

Ecology Meets Integral Ecology Meets Media Ecology: Education for *Laudato Si'*

Maria F. Loffredo Roca and Peter Blaze Corcoran

Abstract: *Laudato Si': On Care for Our Common Home* has struck a deep chord with a broad audience. We explore the synergy between the ethical vision of sustainability in the Earth Charter and the encyclical. We position the document within the ecology and media landscapes. *Laudato Si'* is remarkable among international statements in its explicit attention to education. We draw out the pivotal importance of education in order for its critical message not to be lost. We argue that education for *Laudato Si'* can be advanced in traditional education—formal and non-formal, secular and religious—and in education through the media.

Keywords: Pope Francis, *Laudato Si'*, ecological education, environmental education, integral ecology, media ecology

Convinced as I am that change is impossible without motivation and a process of education, I will offer some inspired guidelines for human development to be found in the treasure of Christian spiritual experience. (Pope Francis, 2015, para. 15)

May our struggles and our concern for this planet never take away the joy of our hope. (Pope Francis, 2015, para. 244)

In his visionary book *The End of Education*, Neil Postman (1996) observed, “The word weavers are the world makers” (p. 172). Pope Francis (2015) has demonstrated himself to be a compelling word weaver in his groundbreaking encyclical *Laudato Si': On Care for Our Common Home*. Are Pope Francis’s words compelling enough to be world making? In this article, we explore this question while also examining *Laudato Si'*’s synergy with the Earth Charter, its grounding in the ecological perspective of integral ecology and media ecology, and its possibilities for education. The depth and breadth of the encyclical’s popularity and usefulness is analyzed with a particular focus on how this document is positioned within the global media landscape and the education landscape.

Laudato Si' (Pope Francis, 2015), an extraordinary papal encyclical by any measure, has received a wide reading and widespread critique with a broad audience in its first few years. The meaning of the encyclical letter arises from a profound vision of creation and of the human relationship “with the Earth itself” (Pope Francis, 2015, para.

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66). The encyclical is grounded in ecological understanding of the systems upon which we depend for life as we have known it. This ecological wisdom illuminates a new integral ecology. Such ecological grounding is elaborated in a series of ecologies: environmental, economic, and social ecology; cultural ecology; human ecology; and, while it is not mentioned, deep ecology. They are collected into the profound wisdom of Pope Francis's integral ecology. While not defined clearly in the document, this ecology of ecologies accounts for the encyclical's greatest substance.

We examine areas of potential impact for the messages of *Laudato Si'* using the lenses of media ecology, narrative theory, coordinated management of meaning (CMM), and constructivism. We discuss the need to create new stories that advance the core ideas of *Laudato Si'* in popular culture as a frame for education and for the inspiration of an ecological conversion.

We argue that a well-thought-out process of education is needed to advance *Laudato Si'*'s high ideals and powerful insights on care for our common home. We believe such education is needed in formal, non-formal, and media settings in order for its profound message not to be lost in the relentless 2020s media and information avalanche.

Synergy with the Earth Charter

The encyclical concludes well with this part “The analysis showed the need for a change of course . . . we must escape the spiral of self-destruction in which we are sinking” (LS 163). It is not a reform, but, citing the Earth Charter, to seek “a new beginning” (LS 207). The interdependence of all with all leads us to believe “in one world with a common project” (LS 164). (Boff, 2017, p. 5)

The underlying integrated ecological thinking and the ethics that guide *Laudato Si'* are illuminated in the Earth Charter (Earth Charter Commission, 2000). The synergy between the ethical vision of sustainability that is the Earth Charter and the message that is *Laudato Si'* is notable. We see that the underlying ethics that guide *Laudato Si'* are illuminated in the Earth Charter. Indeed, Pope Francis (2015) says,

The Earth Charter asked us to leave behind a period of self-destruction and make a new start, but we have not as yet developed a universal awareness needed to achieve this. Here, I would echo that courageous challenge, “As never before in history, common history beckons us to seek a new beginning. . . Let ours be a time remembered for the awakening of a new reverence for life, the firm resolve to achieve sustainability, the quickening of the struggle for justice and peace, and the joyful celebration of life.” (para. 207)

In explicitly citing one of the most stirring passages from “The Way Forward” of the Earth Charter, Pope Francis calls us to the spiritual and educational challenges we must meet for such “a new beginning.”

The parallels between *Laudato Si'* and the Earth Charter are many—global partnership, new dialogue, presentation of spiritual wisdom, critical analysis of technology and reductionism. In some ways, Pope Francis is hitching his wagon to the

star of the Earth Charter, which has served as an ethical lodestar for civil society for a generation.

