its members."[61] Proliferating channels of communication, going visiting, attuning, and cultivating the ability to respond—these are our tasks. The RC sacraments, apparatuses scheduled on the liturgical calendar with seasons in which we attend to varying aspects of our spiritual ecosystems, can serve as models for these to channel, with regularity, the variety of human responsibilities through embodied ethical and socio-cultural demands of the Anthropocene.

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panentheistic body of work, especially *Super, Natural Christians: How We Should Love Nature* (Minneapolis, MN: Fortress Press, 1997), which opens with "The thesis of this book can be stated simply: Christian practice, loving God and neighbor *as subjects*, as worthy of our love in and for themselves, should be extended to nature" (1). This thesis is further developed in *Life Abundant* (Minneapolis, MN: Fortress Press, 2001), in which she develops a "planetary theology"

[61] Bennett, *Vibrant Matter,* 104. Bennett is notably including the *things* in her political aim—though she recognizes the "many practical and conceptual obstacles", namely communication (104).

The demands of the Chthulucene are many and varied. The strains of this unfolding climatic s/cene only exacerbate the massive stressors the paradigm shift of modernity's rendering of reality have placed on theology. Some theologies of the last century have significantly incorporated and responded to these; Roman Catholicism has had its champions—Teilhard de Chardin and David Tracy, to name two, have sought to merge their theologies with post-Newtonian physics. And yet, for the tradition writ large and the Western outlooks that broadly inform it, the tasks of adequately responding to post-Newtonian understandings of reality remain significant.

As this chapter has detailed, the presumptions of classic physics remain potent in theological renderings of RC sacramental efficient causality. For as Thomas reminds, God is the principle cause of the sacraments' grace to fulfill God's "promise" that humanity might participate in the "Divine Nature" (3.62.1 resp.). Though the mechanisms of the sacraments thus rendered are by no means simple, post-Newtonian physics as developed by Barad offers other "physical" means of understanding the work of the sacraments through their agential realism. Within Barad's mode, I have argued that sacraments should be considered apparatuses that cause what they signify intra-actively as material-discursive practices that demarcate clearly what matters within the intra-actions of the liturgy.

Thinking towards the sacraments as apparatuses that can cultivate human embodied attunement to the Divine in (with or as) nature/cosmos is my hopeful composting and reconstitution of RC sacramental theology for the New Climatic Regime. Recalling the panenthistic visions of many ecofeminist theologians and the green sisters,

I wonder what kind of turning or intra-action might foster more rapid and robust responsiveness to the planetary crises? What additives might contribute to the heap's heat? What might balance and enable healthy decay and decompositional flourishing?

In the final chapter I will radically turn and return the heap with Walt Whitman as a pedagogical composting companion. His non-Catholicism, indeed his at times anti-Catholicism, broadens the necessary ecumenical work of composting. This turn will be variously informed and aims to draw in new material to the heap that might make it more approachable to American audiences in particular—for he is often upheld as the great Bard of the American context. He also models an attunement to nature that I read as open to an agential realist account of that nature and to a transcendent spiritual presence in nature, reminiscent of RC's sacramental worldview and Divine immanence.

In the spirit of Haraway's "visiting," the final chapter will "go visiting" Whitman. It will then draw Whitman's pedagogical insights back into the heap for turning. Whitman's responsiveness not only to nature, but also to religious and philosophical movements of his day permeates his poetry instructively. His openness to the onset of modernity is a stark contrast to how Leo XIII pointed RC back towards scholasticism as a closing off to modernity. Nouvelle theologians did intriguing work within the tradition and primed the heap in promising ways; RC ecofeminists have thought and lived the work of attunement incorporating it into their daily and spiritual lives. Incorporating this disparate material into the heap of the tradition is also meant to signal and open into the demands of the Anthropocene for broad collation building—among humans and beyond.

This Compost

1
Something startles me where I thought I was safest,
I withdraw from the still woods I loved,
I will not go now on the pastures to walk,
I will not strip the clothes from my body to meet my lover the sea,
I will not touch my flesh to the earth as to other flesh to renew me.

O how can it be that the ground itself does not sicken?
How can you be alive you growths of spring?
How can you furnish health you blood of herbs, roots, orchards, grain?
Are they not continually putting distemper’d corpses within you?
Is not every continent work'd over and over with sour dead?

Where have you disposed of their carcasses?
Those drunkards and gluttons of so many generations?
Where have you drawn off all the foul liquid and meat?
I do not see any of it upon you to-day, or perhaps I am deceiv’d,
I will run a furrow with my plough, I will press my spade through the sod and turn it up underneath,
I am sure I shall expose some of the foul meat.

2
Behold this compost! behold it well!
Perhaps every mite has once form’d part of a sick person—yet behold!
The grass of spring covers the prairies,
The bean bursts noiselessly through the mould in the garden,
The delicate spear of the onion pierces upward,
The apple-buds cluster together on the apple-branches,
The resurrection of the wheat appears with pale visage out of its graves,
The tinge awakes over the willow-tree and the mulberry-tree,
The he-birds carol mornings and evenings while the she-birds sit on their nests,
The young of poultry break through the hatch’d eggs,
The new-born of animals appear, the calf is dropt from the cow, the colt from the mare,
Out of its little hill faithfully rise the potato’s dark green leaves,
Out of its hill rises the yellow maize-stalk, the lilacs bloom in the dooryards,
The summer growth is innocent and disdainful above all those strata of sour dead.

What chemistry!
That the winds are really not infectious,
That this is no cheat, this transparent green-wash of the sea which is so amorous after me,
That it is safe to allow it to lick my naked body all over with its tongues,
That it will not endanger me with the fevers that have deposited themselves in it,
That all is clean forever and forever,

That the cool drink from the well tastes so good,
That blackberries are so flavorous and juicy,
That the fruits of the apple-orchard and the orange-orchard, that melons, grapes, peaches, plums, will
  none of them poison me,
That when I recline on the grass I do not catch any disease,
Though probably every spear of grass rises out of what was once a catching disease.

Now I am terrified at the Earth, it is that calm and patient,
It grows such sweet things out of such corruptions,
It turns harmless and stainless on its axis, with such endless successions of diseas'd corpses,
It distills such exquisite winds out of such infused fetor,
It renews with such unwitting looks its prodigal, annual, sumptuous crops,
It gives such divine materials to men, and accepts such leavings from them at last.

CHAPTER SIX: ECOPOETIC SCENES OF INSTRUCTION

SACRAMENTAL COMPOSTING WITH WHITMAN

> If the most effective pedagogy for morals is incarnational and sacramental, we ought to write ethics accordingly. Ethics is obliged—as much as any "literature"—to take up the challenge of representing human lives. It is called to speak about embodiment, not despite it.
>
> Mark D. Jordan, *Teaching Bodies*, 64

> So the becoming-flesh of Whitman as a body of work may be read as an iteration of the ancient Christological assumption. But he expands it in his kosmos-persona to contract, to incarnate, the material universe, minimal and maximal, as himself. So what he has assumed—presumptuously?—as his self-celebrating "I" is thereby offered through this sacramental poiesis to every reader.
>
> Catherine Keller, *Cloud of the Impossible,* 210-211

> The breadth and depth of experience that may mediate holy mystery is genuinely inclusive. It embraces not only, and in many instances not even primarily, events associated with explicitly religious meaning such as church, word, sacraments, and prayer, although these are obviously intended as mediations of the divine. But since the mystery of God undergirds the whole world, the wide range of what is considered secular or just plain ordinary human life can be grist for the mill of experience of Spirit-Sophia, drawing near and passing by.
>
> Elizabeth A. Johnson, *She Who Is*, 132

In previous chapters I have navigated a selection of the sacramental folds within the Roman Catholic (RC) compost heap to oxygenate and learn from nourishing seams that offer important insights for embodied learning and ethical formation. I have argued that these insights about embodied sacramentality, though complexly entangled with toxic legacies, are worth drawing into the uncertainties of the presently unfolding s/cenes: the Anthropocene, the Chthulucene, the Capitalocene, the New Climatic Regime. Medieval and modern folds of the RC heap inform that the sacraments humble, teach, and

redeem humanity from sin, thereby reuniting the flesh of the world with God's-self. The RC tradition teaches that in God's wisdom, Jesus instituted the sacraments according to the logic of *convenientia*: given humanity's embodiment, God established the sacraments as embodied modes of teaching. Befittingly, the seven sacraments are material and bodily rituals; they are liturgical scenes of instruction.

The sacraments further offer epistemological and pedagogical insights for individual and collective ethical formation in the Anthropocene: an era so erratic it will challenge and test what we can know and learn through our bodies. In order to aptly attend to the subtle and complex ecological changes in this New Climatic Regime humans need to develop and hone embodied, sacramental attentiveness. Especially in the unfolding s/cene, the tempting (and potentially liberating) flights from the material world into alternative realities online or on Mars need countervailing instruction. Sacramental embodiment, enfleshed attunement, together with scenes of embodied and symbolic materially and spiritually attentive becoming can provide one such countervailing force.

In the penultimate chapter, I demonstrated how contemporary thinkers from various fields developing new materialisms and agential realisms in light of advancements in theoretical physics aided in updating historically authoritative understandings of the sacraments. Concepts like *intra-action* and *apparatus* that constitute Karen Barad's highly relational worldview detailed in *Meeting the Universe Halfway* provided the foundation for my reframing the sacraments. This reframing considers the sacraments as apparatuses that structure, orchestrate, and intra-act as agents within the Church's liturgy and facilitate the earthly reception of grace by participants. This conceptual framing fosters my understanding of sacramental practices as iterative,

material processes of becoming that infuse with grace all elements, agents, and beings present in and through sacramental rites. While the material elements of RC ritual are often ornate and dramatic, the nature of formative intra-actions that take place in the enactment of sacraments appear myriad, subtle, and complex.

The aesthetics, sounds, smells, lighting, bodily postures, and the unique reiterative combinations of these elements in sacramental rituals are not fully comprehended or captured in conventional theological terms. Traditional theological accounts of the sacraments appeal to the mysterious working of the Spirit as they refuse reductive understandings of the work of the sacraments. This is apt since that which the sacraments convey and cause is more than material, as Thomas reminds us: sacraments affect grace from one order of being through what I call an apparatus to a wholly other order of being.

Among my arguments is that the RC tradition and its roughly 1.3 billion followers (approximately $1/7^{th}$ of the global human population, roughly the same population as China) can creatively rethink and more formidably address how the Church intra-actively informs its followers in light of the challenges of the Anthropocene. Indeed, Francis has begun that conversation importantly in the pastoral guidance of *Laudato Si'* and one hopes that Leo XIV continues its work. The RC church alone will not and cannot address the Anthropocene—we (all humans), a differentiated collective with unique responsibilities, need to (re)learn to live, to respond, to think, and to flourish differently in these times. This chapter ecumenically turns the insights of the RC heap with the unusual companion of Walt Whitman.

WHITMAN'S AMERICAN ECO-SPIRITUAL ATTUNEMENT

Composting RC with Whitman requires what Haraway described as the challenging practice of "visiting." To compost with Whitman is to enlarge and oxygenate the heap and enable the building of broader coalitions, learning across meaningful differences, and celebrating multitudes of possible trajectories for thriving in the Anthropocene. As a Roman Catholic, I know that I have learned and benefitted greatly from spending time in Whitman's non-RC verse. Whitman is a teacher of mine, he is part of my inheritance as an American and lover of nature. In part, this chapter is born from a wild curiosity about what the wisdom of RC sacramental traditions might bring to those who do not subscribe to its faith. Mutually, I wonder what the RC tradition can learn from non-RC pedagogues whose modes of becoming might fruitfully inform a development of the sacraments and sacramental pedagogy more attentive and responsive to the Chthulucene?

Walt Whitman is a uniquely positioned pedagogue with whom to imagine embodied attunement for the Chthulucene along a number of important axies. For one, Whitman is widely regarded as America's bard or poet, recognized not only as a poet of nature and the body, but also a poet of the soul and religion (broadly construed).[1] David S. Reynolds, literary critic, Whitman biographer, and distinguished professor at CUNY, rightly notes that "[e]xclusive emphasis on either the physical or spiritual Whitman misses his determined intermingling of the two realms."[2] Whitman was born on Long Island in 1819 and raised in Brooklyn, which Reynolds has described as a "city of

[1] See David S. Reynolds, *Walt Whitman's America: A Cultural Biography* (New York: Alfred A. Knopf, 1995); especially, Chapter Eight: "Earth, Body, Soul: Science and Religion," 235-278.

[2] Ibid., 235.

churches." It "was perhaps the most important locale in America for new religious developments that occurred during the nineteenth century."[3] Whitman himself acknowledged the importance of this "religious rootground" in the 1872 forward to *Leaves of Grass*.[4] And though Whitman was ecumenical in his embrace of aspects of many different traditions, he was also notably critical of the capitalistic and materialistic trajectories of some churches, membership in which he increasingly viewed as mere markings of social and class statues; some churches were becoming aristocratic societies rather than spaces for worship.[5] This critical socio-political intervention within Whitman's thought is an essential component perennially welcomed in the heap, much as any compost pile flourishes with additional carbon- or nitrogen-rich plant matter.

Some have called Whitman an "inverted mystic," suggesting his spiritual practice aimed primarily at union with the physical world rather than the transcendent.[6] Reynolds quotes from Whitman's earliest notebook poem to demonstrate how matter and spirit and their continual interplay are central to Whitman's major poems from the outset: "I am the poet of the body / And I am the poet of the soul."[7] Whitman's poetry is not wholly any one thing. His writing speaks to ecologies and geographies, sexuality and lust, sociality

[3] Ibid., 35.

[4] Whitman as quoted by Reynolds, ibid.

[5] Ibid., 237-238. Reynolds also writes, "As a churchgoer, Whitman was a catholic in the original sense of the word" having attended various kinds of churches and Sunday schools in his early life (39).

[6] Reynolds, 235.

[7] Whitman as quoted by Reynolds, Ibid., 235.

and mutuality, politics and war, and so much more. Perhaps he names it best in that famous parenthetical from *Song of Myself* (51): "I am large, I contain multitudes."[8]

In its remarkable multiplicity and complexity, I hope to explore only a small portion of his poetry, namely "This Compost," to investigate how Whitman, in his "writing up,"[9] models the kind of embodied attunement to and consideration of particular environments, their histories and futures, that we might ritually, sacramentally participate in and attend to in our attempts to flourish in the Anthropocene.

Whitman, too, brings with him his toxins that require composting and the RC tradition might prove an apt heap to foster re-composition. The 1840s-1850s witnessed a remarkable surge in immigrants to the United States, "the largest proportionate increase in immigrants at any time in American history. The large majority of whom were Roman Catholic."[10] He responded to this influx of immigrants with some disdain that expressed itself through concerning nativist leanings. This nativism might not be so different from his socio-political, classist critique of class, as a number of Christian churches were notably homogenous along class lines and engaged in the power-brokering he could not reconcile with the spiritual worship he understood as religion's true purpose. As a young man, Whitman worked as a journalist and frequently clashed with the increasingly

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[8] Walt Whitman, *Leaves of Grass: Authoritative Texts, Prefaces, Whitman on His Arts, Criticism*, ed. Sculley Bradley and Harold William Blodgett, A Norton Critical Edition (New York: W. W. Norton, 1973), 88.

[9] This turn of phrase from Whitman is developed by Bennett centrally in *influx and efflux* as is evident in her subtitle: *writing up with Walt Whitman*. Bennett argues writing up is (in one iteration) a linguistic practice through which a poet "arranges words to mark the cooperation of the many formative efforts of varieties of vibrant matter" (Jane Bennett, *influx and efflux: writing up with Walt Whitman* (Durham: Duke University Press, 2020), 111).

[10] Ibid., 151.

powerful RC Bishop of New York, John Hughes.[11] His disdain especially for the capitalistic and political tendencies of organized religion, paired with his attentiveness to body, nature, and spirit, is an apt additive in this Theology of Compost. For instance, regarding Grace Church in Manhattan, he wrote in the *Eagle*, "We don't see how it is possible to *worship God* there at all…The haughty bearing of our American aristocrats (that most contemptible phase of aristocracy in the whole world!) the rustling silks and gaudy colors in which wealthy bad taste loves to publish its innate coarseness—the pompous tread, and the endeavor to 'look grand'—how disgustingly frequent are all these at Grace Church! Ah, there is no *religion* there."[12] Whitman is an unsuspected interlocutor with whom to advance the sacramental principle so key to his spirituality.