As Catholic theologian Joe Holland (2017) has written,

This overlap of the Earth Charter and *Laudato Si'*—with both so closely related and so mutually enhancing—is remarkable and inspiring! Let us hope and pray that more and more communities across our garden-planet Earth will study both the Earth Charter and *Laudato Si'*. Let us further hope and pray that both documents will help to promote global dialogue between science and religion, and especially within university milieus.

Let us also hope and pray that the scientific scholars who warn us of the Anthropocene's planetary devastation will not find fulfilled the collapse of civilization that some of them have understandably predicted. Rather, let us hope and pray that such dialogues will involve and inspire young scientific and spiritual leaders to work together in planting fruitful seeds for a regenerative postmodern ecological civilization, and to do so before it is too late. (p. 23)

The Earth Charter has particular relevance to the popular appeal of *Laudato Si'*. The Earth Charter Initiative involved the most open and participatory consultation process ever conducted in connection with the drafting of an international document. Tens of thousands of individuals and hundreds of organizations from all regions of the world, different cultures, and diverse sectors of society participated. The Earth Charter was shaped by experts, government and civil society leaders, students, and representatives from Indigenous groups and grassroots communities. It remains an important expression of the hopes and aspirations of the emerging global society. It has been part of a growing worldwide people's movement pursuing major challenges in our values and institutions in order to ensure a better future for all (Corcoran, 2002). Such credibility powers the points Pope Francis seeks to make. Pope Francis would seem to understand how solid a foundation the Earth Charter is for his thesis.

In addition to the credibility of the process itself, extensive consultations with religious and spiritual leaders illuminated the ethical principles. Through the remarkable 11-year process of research into a variety of philosophical and scientific fields, law and soft law, Indigenous wisdom and treaties, and all the major faith traditions, the Earth Charter has tapped into deep truths about the universe.

Many dimensions of the case made in the encyclical are foreshadowed in the Earth Charter. As Steven C. Rockefeller, chair of the Earth Charter International Drafting Committee, has written,

Both *Laudato Si'* and the Earth Charter recognize that there is an ethical and spiritual dimension to the world's social and environmental crises that must be addressed, if the human family is to find its way to a just and sustainable future. In this regard, the Earth Charter stresses the urgent need for a relational spirituality that involves an ethic of respect and care for the community of life as a whole. The major theme of Pope Francis' Encyclical is "care for our common home." He laments the increasing degradation of Earth's ecosystems and

the loss of natural beauty. Like the Earth Charter, the Encyclical rejects the widespread and problematical view in industrial-technological civilization that the natural world apart from humanity has utilitarian value only and is just a collection of resources that exist for human exploitation. The imperative to care for creation in the Pope's theological vision is inspired by a deep sense of the intrinsic value and interdependence of all beings—of plants, animals, forests, mountains, rivers and ocean. . . .

Caring for our common home according to Pope Francis requires a radical cultural transformation. It means ending poverty and advancing social and economic justice together with ecological restoration and protection. He urges us to develop a new appreciation of the interrelationship between the world's spiritual, ethical, social, economic and environmental challenges and to adopt holistic thinking and integrated planning. He calls for a new global partnership of all nations and peoples infused with a spirit of cooperation and a readiness to share equitably the benefits of development. To all of this the Earth Charter movement can only say Amen. (p. 32)¹

The synergies between the two documents are elaborated extensively in *Voices of the Earth Charter Initiative Responding to Encyclical Laudato Si'* by Alicia Jimenez and Mirian Vilela (2017). Well-established Earth Charter scholars reflect on the origins, themes, message, and spiritual foundations of *Laudato Si'* and analyze its contribution to an ecological civilization. This scholarly work helps to situate *Laudato Si'* in the quest for a sustainable future that is hopeful—and joyous!

Ecology

What is the underlying metaphysics of the “integral ecology” of Pope Francis in *Laudato Si'*? It is the truth and conviction of the interrelatedness of the whole of reality and the interdependence of all created entities. (Kureethadam, 2019, p. 112)

One of the traditional purposes of encyclicals, or “letters in circulation” of the Roman church, is to reach out to clergy and laity on matters of Catholic social doctrine. While Pope Francis situates *Laudato Si'* in the provenance of certain teachings of Pope John Paul II and Pope Benedict XVI, the grounding of this encyclical in ecology is stunning, particularly in its comprehensiveness and paradigmatic interrelatedness. His ideology, methodological ritual (see, judge, act), and theological reflection are linked to Latin American approaches to ecology (Boff, 2014). Pope Francis sees the human ecology of the logic that exploits people as that which plunders earth. This is the logic that has broken the kinship of humankind to earth and destroyed human connectedness with all things (Boff, 1997).

¹ The leadership of Rockefeller in the global participatory process of writing the Earth Charter and in its implementation process by the Earth Charter Commission is noteworthy. Its historic declaration of global interdependence and universal responsibility sets forth the ethical principles for building a just, humane, peaceful, and sustainable world.