And yet in the current moment, I cannot help but wonder how Whitman might have received *Laudato Si'*. I suspect that he would have welcomed it over the reactionary response to modernity of Leo XIII's 1879 papal encyclical, *Aeterni Patris,* which directed the RC church to reaffirm Thomas' theology in order to rebuff powerful trends of modernity.[13] Francis' demand for an ecological conversion that recognizes the deep entanglements of religion with the environment, politics, society, and economics enlivens my inkling that Whitman might have been more open to the RC church in its direction of late. Nevertheless, given the evident tension between Whitman and Roman Catholicism in the latter half of the 19th century, there is more reason to critically consider and

[11] For instance, see Reynolds, 99-101; 151.

[12] Whitman as quoted by Reynolds, 237.

[13] To be clear, I have no evidence that Whitman was ever aware of *Aeterni Patris* such that he indicated adversity to such a document; it is certainly unlikely that Whitman would interest himself with such internal moves in the RC Church.

compost their entanglement explicitly. By turning the RC tradition together with Whitman's embodied pedagogy and his communion with nature and spirit we raise the temperature of the heap to embolden and revitalize in the sacramental principle already drawn forth by the green sisters and other ecofeminist theologians.

Embodied Affective Attunement

Walt Whitman's poetry offers scenes of embodied and affective sensibilities of becoming with nature. By closely reading his poetry with the assistance of contemporary ecologically and ethically attentive readers like Jane Bennett, Catherine Keller, and M. Jimmie Killingsworth, I will turn Whitman with the RC sacramental insights to imagine a broader coalition of embodied, ritualized attunement with the planet.

Whitman's poem "This Compost" strongly resonates with this theology of compost's ethical attunement to becoming in the Anthropocene. His transformative movements in relation to the earth within "This Compost" and those movements in relation to the matter of compost will prove a fitting guide for present human intra-action with planetary possibilities and timescapes. His reactions as expressed in verse and in the process of compost itself, metaphorically and physically, serve as exemplars for such intra-action. Even the affective structure of "This Compost" is instructive, as his hope-filled wonder born from bodily knowledge and from science bookend the fear, disgust, and disorienting realizations of entanglement that form the center of his poem. Opening "Something startles me where I thought I was safest" with time and attention, thought and attunement eventually give way to his ability to return to his "lover the sea." Whitman's structure is one often repeated in Whitman's *Leaves of Grass*. His construction holds in regular, furtive tension the insights of the body and thought with

scientific knowledge that Weston urges we retrieve. It also places at the heart of his work the disorientation, disgust, and despair that the Anthropocene engenders in many humans called to attend to the s/cene even a century and a half later. Through my turning of "This Compost" into the RC heap, Whitman may enliven wildly curious visiting of what often feels too familiar or mundane a sacramental ecosystem: the routine of the RC ritual within liturgical calendar and the commonplace of our ecological, situated belonging. Throughout Whitman's poetry he readily recognizes the Divine's presence in the natural world and its regenerative capabilities. Turning him into the heap brings another powerful and palpable voice to strengthen the panentheistic nodes of RC natural theologies diffused through the tradition.

While a number of valid critiques have been levied regarding Whitman and his poetry, Keller, Bennett, and Killingsworthy help to illuminate the edges of Whitman's insights that directly address the needs of the unfolding s/cenes articulated in chapter one: human humility to counter technological hubris, socio-political critique of modern geo-politics and capital, New Materialisms' insights into the more-than-human collaborators in facing the new s/cenes, and taking seriously the emotional toll of planetary changes. Whitman has been criticized for how his poetry can be read as egocentric, greedy and consumptive—all concerns that might mark him as an American poet in all the wrong ways. One can imagine the critique: Whitman the selfish, capitalist American whose consumptive greed helped to foster the ecological crisis that we now inhabit. Certain poems and collections can indeed be read as egoistical. For instance, this risk can be readily misread in the famous lines of "Song of Myself": "I celebrate myself, and sing

myself, | And what I assume you shall assume, | For every atom belonging to me as good belongs to you."[14]

These lines and others by Whitman have inspired critiques of his assumed proximity to others or the "grandiose denial" of distinctions between himself and others.[15] Whitman scholar M. Jimmie Killingsworth writes that this denial of difference "may seem uncomfortably close to the rhetorical strategies that critics these days associate with imperial, colonial, racist, and masculinist discourses."[16] Killingsworth does not flatly reject this historical reading of Whitman; however he offers a "geographical dimension" in order to understand Whitman as a poet adapting to urbanization. He argues that Whitman's "myself" is one who aims to cultivate the familiarity and public intimacy of small towns in new urban settings.[17] Killingsworth also points to the "abstracting imagination" made possible by the "urbanizing experience", which he in large part associates with Whitman's fluid use of gender and sexuality throughout his writing.[18] The desire for a depth of intimacy, for love among strangers in

[14] Walt Whitman, *Leaves of Grass: Authoritative Texts, Prefaces, Whitman on His Arts, Criticism*, ed. Sculley Bradley and Harold William Blodgett, A Norton Critical Edition (New York: W. W. Norton, 1973), 28. Note also the relationality present—the intimacy of mutual belonging here present.

[15] M. Jimmie Killingsworth, *Walt Whitman and the Earth: A Study in Ecopoetics* (Iowa City: U of Iowa Press, 2004), 143. And it is worth my noting the difficulty of imagining into and writing hopefully of collaborative becoming without slipping uncritically into *we*. Throughout the writing of this dissertation I have struggled and worried about how and when to write collectively and I am sure that I have not done so perfectly.

[16] Ibid., 143.

[17] Ibid. This is the type of public intimacy that is also aligned with the democratic pulse of Whitman's poetry.

[18] Ibid., 147.

the city is central, according to Killingsworth, to Whitman's elision of distance and difference between persons that holds potential concerns about the poet.

In a chapter exploring Whitman's poetry vis a vis apophasis, sexuality, and the earth, Catherine Keller persuasively deals with similar concerns and critiques of Whitman through a close reading and uncovering of his highly relational cosmology. Political and cultural critiques which attend to the poet from a singular angle, can render the subjects of their critiques flattened, literal, and also singular, which we know Whitman is not. Regarding the above quoted assumptions of Whitman in "Song of Myself", Keller writes:

> In this self-celebration what "I *assume*" must not be read as meaning what I *presuppose*. It has the prior meaning of "taking up," as when I assume responsibility, an office, or a burden. But whatever I take up—so now do you. So the affirmation does not inflate, it radically redistributes, itself, its very matter… the poet performs—across any space and time—an intentional entanglement with the reader. And the radicality of the gesture is immediately revealed: it goes down to the atomic level.[19]

Keller reads Whitman through his radically entangled, egalitarian, and democratic aims.[20] In the atomic implications of his assumptions, Keller shows how Whitman anticipates modern physics and offers "a relationality of such constituent interdependence that there is no escape from each other."[21] Her relationalist reading of Whitman offers a framing of *Leaves of Grass* that entails ethical responsibility not only for humanity but for all of Earth's others. Further, Keller highlights how Whitman in his writing and in his

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[19] Keller, *Cloud of the Impossible*, 210.

[20] For more on Whitman's democratic aims within the American context, see the works of Mark Edmundson, especially *Song of Ourselves: Walt Whitman and the Fight for Democracy* (Cambridge, MA: Harvard University Press, 2021).

[21] Keller, *Cloud of the Impossible*, 210.

assumptions intentionally invites and includes the reader across time and space into his entangled becoming.

The scenes in his poetry are instructive. They anticipate the post-Newtonian physics that the RC tradition struggles to incorporate and that I argue must transform how we understand sacramental causality as apparatuses for intra-acting. Whitman's poems name the entanglement of all beings and matter; in them Whitman assumes responsibility for our being across time and space, inviting us to do likewise.