Perhaps the deepest wisdom of the encyclical lies in its ecological grounding and its attendant valorization of integral ecology. Chapter Four is a master class in ecology. If political, economic, and religious leaders had taken the pope's lessons into their thinking a half-century ago when ecological insights first became widely available in Western religious and academic circles such a lesson in ecology might not be needed today. The wisdom of the spiritual ecology of Indigenous cultures and the perspectives of the study of scientific ecology, which long fell on ignorant ears, are foregrounded in *Laudato Si'*.

Indeed, Pope Francis speaks to “the human roots of ecological crisis” in Chapter Three. In an extended and astute analysis, he critiques technology in what he calls “*an undifferentiated and one-dimensional paradigm*” (Pope Francis, 2015, para. 106).

According to Fr. Jostrom Isaac Kureethadam (2019),

The basic constituents of such a conceptual paradigm are the exalted position of the subject as in modern anthropocentrism, the reduction of the world to a mere object as in the mechanistic conception of the natural world as inert matter for human use and consumption, and consequently, a conflictual relationship between humanity and the natural world. (p. 98)²

Pope Francis's critique of the technological paradigm is scathing and includes its dominance in social, economic, and political life; accordingly, he writes that “we fail to see the deepest roots of our present failures, which have to do with the direction, goals, meaning and social implications of technological and economic growth” (para. 109).

In preparing his argument on behalf of integral ecology, Pope Francis (2015) reminds us of the following:

Ecological culture cannot be reduced to a series of urgent and partial responses to the immediate problems of pollution, environmental decay and the depletion of natural resources. There needs to be a distinctive way of looking at things, a way of thinking, policies, an educational programme, a lifestyle and a spirituality which together generate resistance to the assault of the technocratic paradigm. Otherwise, even the best ecological initiatives can find themselves caught up in the same globalized logic. To seek only a technical remedy to each environmental problem which comes up is to separate what is in reality interconnected and to mask the true and deepest problems of the global system. (para. 111)

² Fr. Jostrom Isaac Kureethadam's (2019) *The Ten Green Commandments of Laudato Si'*, is a very useful resource on education for *Laudato Si'*. It is an insightful commentary by a Vatican insider from the Holy See's Dicastery for Promoting Integral Human Development. Kureethadam has also written a full and thoughtful book on the topic of the ecological consequences of modernity and the need to evolve a new worldview titled *The Philosophical Roots of the Ecological Crisis: Descartes and the Modern Worldview* (2017). We were privileged to interview him for this article by video from his office in the Vatican. His position is coordinator of the Dicastery Sector on Ecology and Creation.

Rather, he calls out the ecological connection of all things. In Chapter Four, “Integral Ecology,” Pope Francis (2015) writes, in a section on “Environmental, Economic and Social Ecology,”

It cannot be emphasized enough how everything is interconnected. Time and space are not independent of one another, and not even atoms or subatomic particles can be considered in isolation. Just as the different aspects of the planet – physical, chemical and biological – are interrelated, so too living species are part of a network which we will never fully explore and understand. A good part of our genetic code is shared by many living beings. It follows that the fragmentation of knowledge and the isolation of bits of information can actually become a form of ignorance, unless they are integrated into a broader vision of reality. (para. 138)

Pope Francis’s broader view is based on scientific ecology. The subtext of *Laudato Si’* is interconnection and interrelatedness. Pope Francis (2015) extends the science of ecology to its social and ethical dimensions. His ecological understanding extends to “historic, artistic and cultural patrimony” (Pope Francis, 2015, para. 143). He writes, “Ecology, then, also involves protecting the cultural treasures of humanity in the broadest sense” (Pope Francis, 2015, para. 143).

Although human ecologists might argue with his definition of the term, his case for integral ecology acknowledges the insights of the study of human ecology. As Robin van Tine (2017) suggests in an article titled “Reflections, Analysis, and Significance for Human Ecology of Pope Francis’s Encyclical Letter *Laudato Si’*: On Care for Our Common Home,” the pope’s recognition of “one complex crisis which is both social and environmental” is the approach of human ecology (p. 160). She writes, “This is at its core a statement of the purposes of the academic study of human ecology” (van Tine, 2017, p. 160). She adds, “Human ecologists have found an ally in Pope Francis” (van Tine, 2017 p. 173). The integral concept is grounded in human ecology, then, as well as in ecology.