Drawing on Deleuze's reading of Whitman, Keller marks the rhizomatic nature of Whitman's writing style, self- and cosmic-understanding. She writes (quoting Deleuze),

> Whitman grows an immense rhizome from the fragments, its elements bursting, unfurling in the unrhymed, incantatory series, forming "a whole that is all the more paradoxical in that it only comes after the fragments and leaves them intact, making no attempt to totalize them." Nonseparable difference had found its epic expression in a "nomadic, rhizomatic poetry." Grass is of course the great example of a material rhizome.[22]

Whitman's sense of self and cosmos is formed from fragments that are whole in themselves and inextricably together, much like an endless sea of grass comprised of leaves upon leaves of grass emerging from an interconnected, non-centralized, rhizomatic root system. Nonseparable difference is an important concept in Keller's work, as it draws on quantum physics. As she points out early in her *Cloud of the Impossible*, nonseparabililty is another word for entanglement.[23] Rather than reading Whitman as denying the distinctions between himself and others, as critiques argue (and to whom Killingsworth responds), Keller convincingly reads Whitman as composting more

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[22] Ibid., 197.

[23] Ibid., 22. Keller also makes very clear "It is nonseparability of difference that renders injustice intolerable" because "differentiation is not an effect of separation but of an entangled unfolding" (22).

mindfully together, not reducing or flattening, the nonseparable difference of all beings. Whitman honors differences while being unable and unwilling to deny the very material, cosmological and ethical entanglement of himself with those others. The poet thus offers himself as a radically entangled fellow earthling sharing in the responsibility of our becoming and modeling a becoming that demands attunement to our nonseparable conspirators [‘fellow breathers.’]

Of course, not everyone will readily follow Keller in her reading of Whitman. His effusive lust for and celebration of many things and bodies, which he describes with vivacious particularity, might lead some (especially today) to read Whitman as resonant with masculine and capitalist entitlements to consume, extract, horde all that one desires. The potential for such a reading marks the complexity and ambiguity that the building of coalitions in a pluralistic democracy require citizens to navigate. Keller reminds, and it is worth holding in relation to both Whitman and the RC tradition in confronting the Anthropocene: “For what is part of us, repeating itself in us, we may iterate otherwise. The ambiguous entanglement is not severed but rewoven. The relational ontology of becoming exists to intensify that possibility.”[24] Entanglement means that relations change but are never severed: they are composted.

And so we turn.

Jane Bennett in *influx and efflux: writing up with Walt Whitman* articulates well this comprehensible tension in Whitman. She writes:

> Does Whitman’s earthly love and impeccable attentiveness to other persons, places, and things encourage a more wondrous respectful mode of interaction

[24] Keller, *Cloud of the Impossible*, 256.

> between dividuals[25] and other living materials? Or do they feed into powerful currents of anthropocentrism, whiteness, colonialism, consumerism, and exploitation of "natural resources"? No doubt they do both, for only a thin and porous membrane separates a love of matter that is nondiscriminatory and radically egalitarian…from a consuming lust.[26]

Whitman's poetry has the potential to inspire more responsive, wondrous, and open dispositions to others of all kinds. This is true as well for each of us—the pull to consume and thrive within systems as they are is often quite near the lure for radically new and different futures. It often comes down to pragmatic questions of whether or not we should work from within a system or reject a system outright. This tension is also present in Killingsworth and his alternative perspective. A purist might demand the renunciation of Whitman for the potentially damning readings of his poetry named above. However, in grounding ethical thinking in complexity and complicity, as well as the need for positive transformation, a composting of traditions, I argue that Whitman is a complex and exemplary, embodied and entangled ethical pedagogue for the Chthulucene.

HOVERING: ECOLOGICAL ETHIC THROUGH POETIC AFFECT

In reading Whitman, what often strikes me about his poetry is its celebratory mood—a celebration shared between himself, others, and the earth. Pope Francis in *LS* likewise embraces Earth and all creation with jubilee. In the well-known opening lines of *Song of Myself,* Whitman writes "I loafe and invite my soul, | I lean and loafe at my ease observing a spear of summer grass | My tongue, every atom of my blood, form'd from

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[25] Bennett follows McKim Marriot's notion of "dividuals" as opposed to individuals (read sovereign, whole, bounded), dividual persons are co-constitued beings that take in and emit various material influences. Bennett introduces this in *influx and efflux: writing up with Walt Whitman* (Durham: Duke U Press, 2020), xii-xiii.

[26] Jane Bennett, *Influx and Efflux: Writing Up with Walt Whitman* (Durham: Duke U Press, 2020), xiv.

this soil, this air, | Born here of parents born here from parents the same, | and their parents the same".[27] Whitman's self-understanding is that he is one with the earth, made from its very self. From the earth he is composed, much as he was by his parents and grandparents. He writes of union with the soil and air; he finds easy enjoyment among the summer grasses. Whitman's embrace of the earth, his embrace of nature and of humanity's place within it, is emblematic of Whitman's ecological sensibility.

Whitman contains multitudes, however. And as Keller writes of him, "the affirmative excess of Whitman's bold vision grips the reader only because it is punctuated by suspenseful negations."[28] Deep into *Leaves of Grass*, one comes across such a suspenseful negation in "This Compost." In "This Compost," Whitman expresses hesitation and even disgust towards nature; the poem is dramatic, expressive, embodied, and transformational, much as is its titular referent: compost. In its drama, he evokes a scene of transformation and movement, a formative, relational scene in which the reader too is forced to reckon with that which so profoundly affects him. The reader, from the outset, is entangled in his suspenseful negations.

"Something startles me where I thought I was safest."[29] What is this "something"? And what do we make of his being startled? Is he fearful? Uncertain? Repulsed? Is Whitman's apprehension a response to that "something" with which he does not find himself mutually constituted? Or is his entangled cosmology, his presumed co-constitution with that "something" that which makes it all the more terrifying to him? Is

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[27] Whitman, *Leaves of Grass,* 24.

[28] Keller, *Cloud of the Impossible*, 199.

[29] Whitman, *Leaves of Grass*, 368.

he inviting us to likewise *attend* to the ways the Capitalocene is making us unaquainted with our homes, our ecosystems; unfamiliar with ourselves; or unfamiliar to our homes?

I suspect the latter. For he has suddenly recognized this "something" "where [he] thought [he] was safest".[30] This *something* embodies the "resistant force" of material assemblages; it exercises a "thing-power" that Jane Bennett describes in *Vibrant Matter*.[31] Where Whitman often attends to the subtleties of material things and beings with great detail, here he is stopped in his tracks at the sheer power of this nearly unnamable *something*. He returns that unknowability to the reader, demanding attunement to tensive ambiguity; Whitman requires the reader to lean into (subjunctively, *ritually*) a world *as if* our worlds cannot be fully known or understood by language, which they cannot.

In this unusual repulsion that Whitman feels and expresses in "This Compost", the power of whatever this *something* is becomes palpable. That Whitman is "startled" at the outset of this first stanza in a place where "[he] thought [he] was safest," suggests that Whitman's recognition of and attunement to this "something" is newly developed or recognized in him. Perhaps this is the result of a developed affective capacity specific to place established over time. Such newly recognized attunement in someone so sensitive and predisposed to carefully attending implies that there remains room for continued reconsideration and bodily attunement in all of us.

This cannot be the full story, however. In her giving voice to thing-power, Bennett challenges us to also recognize the ways in which things exert themselves in

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[30] Ibid.

[31] Bennett, *Vibrant Matter*, 1.

relation to humans. Things can startle us into recognition of their presence and their agency. Whitman's "something" seems to have done just that.

Killingsworth uses "This Compost" centrally in *Walt Whitman and the Earth: A Study in Ecopoetics* and describes Whitman's initial "nearly physical repulsion" from the "'something' he refuses to name, categorize, or tame with a trope."[32] Whitman's choice to leave unnamed and untamed that "something" is important; it seems that in his being startled, Whitman recognizes the need to wrestle with the sheer affective force of it. To do so, he chooses not to tame, or reduce to a name this "something" which acts upon him. Instead, he chooses to pause in the ambiguity, and aim towards greater intimate understanding of the "something."