Integral Ecology

The radical ethics championed by Pope Francis, expressed sometimes, but not always, in theological language, is essentially the ethics of deep ecology, the philosophical school founded by Arne Naess in the 1970s. (Capra, 2015, p. 2)

Let us become *Laudato Si’*. (J. Kureethadam, personal communication, December 7, 2020)

The term “integral ecology” is not defined in an exact sense but for Pope Francis includes the commitment to the common good, intergenerational equity, and the preference for the poor. He might say we live in an integral ecology and therefore need an integral ecological approach to all of life. This worldview raises for Pope Francis (2015) the most profound questions:

What kind of world do we want to leave to those who come after us, to children who are now growing up? . . . What is the purpose of our life in this world? Why are we here? What is the goal of our work and all our efforts? What need does the earth have of us? (para. 160)

These fundamental questions are provoked by environmental deterioration as well as cultural and ethical decline.

Physicist Fritjof Capra (2015) argues from a systems perspective that Pope Francis's "radical ethics" are those of deep ecology. He writes,

The defining characteristic of deep ecology is a shift from anthropocentric (human-centered) values to ecocentric (earth-centered) values. It is a worldview that acknowledges the inherent value of nonhuman life, recognizing that all living beings are members of ecological communities, bound together in networks of interdependencies. All these considerations, and the radically new system of ethics they imply, are clearly expressed in the Papal encyclical. (para. 7)

Capra's insight helps us to see just how radical Pope Francis's integral ecology is. Deep ecology promotes a biocentric approach to life, placing all life at the center of meaning. It strives to view humans as integral parts of creation but not ontologically more valuable than other life forms. Coined by Norwegian philosopher Arne Naess in 1972 in an article titled "The Shallow and the Deep, Long-Range Ecology Movements: A Summary," this philosophy recognizes all natural processes as inherently and ineluctably valuable. Deep ecology also provides a rich counterpoint to the modern sense of place and epistemology. It weaves present scientific theories of evolutionary biology and ecological relationships into a meaningful and engaging cosmology (Corcoran, 1996).

Pope Francis's integral ecology provides a dramatic, holistic, and new dimension to traditional Catholic social teaching. It provides a foundation for ecology education and ecological conversion. In our opinion, the great appeal of "ecological spirituality" accounts for much of the popularity and aspirational quality of *Laudato Si'*. Pope Francis (2015) offers an inspiring way forward—allowing spirituality to "motivate a more passionate concern for the protection of our world" (para. 216). This concern arises from a love relationship to God's creation and from an ongoing commitment inspired by spirituality in keeping with integral ecology (Graham, 2017).

Media Ecology

Yet all is not lost. Human beings, while capable of the worst, are also capable of rising above themselves, choosing again what is good, and making a new start, despite their mental and social conditioning. We are able to take an honest look at ourselves, to acknowledge our deep dissatisfaction, and to embark on new paths to authentic freedom. No system can completely suppress our openness to what is good, true and beautiful. (Pope Francis, 2015, para. 205)

[W]orld making through language is a narrative of power, durability, and inspiration. It is the story of how we make the world known to ourselves, and how we make ourselves known to the world. (Postman, 1996, p. 175)

Media ecology provides another lens for understanding the impact of *Laudato Si'*, while also offering an avenue for the education of a wide variety of audiences. The term “media ecology” is generally attributed to Neil Postman (1999), although more contemporary scholars have further developed the concept (Anton, 2011). At its core, media ecology refers to the study of how media shape our ways of seeing and experiencing the world. Gilchrist (2017) applied the term to *Laudato Si'*, calling it “papal media ecology, an example of religious communication that invites interpretations using theories within media ecology” (p. 57).

In a media landscape saturated with apocalyptic messages about the future of the earth’s health, Pope Francis provides a more hopeful vision through his use of appeal to spirit and to emotion, as well as through his commentary on technology and media. He has embraced two of Neil Postman’s (1996) “gods that serve,” as presented in *The End of Education*: “Spaceship Earth” and “The Word Weavers are the World Makers.” Postman (1996) describes gods that serve as “the myths that bind a nation and give purpose and meaning” (p. 59). The juxtaposition of the God of Roman Catholicism and Postman’s “gods that serve” helps to reveal why *Laudato Si'* has such a profound rhetorical impact. Pope Francis operationalizes Postman’s gods in terms that are appealing to people of all faiths and those of no faith. This helps to explain the global resonance of *Laudato Si'*. It provides a god that serves, as Postman suggests, that is accessible to all people, while also offering a compelling way to serve God for people of faith.

Fundamental in both Postman’s and Pope Francis’s perspectives is the idea that earth is our common home and that it must be treated as such by all humans. In order to build this view of earth, Postman (1996) believed that we must “create forceful, inspiring narratives” (p. 59). Postman saw public schools as the best arena to teach these new narratives and he believed that it is essential for schools to refute the messages promoted in the media. He feared that “the advertisers and, of course, the popular musicians and filmmakers” are the ones creating the compelling stories, not the teachers or the spiritual leaders (Postman, 1996, p. 59).

Both Postman and Pope Francis believe that we are under siege and that, as Postman (1996) suggests, “*our* enemies are sloth and poverty and indifference and hatred” (p. 94). Gregory E. Sterling (2019) writes,

Gus Speth, former dean of the School of Forestry & Environmental Studies at Yale, has been widely attributed to say: “I used to think the top environmental problems were biodiversity loss, ecosystem collapse, and climate change. But I was wrong. The top environmental problems are selfishness, greed, and apathy.” Speth went on to say that “to deal with those issues we need a spiritual and cultural transformation – and we scientists do not know how to do that.” Speth was right. (para. 1)

Postman (1996) goes on to argue that “people in distress will sometimes prefer a problem that is familiar to a solution that is not” (p. 96). Similarly, Pope Francis (2015) states, “Obstructionist attitudes, even on the part of believers, can range from denial of the problem to indifference, nonchalant resignation or blind confidence in technical solutions. We require a new and universal solidarity” (para. 14).

One of the challenges is to persuade more people to live every day in a way that treats the earth as our common home, and that the solution, though unfamiliar, is the only hope for the future. Pope Francis (2015) believes that we must “bring the whole human family together to seek a sustainable and integral development, for we know that things can change” (para. 13).

The pope’s messages in *Laudato Si’* have found receptive audiences in some Roman Catholic communities, and much of the rhetoric in the encyclical has the potential to resonate with nonreligious, ecologically sensitive people. In all communities, compelling narratives are needed to achieve the ecological conversion called for by Pope Francis. This need was articulated by Jesus himself when he said, “I speak to them in parables; because while seeing they do not see, and while hearing they do not hear, nor do they understand” (*New American Standard Bible*, 2011, Matthew 13:13). Jesus understood the power of a well-told didactic story. The example of Jesus’s teaching through parables may hold the key to inspiring the ecological conversion called for by Pope Francis. As outlined by Kureethadam, these stories need to connect to everyday life, be nature-based, include the struggles of ordinary people, inspire a desire to listen, and be clear about how people should respond. As proposed by Pope Francis, the responsibility to craft and tell these stories is shared by all people, across all groups, within all organizations (J. Kureethadam, personal communication, December 7, 2020). Compelling stories can help create the paradigm shift envisioned in *Laudato Si’*. There are more platforms now than ever to share these well-crafted stories, to create modern-day parables. Through education, storytellers are trained; through media, stories are shared.

The ubiquitous presence of mass media exerts an influence on the prevalent narratives across all aspects of society. Postman’s term “gods” helps us understand how powerful these stories are as agenda-setters for everything from the choices we make in everyday life to the curriculum taught in schools. The media and educational institutions have an opportunity to join forces to advance the messages in *Laudato Si’* to ensure that they reach the broadest possible audience. Content taught in the classroom can be framed by stories told in mass media.

Extensive research supports the power of narrative to change minds and hearts. Communication scholars have concluded that it is important for most people to coordinate how they interpret these stories with the interpretations of others, particularly those who they see as significant in their lives (Mead, 1967). Coordinated meaning is constructed through scripts and schemas that become deeply entrenched in both the sense of self and how people see the society to which they want to belong. Churches have been an important venue for the faithful for this coordination of meaning.

The application of narrative theory to the messages of *Laudato Si’* is one potential strategy. Humans are story-telling animals by nature, so narrative theory is essential in understanding how sense is made of the world. Narrative theories focus on understanding how a series of events in a person’s life form a coherent, recognizable story. In Walter Fisher’s (1987) work on narrative theory, he focuses on how rationality

of all types is based on narratives. Humans make sense of the world around them and determine what is real through stories. Fisher argues that much of persuasion is based on good reasons, and the effectiveness of stories in providing good reasons is judged by two criteria: coherence and fidelity.

Coherence is the degree to which the story makes sense. Narratives are judged by whether people find them to be reasonable, either by their judgment of their overall form or by the believability of the structure. Stories are also measured to see if they match up with stories we have already internalized. Fisher refers to this as external consistency. Lastly, people consider whether the characters seem believable and have coherence.

Fisher's second criterion, fidelity, is the truthfulness or reliability of the story. Fisher approaches this from the perspective of values and encourages people to inquire whether the values are appropriate and whether they appear to have a positive outcome. Also, he considers whether the values are consistent with a person's own experience. Finally, Fisher asks if the values put forth by the story represent part of an ideal vision of human conduct.

Part of what makes narrative theory so compelling and liberating is that narratives are universal. Narrative construction and processing are emancipating and empowering because they are open to everyone; they do not require special expertise. Narratives contribute to our moral development and we construct our own stories that indicate who we see ourselves to be as we present ourselves to others. This, in turn, helps people integrate their stories with the stories of others, creating a sense of identification with those who share their values and ideals. This is where great potential lies with *Laudato Si'*. New narratives can be crafted that are compelling, liberating, and inspiring—universal stories that move people to action. In order to be effective, we believe these stories need to be shared on multiple platforms.