In his pause, Whitman pulls himself back from this something working upon him:

> I withdraw from the still woods I loved,
> I will not go now on the pastures to walk,
> I will not strip the clothes from my body to meet my lover the sea,
> I will not touch my flesh to the earth as to other flesh to renew me.[33]

Whitman recoils into himself. He does not retain in this moment his open disposition to the earth. He closes himself off from his "lover the sea" and conceals his flesh, which he otherwise conjoins with the flesh of the earth for self-renewal. In his recoil he reveals a great deal about his usual assumptions about and relations to the woods, pastures, sea, earth. What Whitman is giving voice to is an intimacy with these

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[32] Killingsworthy, *Walt Whitman and the Earth*, 19. Writing in 2004, Killingsworth offers an ecopoetical reading of Whitman that draws explicitly on "thing theory" which Bennett's *Vibrant Matter* and *influx and efflux* develop (if uniquely and from a different intellectual trajectory). Killingsworth's reading offers insights that align with my experience of and thinking about the poem when I first encountered it consciously in relation to my ecological concerns during my master's degree program.

[33] Whitman, *Leaves of Grass,* 368.

places, these ecosystems which he knows always already act upon him, renew him, and co-constitute him. This intimacy that recognizes the ways in which these places act upon him also enables his sensitive perception of this "something" that might have always been there existing on a more subtle plane, perhaps within a different temporality.

The pause we witness here from the outset accompanied by his recoiling into himself is much like the solar judgment that Whitman introduces in "By Blue Ontario's Shore" and which Bennett unfurls in *influx and efflux*.[34] In "By Blue Ontario's Shore" Whitman writes of the poet that:

> He is no arguer, he is judgement, (Nature accepts him absolutely,)
> He judges not as the judge judges but as the sun falling round a helpless thing.[35]

Of this (and an extended section of the poem), Bennett asks what it would mean for a human to inhabit this type of solar posture and mood, position and disposition.[36] In unpacking Whitman's position she argues that it might mean "to inhabit a moment of unalloyed impartiality, to acknowledge presences without ranking them, to hear testimonies from people, places, and things without preference."[37] There is something "apersonal," she suggests, to this deep, attentive listening; she also likens the "sun falling" to an "atmospheric dissemination" that is generally curious and open to others of

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[34] See in particular Chapter three of *influx and efflux*: "Solar Judgment."

[35] Whitman, *Leaves of Grass*, 347.

[36] Bennett, *influx and efflux*, 46.

[37] Ibid., 47.

all kinds and persuasions.[38] Bennett renders this a process-oriented reading of Whitman's judgment.

In drawing on Alfred North Whitehead, she argues that "decision is not the apex of judgment".[39] Rather, judgment "hovers." It takes time to pause, to "witness and wait," to "hover in the interval between influx and efflux."[40] This judgment modeled on the sun's falling, is a temporal shift: it is a position or posture that hovers in the interval, pauses in suspense.[41] The process and pause in judgement is an eternal and liminal space that judgment Bennett offers us through Whitman. This liminal space, this non-knee-jerk response, is a difficult one to inhabit. Yet, in a pluralist world where we (hopefully!) increasingly encounter difference, does such pause not seem eminently needed and ethically astute?

In the Anthropocene, the Chthulucene, the New Climatic Regime, the Capitalocene, the ability to pause and witness changes and differences in our environs, to hover and hold those changes and differences without rejection or hierarchization, is going to be increasingly important. We are already witnessing tremendous and rapid fluctuations in our ecosystems and climate patterns and will continue to do so. What we need is perceptive, embodied attunement to those changes and dispositions that enable us to hold, respond to, and shift, "to expose," "to turn," "to renew," with such changes. Of course, we all have preferences and functional hierarchies and initial responses, and

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[38] Ibid.

[39] Ibid., 48.

[40] Ibid.

[41] Ibid.

Whitman invites us to enter a world in which we suspend time and withhold those judgments. His framing, in other words, can be read as ritual framing.

In his attentiveness to living into the world with suspended judgement, Whitman is able to relate to and learn from and about the world with the fullness of his body. His bodily attentiveness is thereby enabled to cognitively learn from his intra-actions with his planetary kin rather than cognitively pre-determine those relation. His ritual framing is akin to Thomas' *convenientia;* it is a fully embodied moral instruction of human persons.

The Whitman that Bennett lifts up through her close and careful reading of "By Blue Ontario's Shore" is aligned with the embodied ethics I argue we must pursue. The solar judgment of Whitman's as articulated by Bennett is a challenging one: it is nearly too perfect. Fortunately, in Whitman's "This Compost" he offers us a similar, perhaps more human and conflicted model, one that might mirror more fraught states. In this transitional time in which the impacts of climate change are increasingly undeniable and perceptible, the Whitman of "This Compost" might provide an intermediate or training module to the solar judgment that Bennett lifts up from Whitman.

For Whitman's recoiling in "This Compost" hardly seems without judgment. Yet judgment might be too strong a word. His reactions do recognize the emotional, visceral responses radical changes might affect. And still, his reaction suggests that essential level of attunement to and thoughtful engagement with changes in his environs and shifts in his perception.

From his withdrawing in "This Compost," Whitman proceeds to raise questions:

> O how can it be that the ground itself does not sicken?
> How can you be alive you growths of spring?
> How can you furnish health you blood of herbs, roots, orchards, grain?
> Are they not continually putting distemper'd corpses within you?

> Is not every continent work'd over and over with sour dead?[42]

Whitman offers us insight into the "something" which so startles him: it is the nexus of death, toxicity, and the persistent rejuvenation of the earth.[43] His worry likely stems not only from the attunement to the earth's regenerative capacities, but also from the recognition born from his increasingly populous urban environs that so many people inhabit the planet, die and are then enveloped by it.[44] Whitman continues his questioning, shifting ever so slightly from concern for the ground and plant life to a dissonant repulsion:

> Where have you disposed of their carcasses?
> Those drunkards and gluttons of so many generations?
> Where have you drawn off all the foul liquid and meat?
> I do not see any of it upon you to-day, or perhaps I am deceiv'd,
> I will run a furrow with my plough, I will press my spade through the sod
> and turn it up underneath,
> I am sure I shall expose some of the foul meat.[45]

Here his sense of the palpable fleshiness of human death and decay in the earth comes through even more strongly. He worries that the earth and plants who he continues to

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[42] Whitman, *Leaves of Grass,* 368.

[43] Killingsworth argues that the "metaphorical network that mediates [Whitman's] relationship with the earth" stops working for Whitman at the outset of this section (*Walt Whitman and the Earth,* 20). I do not necessarily disagree with this assessment. However, I argue that it is not that this is not working, but rather that the relationship is profoundly called in to question for Whitman precisely because he is reckoning with another layer of attunement with the earth and its decomposition capacities in this poem.

[44] "This Compost" was included in the second edition of *Leaves of Grass* (1856). While the centrality of death and his responses to death conveyed herein were likely heightened in the aftermath of the Civil War, the dating of this poem suggests that in all likelihood the voluminous death startling him here is related primarily to his urban existence.

[45] Whitman, *Leaves of Grass*, 368.

address with the second person pronoun "you" have deceived him. And he sets course for an empirical, embodied turning of the soil to "expose some of the foul meat."

The juxtaposition of the possibly deceptive earth, whom he has so affectionately known and from whom he now withdraws, with the toxic, "distemper'd corpses" of "drunkards and gluttons" from generations signals how the power of "something" has called into question much of what he has known and presumed about the earth and perhaps the finality of human death. These bodies are poisonous partly in their quantity and also in their corruption, but through composting might be reclaimed. Whitman's questioning represents a pausing in which to engage his intellect to explore the embodied affective response to this "something" that he encountered and felt so profoundly. This pause and the distinction between intellect and affect, mind and body, is an important one that must be carefully held to not regress into a separation. The intellectual and affective are mutually informing sources of knowledge that come from these interconnected components of our human selves and are important to glean from Whitman. It is in listening deeply to both in conjunction that Whitman is able to move into his scientifically inspired celebration of the earth's materially transformative capacities.