Once these stories are crafted, CMM theory helps shed light on how humans integrate their stories with the stories of others (Cronen, 1994). CMM explains that meaning is created at six distinct levels. These range, at the most basic level, from the content of the message to the highest level of cultural influence. The levels are presented as an inverted pyramid with the highest level, that of cultural influence, weighing the heaviest on the ultimate interpretation of a message (even more powerful than the levels of autobiography and relationship). CMM helps us understand that narratives are powerfully influenced by the culture within which they are embedded. As a result, these narratives also have a profound impact on how individuals create meaning and which narratives individuals will choose to embrace or reject. For example, even if a young person has been raised in a “green” household and has parents who embrace a sustainable way of living, the ubiquitous cultural narrative of consumption may easily have greater influence than the parental message. The green schema, or script, simply does not have the coherence and fidelity, nor the cultural heft, of the more popular consumption narrative. The cultural influence within Roman Catholic churches may have more impact to advance the call of *Laudato Si'* for the truly devout. But the vast majority of people, faithful and secular, are far more influenced by the ubiquitous cultural narrative that ignores the cry of the earth and the cry of the poor (Boff, 1997).

One additional communication theory that adds insight into how to create modern-day stories, parables, with coherence and fidelity is constructivism (Delia, 1977). The constructivist perspective suggests that humans develop cognitive schema that not

only influence how they construct meaning but also an individual's compulsion to act in particular ways (the concept of logical force). The more different and diverse constructs an individual develops and can use in their process of making meaning, the more cognitively complex the individual. The simplest constructs tend to be dualistic in nature and may heavily influence, or constrain, an individual's behavior (e.g., rich versus poor, consumption versus sacrifice). More complex constructs allow for greater comfort with ambiguity and dialectical tension, providing richer, more thoughtful responses and actions. Unfortunately, the current cognitive constructs surrounding consumption and sustainability tend to be dualistic in nature, a pleasure-versus-pain narrative whose cultural weight still tends to fall on the side of consumption as pleasure and sustainability as sacrifice. There are still very few compelling cultural narratives that support and encourage sustainability as a desirable choice. Rather, the sustainability construct still tends in the direction of fear, pain, and the surrender of comfort in order to "save the planet." Without this more compelling construct, it will be difficult to turn the tides to advance the themes in *Laudato Si'*. At the same time, the majority of scientific evidence warns that if we do not turn this tide, the human race will find itself in grave danger.

Just as the ideas from narrative theory, CMM, and constructivism are helpful in understanding why consumerism is so attractive and sustainability so remote, they can also be used to craft ways to shift human thinking, and ultimately behavior, toward seeing sustainability as the way forward for a habitable and healthy planet. They may provide insight about how to take the ideas in *Laudato Si'* and craft them into modern-day parables that will have similar impact to those in the Bible.

The Spaceship Earth narrative as a "god that serves," presented in Neil Postman's (1996) *The End of Education*, is promising. It offers a framework for the construction of hopeful, empowering stories that inspire action. Many of the ecological stories in mass media, to date, have been apocalyptic in nature. Even the beautiful films of Hayao Miyazaki (e.g., *Nausicaä of the Valley of the Wind*, *Spirited Away*, *Princess Mononoke*) or the now classic children's movie *WALL-E*, envision survival after an environmental catastrophe. In other cases, the environmentalist is presented as someone to ridicule; for example, Elena in the remake of the TV series *One Day at a Time* is made fun of when she promotes recycling and is mistaken for Heidi when she trick-or-treats as Greta Thunberg. One more hopeful recent example is in the second season of the Netflix series *The Politician*. While running for the New York State Senate, young candidate Payton Hobart is inspired by the passion of young environmentalists and shifts his campaign to focusing on sustainability. The campaign is successful in registering young voters, and he wins. The season ends two years into the future when he has successfully made changes to public transportation, the energy grid, and housing that have significantly reduced greenhouse gas emissions. Although not religious, the story embodies realizing themes in *Laudato Si'*. Ecological conversion may be taking root.

Kureethadam reminds us that "the highest purpose of communication is creating values" (personal communication, December 7, 2020). Mass media have the potential to embrace and promote the core themes of *Laudato Si'* in movies, television, and other mass communication platforms that use the principles of narrative theory, CMM, and constructivism to create stories that educate and inspire people to action. These stories can be shared in schools, churches, and homes. They can help people hear the cry of the earth and the cry of the poor, and they can inspire action just as parables have done for thousands of years.

Education for *Laudato Si'*

Our efforts at education will be inadequate and ineffectual unless we strive to promote a new way of thinking about human beings, life, society and our relationship with nature. (Pope Francis, 2015, para. 215)

To educate is always an act of hope, one that calls for cooperation in turning a barren and paralyzing indifference into another way of thinking that recognizes our interdependence. If our educational systems are presently marked by a mindset of replacement and repetition, and are incapable of opening up new horizons in which hospitality, intergenerational solidarity and the value of transcendence can give birth to a new culture, would this not signify that we are failing to take advantage of the opportunity offered by this historic moment? (Pope Francis, 2020, para. 5)

As professors, we have a particular interest in the educational dimensions of the encyclical. *Laudato Si'* is remarkable among such international documents in its explicit concern for education. We are particularly interested in its educational philosophy, its implied pedagogy, and its potential for several key audiences ranging from the planet's 1.2 billion Catholics, to higher education stakeholders, to the general public.

Laudato Si' pays extraordinary attention to education, indicating, we assume, its importance and its difficulty. We believe we will not move in the direction of integral ecology or ecological spirituality without an intensive and well-constructed educational effort. As Pope Francis (2015) writes, "A great cultural, spiritual, and educational challenge stands before us and it will demand that we set out on the long path of renewal" (para. 202).

The document includes a studied and wise reading of the professional literature of environmental education and ecological education. There is sophistication in what kind of education might be efficacious in order to make changes in lifestyle and, therefore, in the larger culture. Environmental education has long dealt with the factors that change behavior; it recognizes that values and attitudes are critical factors in addition to knowledge. Pope Francis understands this. He expresses the view that education is possible and powerful: "Human beings are also capable of rising above themselves, choosing again what is good, and making a new start despite their mental and social conditioning" (Pope Francis, 2015, para. 205).

The argument for ecological citizenship through "ecological education and spirituality," as per the title of the encyclical's Chapter Six, recognizes a new level of environmental education that includes a critique of modernity and a post-humanist responsibility to care for creation. Pope Francis (2015) wisely writes,

Environmental education should facilitate making the leap towards the transcendent which gives ecological ethics its deepest meaning. It needs educators capable of developing an ethics of ecology, and helping people, through effective pedagogy, to grow in solidarity, responsibility and compassionate care. (para. 210)

This now begs the question of what sort and magnitude of educational effort is needed to support the changes in ethics, values, attitudes, and behaviors that will lead to the ecological conversion advocated in the encyclical. Unfortunately, it seems that education advocating for, and providing the resources for, the process of ecological education and spirituality has been limited.³ The Dicastery for Promoting Integral Human Development is a small office within the Holy See where the work of *Laudato Si'* is coordinated. It is led by a prefect, Cardinal Peter K. A. Turkson of Ghana, and staffed by a very talented but modestly sized group. They have a broad range of responsibilities across the pope's interests in climate change, marginalized populations, the unemployed, environmental refugees, migrants, and peace.

In 2020–2021, they organized a fifth anniversary of special innovative projects and initiatives with emphasis on “ecological conversion” in “action” that they hope will be realized in partnership with other organizations (Dicastery for Promoting Integral Human Development, 2020, p. 3). The plans include an ambitious action platform, a set of *Laudato Si'* goals, and recognition awards.

The Dicastery's aims and the encyclical call for educational programs and events at many levels and in various settings. Specifically, the encyclical calls on educational sectors “at school, in families, in the media, in catechesis, and elsewhere” (Pope Francis, 2015, para. 213). The *Laudato Si'* action plan, in speaking of measuring integral ecology through ecological education, calls upon stakeholders to “re-think and re-design educational curricula and educational institution reform in the spirit of integral ecology to create ecological awareness and action, promoting the ecological vocation of young people, teachers and leaders of education” (Dicastery for Promoting Integral Human Development, 2020, p. 8).

We have seen accelerated educational activity around 2020's fifth anniversary of *Laudato Si'*. Two of the most important contributions were released on that day. First, the Department of Justice, Peace, and Human Development of the United States Conference of Catholic Bishops published a wide-ranging discussion guide and primer on social teaching (United States Conference of Catholic Bishops, 2020). Second, the Vatican offered *Journeying Towards Care for Our Common Home: Five Years After Laudato Si'* (Interdicasterial Working Group of the Holy See on Integral Ecology, 2020). It has been called a “user's guide” for a broad audience but focused on education. At over 227 pages, a wide variety of audiences and topics are addressed. In a chapter on “Education and Ecological Conversion,” audiences include governments, churches, laity, catechists, banks, university students, journalists, and several specific others. Topics are from a broad range of concerns, including finance, communication, health care, water, deforestation, and interfaith dialogue. The document was written by an intergovernmental committee, the Holy See Interdicasterial Table on Integral Ecology. It focuses on education and valorizes ecological conversion as a change leading to care for creation. It calls for “a new centrality” of schools and universities.