In the second movement of "This Compost," Whitman's more familiar celebratory cadence returns: "Behold this compost! behold it well!"[46] In his experimentation, his communing with the soil, his participation in the turning of its humus, Whitman recognizes the compost as living, fertile soil. He recognizes the

[46] Ibid. How could a Catholic not read "Behold this compost!" and hear the echo of "Behold, this is the lamb of God who takes away the sins of the world, blessed are those who are called to his supper." These are words spoken by the priest after the transubstantiation and prior to the sharing of the eucharistic sacrament. The nonseparable difference shimmers through these lines palpably, at least to this RC reader. Some might also envision images of the "Ecce homo."

profound transformation that must occur in the composting process which strikes as miraculous and comprehensible or scientific. He declares "What chemistry!"[47] Before remarking on the earth's transformative, indeed "resurrective," material capacities, he lingers in the pause, the solar hover in order to behold:

> Perhaps every mite has once form'd part of a sick person—yet behold!
> The grass of spring covers the prairies,
> The bean bursts noiselessly through the mould in the garden,
> The delicate spear of the onion pierces upward,
> The apple-buds cluster together on the apple-branches,
> The resurrection of the wheat appears with pale visage out of its graves,
> The tinge awakes over the willow-tree and the mulberry-tree,
> The he-birds carol mornings and evenings while the she-birds sit on their nests,
> The young of poultry break through the hatch'd eggs,
> The new-born animals appear, the calf is dropt from the cow,
> the colt from the mare,
> Out of its little hill faithfully rise the potato's dark green leaves,
> Out of its hill rises the yellow maize-stalk, the lilacs bloom in the dooryards,
> The summer growth is innocent and disdainful above all those strata of
> sour dead.[48]

Whitman's voice here is familiar. In a sense, he returns to his sensitive attunement and remarkable ability to pay attention with generosity and openness. The poem began with the initial affective repulsion and withdrawing due to "something;" in that withdrawing Whitman recalibrated, he checked in with himself and interrogated, to an extent, his response; through experimentation and trusting his embodied perception, he has come to appreciate the transformative work of the earth—its ability to compost and incorporate "part of a sick person" into beautiful grasses, onions, flowers, birds, robust ecosystems. Yet something remains slightly different: the growths are "innocent" *and* "disdainful."

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[47] Whitman, *Leaves of Grass*, 369.

[48] Whitman, *Leaves of Grass*, 368-369.

The composting of "strata of sour dead" by the earth and the growth of spring gently and beautifully is not despoiled by those dead, but it is disdainful. In this disdain, I read not so much contempt for the putrid, decayed bodies turned into fertile humus, but rather an impersonal relishing of the profound beauty and indulgence of summer growth.

Whitman concludes this second movement with his settling back into a feeling of safety and security with the earth, marveling at its power, enamored once more of the earth's body and desiring to enjoy and be at one with it.

> What chemistry!
> That the winds are not really infectious,
> That this is no cheat, this transparent green-wash of the sea
> which is so amorous after me,
> That it is safe to allow it to lick my naked body all over with its tongues,
> That it will not endanger me with the fevers
> that have deposited themselves in it,
> That all is clean forever and forever,
> That the cool drink from the well tastes so good,
> That blackberries are so flavorous and juicy,
> That the fruits of the apple-orchard and the orange-orchard,
> that melons, grapes, peaches, plums, will none of them poison me,
> That when I recline on the grass I do not catch any disease,
> Though probably every spear of grass rises out of what was once a catching disease.[49]

His return to paying attention to the deliciousness and sensuousness of the air, of water from well and sea, of fruits, and of grass, all of which will not poison or disease him—though disease and poison might have been their origin and sustenance. His willingness to return to the sea and "allow it to lick my naked body all over with its tongues", is an erotic union with the Planet which just before caused him such great terror. Whitman exercises the ability to hold tremendous tensions together without fully resolving one into

[49] Ibid., 369.

the other. It is a pause and hovering, a recognition of multitudes, but not a short-cutting decisive judgment. Yet Whitman does hold, quite complexly, the ambiguity and process-oriented judgment that Bennett reads in "By Blue Ontario's Shore."

His holding of the tension between his affective revulsion and self-removal, with his appreciation of the transformative beauty and work of the earth and humanity's pollution of it in life and death persists in his closing of "This Compost." He writes:

> Now I am terrified at the Earth, it is that calm and patient,
> It grows such sweet things out of such corruptions,
> It turns harmless and stainless on its axis,
> with such endless successions of diseas'd corpses,
> It distills to such exquisite winds out of such infused fetor,
> It renews with such unwitting looks its prodigal, annual, sumptuous crops,
> It gives such divine materials to men, and accepts such leavings
> from them at last.[50]

Even in his reveling in the beauty of orchards, fruits, grasses, birds, and animals, Whitman remains "terrified" at the close of "This Compost." He has been changed by his experience. The affective repulsion was not overcome or itself transformed through interrogation and reflection—the intellect did not successfully subdue or override the powerful, embodied and affective response to that initial "something." He seems at the end of his poem to recognize the smallness and insignificance of humanity. There is clear recognition that the earth provides "divine materials" (perhaps God's immanence encountered!) that humans then leave in such waste. And still earth accepts them—toxic, polluted, degraded—and "renews" those materials to produce "prodigal, annual, sumptuous crops."

[50] Ibid., 369-370.

Of this closing, third movement, Killingsworth writes, "the poet adjusts to his new realization and stands in awe before the mystery of the earth's resurrecting powers".[51] Killingsworth marks the movements of this poem as:

> one of the finest instances of the Whitmanian sublime, we arrive by way of the quasi-scientific concepts of "compost" and "chemistry." The thing that had disturbed him at the start of the of the poem, transformed by the processes of composting and chemistry, has virtually vanished, leaving only the beautiful nameable objects of the familiar earth…the terror of the initial shock yields to the "terrifying" wonder of the sublime.

The transformation within the poet mirrors that process of embodied composting and of Francis' ecological conversion. In its initial form, compost can be a quite repulsive display of things familiar in a state of partial decay and putrefaction, "all those strata of sour dead;" it is a messy porousness between things and beings: recognizable, but just. With patience and time—a temporal shift into earth's rhythms, if briefly—these things transform, they attune, they give way to one another, they decompose and recompose and "faithfully rise" into a beautiful rich humus. Like the fertile soil the green sisters would prize.

And the compost heap is never quite done. We add to it continually, but by no means control it. Its power is in the collective coming together of organic material, heat, water, fungi, and insects--the divine incarnate.

[51] Killingsworth, *Walt Whitman and the Earth*, 22.

CONCLUSION

COMPOSTING: A PROCESS THAT IS AN END-IN-ITSELF

In the years since my work on this dissertation began a great deal has changed.

On Easter Monday, 21 April 2025, Pope Francis died. On 8 May 2025, Leo XIV, formerly Cardinal Robert Francis Prevost, ascended to the papacy—the first pope born in the United States. Fortunately, before his papacy, Leo XIV indicated his alignment with Pope Francis' concerns about the climate. In November 2024, then Cardinal Prevost called for a move "from words to action" in addressing climate change.[1] On 9 July 2025 Leo XIV celebrated a Mass for the Care of Creation, a new formulary of the Roman Missal.

The United States continues to experience a significant upheaval of political norms, largely as a result of Donald Trump's return to the presidency. In August 2022, President Joe Biden signed into law the Inflation Reduction Act, which devoted tremendous resources to supporting renewable energies and necessary infrastructure changes for combating Climate Change. As I write, that legislation has begun being rolled back. Similarly damning to our planetary well-being, Donald Trump withdrew, again, from the Paris Climate Agreement to reduce greenhouse gas emissions on 20 January 2025, quickly after his second inauguration. And this is not to mention the ongoing gutting of the Environmental Protection Agency, the removal of federal data about climate change from online public access, Trump's proposal to sell approximately

[1] Kielce Gussie, "Pope: Climate change impacts poorest and requires global cooperation," Vatican News, November 29, 2024 https://www.vaticannews.va/en/vatican-city/news/2024-11/climate-change-conference-latin-america-cardinals-rome.html.

500,000 acres public lands in the West for development, and the defunding of research at universities around the country.

Advancements in technology are proving complicated in the era of climate crisis. Generative AI has made major breakthroughs in its ability to produce text and analysis using large language models and machine learning. It has become broadly accessible through a number of platforms and has readily been integrated into many digital spaces, like search engines. Not only is this causing tremendous challenges in academic and educational spaces, data centers needed to support generative AI have serious environmental impacts: they intensively consume electricity and water for cooling and efficient functioning.[2]

Each of the past two years has proven the hottest on record: 2024 was the hottest year on record, 1.29 degrees C above the 20th century average and 0.10 degrees C warmer than 2023, the second warmest year on record.[3]

In these years, I have personally experienced increasing destabilization climatically, politically, technologically, educationally, and culturally. The interrelation of these destabilizations has only reaffirmed the pertinence of the questions and concerns of this dissertation.

As humans continue to cause damage to our planet, further exacerbating the impacts of planetary systems changes that are not fully knowable, I have queried: how can individuals and communities wrestle with deeply formative, inherited traditions?

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[2] Adam Zewe, "Explained: Generative AI's environmental impact," MIT News January 17, 2025, https://news.mit.edu/2025/explained-generative-ai-environmental-impact-0117.

[3] John Bateman, "2024 was the world's warmest year on record," NOAA, January 10 2025, https://www.noaa.gov/news/2024-was-worlds-warmest-year-on-record.

How can we compost them, drawing forth insights about the formation and flourishing of ethically responsive, materially attuned human beings? Regarding the RC tradition I have inherited, I am still asking: what does a faithful re-composing of the tradition of sacramentality and sacramental theology in light of post-Newtonian physics entail? And given the universal—catholic—reality of the crises, how might the insights of a composted RC tradition furtively conspire beyond itself?

The process of researching and writing this dissertation has taught me a great deal. Perhaps what continues to strike me most is the brilliance and foresight of so many remarkable ecofeminist theologians and scholars. As I studied various aspects of the RC tradition that I discussed in this dissertation, I was delighted to return to ecofeminists and revisit their early anticipation of complex concerns. As I read widely on sacramental theology, going as far back as Augustine, Hugh of Saint Victor, Peter the Lombard, Thomas Aquinas, and forward through more contemporary thinkers like Louis-Marie Chauvet and Yves Congar, I could return to thinkers like Rosemary Radford Ruether to find a rich and succinct analysis of sacramental theology that had no doubt formed and anticipated my questions. Indeed, ecofeminists called forth continued constructive work with the tradition. Pope Francis' pastoral work on ecology in *Laudato si',* which he fervently reiterated in *Laudate Deum*, I found reminiscent of the critiques and calls made so powerfully and so clearly by ecofeminists decades earlier. And, yet, such ecofeminist theologians remain largely uncited by Pope Francis and in formal documents of the patriarchal Church.[4] And so, I find myself inspired to return perennially to ecofeminists

[4] Footnote 42 in *Laudate Deum* cites Donna Haraway's *When Species Meet* and thus is a notable and very recent exception.

for honest, incisive, and generative analysis and liberatory praxis. Ecofeminists have taught me the importance of what Haraway calls "staying with the trouble;" truly, they have demonstrated how to do so along both theological and ecological axes.

The disciplines of reading and writing that I have honed during the composing of this dissertation have been humbling. Mary Daly's sharp criticisms of RC, which have influenced my thinking as evidenced by my citation of her work, have resonated, at times, with my frustrations with the Church. My vexations continue regarding the Church's responses to issues like the sexual abuse scandals, matters of gender and sexual orientation, and in the Church's firm espousal of outdated theologies, like those grounded in a metaphysics of substance. Yet, I have learned to hold greater nuance in my criticisms. Through my study of how Aquinas' drew upon Aristotle I have better understood how the essentialism born from the category of substance, though harmful, was inspired by and encouraged attention to and appreciation for the material world not so distinct from that for which I have argued. The compost heap of the tradition is complex and itself contains toxins that are closely intermingled with the most nourishing of elements.

Early in working on this dissertation I wrote, "Whether or not these [sacramental] practices and their forms can be effectively disentangled from the inexcusable wrongs and inaccuracies of the tradition that informed their development remains an open question." While I affirm that the question is ultimately unanswerable, it remains an important one to raise and with which to sit. At the end of this writing this dissertation, however, I find myself more confident that the composting of the RC tradition is a necessarily continual process, and that the tradition contains within itself tools and

insights for vigorous remediation of persistent toxins and faithful reconstruction to meet contemporary problems.

Roman Catholicism should not, however, grow rely solely on its own, internal resources to address its own harms. Theologians who have tended the tradition's resources in conversation with developments in human understanding from a wide variety of disciplines have most positively developed the RC tradition. For instance, contributions of ecofeminists have regularly incorporated insights of feminist theory and contemporary ecological and climate sciences; RC process theologians have drawn upon insights from contemporary quantum mechanics and relativity theory to update their metaphysical propositions. Additionally, decolonial theologians and queer theologians continually model the types of analyses I fervently hold that the contemporary world demands. Given the interrelation of all things that so much RC cosmology presumes and Francis has strongly reaffirmed, composting the RC tradition demands boundless dialogue and intersectional analysis.

THE COMPOST

Inhabitants of the planet Earth are experiencing a rapidly intensifying climate crisis as part of an ongoing, larger shift in planetary systems. The realities of these planetary changes and of climate breakdown underscore the fundamental dynamism of reality while posing an existential threat to life as all earthly inhabitants have known it. The transformations, already ongoing and that we cannot fully predict or comprehend, constitute the horizons into which this dissertation is imagined and to which it aims to be response-able.

The climate crisis is not new; many groups of humans have been eminently aware of it and actively responding to it for decades—the ecofeminists, for one. Indeed, those seemingly best poised to respond to and guide responses to ecological destabilization have already established strong relations within particular ecosystems and tended to them responsively. They have also learned from the advances in understanding garnered from experts in various disciplines who have responded to and anticipated changes. To return to a key example of the present work—The green sisters—from Genesis Farm, to the IHM sisters in Munroe, MI, and Green Mountain Monastery in VT—represent one such set of human collectives. For decades they have variously modeled how humans can meet the dynamic and changing reality of life on this planet undergoing anthropogenic climate change. They have done so through integrating, transforming, composting Roman Catholic theology, worldview, and practices to enable holistically flourishing in the present era.

The institutional hierarchy of Roman Catholic Church, with its formidable material, spiritual, and formative resources, was decades behind in responding to the unfolding climate crisis. Pope Francis fortunately changed that. He directly charged the Church to reckon with the ecological devastation already unfolding. In 2015 he delivered his papal encyclical *Laudato si': On Care for our Common Home,* which called for all humans to work to protect planet earth and the viability of its ecosystems, dialogue about how humans are shaping livable futures, and by responding along axes spiritual, ecological, economic, and social. Eight years later and heartbroken by the lack of meaningful response to the crisis on political, economic, and religious fronts, Pope

Francis issued his 2023 exhortation *Laudate Deum*, to implore all people of good will around the globe to act.

Grounded in and inspired by the green sisters and Francis' call for dialogue and ecologically concerned theologies, this dissertation has employed the ancient metaphorical and recuperative power of compost to constructively assess and reimagine Roman Catholic theology and sacramental pedagogy. To do so required study of the complexities of the unfolding era of planetary upheaval. The Anthropocene is perhaps the most broadly recognized conceptualization of the horizon into which I have reconstructed RC sacramental pedagogy, which decisively marks the anthropogenic nature of the climate crisis. Humans bear unique responsibility for the climate crisis and humans therefore ought to address our culpability. Ecofeminist theologians, Pope Francis, and many others have rightly noted, however, that not all humans bear this responsibility equally—hence the need for differentiation of responsibilities among humans.

What we know with certainty regarding this era of planetary crisis is that we do not and cannot fully comprehend the impacts of the planetary systems changes that are currently underway. This humility demands flexibility and the cultivation of responsiveness. And so, I have argued that many names or conceptions of the unfolding era will assist in maintaining humility and recalling critical correctives to a few harmful modes of thinking and being that we humans should aim not to perpetuate. Hence, the Capitalocene, which Jason Moore distills in order to recognize the formative influence of capitalist economic systems on the unfolding s/cene; the New Climatic Regime, which Bruno Latour theorizes to address the political polarization revolving around climate denialism that inhibits humans from collectively responding to planetary systems

breaking down; and the Chthulucene, which Donna Haraway proposes as a constructive and synergetic approach to reimagining modes of living and dying well alongside our non-human, planetary kin. Haraway importantly argues for the use of many names—aligning with the critical feminist reclamations of the power of naming that are especially poignant in the theological practice of naming, by which humans participate in Divine creativity.

In surveying these names that uniquely render the unfolding era, I have argued that they collectively offer four crucial ecological interventions: 1) a critical stance toward humanity's epistemological and technological hubris; 2) a postcolonial critique of modern, extractive geopolitics; 3) a new materialist expansion of notions of agency that counteract and trouble assumptions of human exceptionalism; and 4) continual recognition and reckoning with the emotional and affective toll of the ecological crisis. The theology I have composted in this dissertation responds to the climatic crisis through a faithful reconstruction and recomposition of Roman Catholic theology for the sake of cultivating these interventions.