We have been particularly interested in higher education's response to education for *Laudato Si'*. The Dicastery is working with a global consortium of elite Roman

³ Co-author Corcoran has had the opportunity to attend two conferences at the Vatican since the launch of *Laudato Si'* in 2015. While favorably impressed with the extraordinary convening power of the Holy See and the diversity of participation from across continents and generations, he had expected that more explicit attention would have been paid to the importance of education in bringing *Laudato Si'* to a broad audience. This now seems to be changing.

Catholic universities on a variety of initiatives ranging from degrees and certificates to the use of integrated ecology as a unifying principle in academic programs. In another initiative, the seven pontifical universities of Rome are now offering a joint diploma in integral ecology. These are promising, if modest, signs of movement toward care for creation as an aim of tertiary education.

In our opinion, all this and more is needed to constitute the influence of *Laudato Si'* in a less than ephemeral way. It will be through education for *Laudato Si'* that the influence and popularity of the encyclical will be maintained. Using spectacle theory, William Gaudelli (2017) captures this challenge, saying that “the fact that we live amidst an unending cacophony of texts and experiences, all inviting us to think of the world differently, is a foundational condition of learning in a spectacle age” (p. 85). Specifically of *Laudato Si'*, he writes the following:

One can presume that Pope Francis' encyclical, now just a few years beyond its release, will quickly fade in the overwhelming din of a global media space. So is the fate of global texts in circulation, perhaps more quickly now than ever before, that their half-lives rapidly increase as momentary attention carries us onto the next and the next in an endless flow of thumbed through feeds in an ever-expanding digital diet. LS is different, though, in that unlike fleeting content delivered onto smartphones, there is unmistakable depth, sincerity, and substance in this work, regardless of how one is disposed toward its content and rhetoric. Interpreting a text like this requires a degree of care and knowledge, taking the time to describe the argument, examine the details, and consider its social and historical connections. The pause that one would aim to create around a substantial text like this is increasingly challenging, however, as the encyclical arrives in the same spectacle-context that is flooded with media texts available to teachers. (Gaudelli, 2017, p. 86)

Given the competitive media space and what Kureethadam calls “a battle of paradigms,” the Dicastery is taking the long view (J. Kureethadam, personal communication, December 7, 2020). Many of the commitments sought of various stakeholders are for the long term, specifically what Kureethadam calls a “seven-year journey.” This is wise, given the complexity of integral ecology and the trust placed in the broadest possible participation. Kureethadam reminded us that Pope Francis’s audience is “all people of good will” and that he believes in creating “a global village” of all stakeholders for the “exciting, important journey of education” (J. Kureethadam, personal communication, December 7, 2020).

As inspiring as the encyclical is, much remains to be done. Five years after the encyclical and at the beginning of seven-year education for *Laudato Si'* plans, change seems slow, given the climate emergency and the urgent social crisis. Yet, the pope remains encouraged in this “great cultural, spiritual, and educational challenge of the ages.” According to Kureethadam, one must “create joy and build enthusiasm” for the long, difficult road ahead.

Conclusion

It is heartening to realize that Pope Francis's call for ecological education in *Laudato Si'* is receiving . . . enthusiastic and high-level endorsements. . . . We cannot but anticipate more such responses from academic centers, churches and religions, and the wider civil society around the world in the area of ecological education. In the care of our increasingly imperiled common home, the role of education is indeed vital and indispensable. (Kureethadam, 2019, pp. 158–159)

We consider education to be one of the most effective ways of making our world and history more human. Education is above all a matter of love and responsibility handed down from one generation to another. (Pope Francis, 2020, para. 6)

After analyzing the roots of *Laudato Si'* in the ethics of sustainability and in ecological theory, as well as after situating the encyclical in the media landscape and in the education landscape, our conclusion is that there needs to be far more education for *Laudato Si'*. This should start with the many educational settings in the Roman Catholic Church, ranging from schools, to seminaries, to catechesis. Given that the audience for *Laudato Si'* is all humankind, education should go far beyond Catholic religious educational institutions to nonreligious educational settings and to secular higher education. Extensive and innovative education through media for a mass audience is also necessary.

In Pope Francis's October 2020 video message to a meeting organized by the powerful Congregation for Catholic Education, he said,

At certain moments in history, it is necessary to make radical decisions that can shape not only our way of life but above all our stance in the face of possible future scenarios. Amid the present health crisis – and the poverty and confusion it has caused – we believe that it is time to subscribe to a global pact on education for and with future generations. This calls for a commitment on the part of families, communities, schools, universities, institutions, religions, governments and the entire human family. (Pope Francis, 2020, para. 11)

Indeed, Pope Francis demonstrates profound understanding of the importance of education as the means of transformation to the world he envisions.

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