In arguing for the use of the Anthropocene, the Capitalocene, the New Climatic Regime, and the Chthulucene, in concert with other names, I argue that doing so employs rhetorical power continually to recall differentiated responsibilities, it undermines justifications of historical erasures and the perpetuation of injustices, and demarcates the limits of human thought and particularly of western notions of progress. Inhabiting and examining the unfolding era, such rhetorical reminders might just draw attention to these persistent issues so that we desist in reinscribing their damage. Working against such re-inscription is an important element of confronting and composting the past.

Composting toward these horizons, these eras of destabilization and change, requires facing inheritances honestly. By turning through, recognizing, and composting its ambiguous legacies, the RC tradition can begin to heal from and leave behind toxic pasts and imagine into and construct hope-filled futures. Thus, from this survey of the horizons into which I have considered the unfurling of theo-ethical formation of persons, I turned to the compost heap of RC histories. Reckoning with destructive legacies of a tradition as old and complex as Roman Catholicism is a tremendous task, one that will require continual attention—far beyond this dissertation—to foster decomposition and regenerative reconstitution. Seams of compost bridling with toxicities that this dissertation has turned and, at least partly, rejected—namely, elements of the doctrine of discovery, the doctrine of creation, and the category of substance—might continue to surface, inform, and engender new modalities within the global church once composted for the good, or not-composted.

In exploring these three important components of RC theology relating to the material of the created universe, I have found many conspirators who have worked and re-worked the complexities of these particular inheritances. All three of these concepts carry significant influence within the RC tradition and their employments historically are not singular. For instance, the historical folds of doctrine of creation as informed by Gnosticism, at once hold the potential for undoing misogynistic binaries while they also contain anti-worldly, dualistic implications. The category of substance enfolds a desire to understand the material world in all its wondrousness and reaffirms our individual separateness over and against our relational constitution. Sacramentality enlivens a world mystically infused by the Creator's grace-filled presence, though it can also be harnessed

to relate the divine too closely to male power through men-only ordination. And so, these complicated folds in the heap must be minded and composted with care.

The fold of sacramentality then becomes the central focus of the remainder of the dissertation, even as its intersections with the doctrine of creation and the category of substance remain important intersections. The sacramentality of the RC tradition powerfully appreciates Divine immanence by directing humans' attention and respect to creation and the Divine, concurrently. This recognition of the Divine presence in creation is formalized and institutionalized in the ritual and liturgy of the sacraments within the Church. As such, the sacraments have long fulfilled three primary functions: to humble, to teach, and to redeem from sin. While not neglecting the first and third purposes, I honed my focus especially on how the sacraments teach and ethically form humans through embodied practices.

Following Mark D. Jordan, I drew upon the logic of *convenientia* that has long informed the sacraments: that embodied humans are best taught and best learn through their bodies. It is, I argue, this logic that in part informs theological understandings of Jesus' incarnation, as the time during which he instituted the sacraments. Sacraments are lived scenes of moral instruction; they are attentive to the body and materiality; they are constructive and profoundly form human participants. I thus argue that the sacraments are uniquely insightful models of embodied pedagogy. Further, I contend that these insights hold promise for the formation of persons empowered to meet the needs of the Anthropocene.

The sacraments, in redeeming humans from sin, cause what they signify: grace. And as they redeem, they instruct. The causal efficacy has remained an important

theological promise of the sacraments. The sacraments as causally efficacious remain important to my argument that they are potent models for forming ecologically responsive humans in this era. The precise understanding of causal efficacy, however, needs significant revision for the present task. Substance metaphysics and pre-Newtonian physics inform the orthodox articulation of the sacraments. Any model of embodied pedagogy for the Chthulucene should be grounded in an apt understanding of the world and its workings. I argue that post-Newtonian physics offers a more accurate rendering of the world, of creation, and thereby apprises my composting the traditional understanding of causal efficacy.

In drawing upon Karen Barad's post-Newtonian, highly relational agential realism, especially its notions of intra-action and apparatus, I reimagined the orthodox RC theological understanding of the how sacraments are causally efficacious. I contend that the sacraments are material-discursive apparatuses that subtly reconstitute all agents—human and non—through their unique intra-active iterative processes. They do so while explicitly acknowledging the Divine presence materially; thereby all participants in the sacraments participate fully in the divine imminence. The sacraments as apparatuses work along many axes and in multiple directions. The grace they cause, the relational connections they foster, and the focus and attention they nurture in humans towards their ecosystems (even if largely human-made), serve as models for shaping humans into increasingly attentive, responsive, and thereby ethical persons better prepared to deal with the many planetary changes, subtle and not, we are already witnessing in this era.

This transformation in understanding of the sacraments, though a radical adaptation of understanding the work of the sacraments, is a plausible one within RC communities. But, how could it be used to build coalitions? How might these insights collaborate with others not so religiously bound but still interested in the need for a holistic approach to human formation in the New Climatic Regime? I argue that doing such work requires drawing in more voices that perhaps wrestle with very different intersecting inheritances. Therefore, I turned to Walt Whitman. His uniquely American poetry gives voice to another set of ideals and values that have shaped me, and likely many of the other nearly 62 million US Roman Catholics. Further, in his poetry he consistently offers scenes of instruction that closely care for and pay attention to his ecological surroundings. In doing so he offers a perspective from a period that might hold the potential for reaching those who do not yet interpret the world we inhabit through the post-Newtonian lens. And, though writing before the advent of quantum mechanics and relativity theory that are central to post-Newtonian physics, his writing anticipates many of the implications of contemporary physics rendered as highly relational metaphysic. And so, I argue compost with Whitman's "This Compost," making him a conspirator whose insights can be turned together with those of the RC tradition to build coalitions and inspire pedagogies that might reach a broader public beyond the Church.

ENVISIONING CONTINUED COMPOSTING

In this dissertation I have argued that the contemporary anthropogenic planetary, ecological and atmospheric crises challenge humans to assess critically what it means to flourish and to live a good life on this planet that is radically and dangerously changed and changing. In order to offer assessment, pursue flourishing, and cultivate our

response-ability humans must develop sensorial and epistemic attunement to the planet, to ecosystems, to one another, and to terrestrial kin. My central contention is that the RC sacramental tradition contains crucial insights for such a process of ethical formation.

The RC sacramental tradition is one area in the RC tradition that has developed human attentiveness to the material world. Indeed, it has taught billions of people over centuries through ritual, sacramental material discursive practices to relate to and understand ordinary materials as extraordinary, unique conduits of the Divine. Sacramentalism has thus engendered humans' relations with the material world with reverence, care, and respect—at least in particular, liturgical settings.

Reckoning with this inheritance that the tradition constitutes and the many modalities by which it informs and intersects with the Anthropocene is a responsibility I as a RC theologian accept. The RC Church composes roughly 1/7th of the global population and carries tremendous influence possibly to affect positive change in responding to the unfolding s/cene. Given these realities, this dissertation has aimed, in part, to compost the RC tradition responsibly, to which I belong, in hopes of contributing to all that the RC Church and tradition might be capable of getting right in creating and shepherding creation into this new planetary era.

Drawing upon historical insights regarding the development and formalization of the sacraments within Roman Catholicism, I have argued that the sacraments have always been responsive to the social and material conditions of the moment. As such, there is good reason to think about how the sacraments today might respond to ecological changes will impact society, culture, politics, and theology.

Though the somewhat novel understanding of sacramental pedagogy has potential, there remains much to ensure that the sacraments directly address the planetary systems breaking down in this era. This dissertation, I hope, provides a general orientation and argument for a thorough composting and reconstitution of RC sacramental traditions for the Anthropocene, following Pope Francis' call for dialogue and action, which Leo XIV affirmed before his election. But what is next? Many questions remain unanswered; projects proliferate. Ecofeminists will continue to prove a mindful guide: what will ecological sacraments entail in the future? How do communities attend to their ecosystems sacramentally? How do communities recognize and share stories of the Divine's presence? How can we track and ensure that we are in fact cultivating attentiveness to subtle changes in planetary systems so that we might adapt and respond appropriately to care for our fellow terrestrials?

These questions move beyond the scope of this dissertation, but may prove important for continued composting.

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