Lisa Sideris's Consecrating Science

with Holmes Rolston, III, "Lame Science? Blind Religion?"; Sarah E. Fredericks, "Reacting to Consecrating Science: What Might Amateurs Do?"; Donovan O. Schaefer, "Mere Science: Mapping the Land Bridge between Emotion, Politics, and Ethics"; Courtney O'Dell-Chaib, "The Shape of This Wonder? Consecrated Science and New Cosmology Affects"; Colin McGuigan, "Wonder Opens the Heart: Pope Francis and Lisa Sideris on Nature, Encounter, and Wonder"; Mary Evelyn Tucker, "Journey of the Universe: Weaving Science with the Humanities"; and Lisa H. Sideris, "Wonder Sustained: A Reply to Critics."

WONDER OPENS THE HEART: POPE FRANCIS AND LISA SIDERIS ON NATURE, ENCOUNTER, AND WONDER

by Colin McGuigan

Abstract. This article argues that Pope Francis's invocations of wonder can speak to and at times challenge Lisa Sideris's recent contributions to the interdisciplinary discussion of wonder, science, and religion. Although the importance of wonder to Pope Francis's 2015 environmental encyclical Laudato si' is acknowledged, it has not been widely recognized that wonder is implicated in and forms connections between multiple concepts and postures acknowledged as defining marks of Francis's papacy: coming out of oneself, encountering others, going to the margins; aversion to doctrinal rigidity; compassion, mercy, tenderness, and humility; to name a few. These defining concepts and stances resonate strongly with certain views on wonder, ethics, and ecology recently articulated by Lisa Sideris. In Francis, however, one finds a more affirming treatment of science-based wonder and a response to Sideris's criticism of theistic wonder.

Keywords: encounter; nature; Pope Francis; Lisa Sideris; theology and science; wonder

In Consecrating Science: Wonder, Knowledge, and the Natural World, Lisa Sideris seeks to uncover a continuing anthropocentrism stubbornly nesting in a broad range of recent mythopoeic cosmological visions. Despite good intentions to overcome the failure of traditional faiths adequately to cherish and safeguard the natural world, partisans of the new cosmologies remain stuck in the old faiths' same "anthropocentric, dominionistic, and

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controlling attitudes" (Sideris 2017, 2). The projects fail, Sideris argues, because the scientistic forms of wonder central to them repeatedly miss nature itself and fall instead on the human species or the human mind, genius of scientific inquiry and oracle of the universe's self-discovery. Rather than "genuine" or "wholesome" wonder, this scientistic, knowledge-based wonder is "scarcely wonder at all" (Sideris 2017, 16). "Genuine" wonder is largely a matter of its objects. Whereas "genuine" wonder involves one in an encounter with otherness, "inappropriate forms of wonder" tend toward self-referentiality (cf. Sideris 2017, 27).

Sideris's argument about wonder's importance and objects resonates well with Pope Francis's frequent (and underrecognized) invocations of the concept of wonder. Wonder is crucial in obvious ways to the argument of Francis's environmental encyclical *Laudato si*; less recognized is how wonder weaves its way throughout Francis's thought and priorities. At any rate, both Sideris and Francis thematize wonder and encounter as reciprocal concepts; both put an ethical premium on direct encounter with otherness over abstract ideas and knowledge, and both valorize a similar catalogue of environmental virtues that are associated with wonder. However, Pope Francis's treatment of wonder challenges Sideris's argument in at least two respects, each pertaining to a different mediation of natural wonder: first, the natural sciences' mediation of wonder at nature; second, nature's mediation of wonder at divinity. Regarding the former mediation, Francis is more affirming of a science-based wonder, and regarding the latter, Francis's wonder avoids a critique of theistic wonder that Sideris offered in a dialogue with Celia Deane-Drummond.

Wonder in Pope Francis and Lisa Sideris

It is hard to miss wonder's presence in *Laudato si*; an inclusio of wonder bookends the encyclical. Francis's plea for ecological conversion and care arises from and leads toward a wonder that is both natural and transcendent. Wonder appears early on, in the introduction, when Francis invokes his namesake Saint Francis of Assisi's wonder and awe at creation, which made the friar a brother to all creatures (Pope Francis 2015, 11). And wonder closes the encyclical, too, with a vision of Eternal Life as a shared experience of joyous wonder at the universe's mystery (Pope Francis 2015, 243). Wonder recurs throughout, as well, explicitly invoked in discussions of the book of nature (Pope Francis 2015, 85), the gaze of Jesus (Pope Francis 2015, 97–98), the sources of joy and inner peace (Pope Francis 2015, 222–26), and the universe's sacramental character (Pope Francis 2015, 233–34). Though its impress in *Laudato si'* is deep, wonder's footprint in Francis's thinking is much broader than this one document. Indeed, it is implicated in and forms connections between many of the defining themes and postures of Francis' papacy: joy, encounter, mercy, tenderness, going to the social and existential peripheries, aversion to doctrinal rigidity, criticism of a disposable culture, commitment to dialogue, and church reform.

To appreciate the thread of wonder running through and between the different motifs of the Franciscan pontificate, it helps to look to Jorge Mario Bergoglio's reflections prior to his 2013 papal election. A televised conversation between Marcelo Figueroa, Rabbi Abraham Skorka, and then-Cardinal Bergoglio is an especially good starting place for the way it addresses wonder head-on. One of thirty-one such ecumenical dialogues between the three friends that were broadcast on Buenos Aires Channel 21 and later published as *The Bible: Living Dialogue*, this particular mid-2011 conversation took as its topic "The Capacity for Surprise." In the course of the hour-long conversation, Bergoglio correlated wonder with many of what would later become his papacy's characteristic themes.

Weaving throughout the conversation is the contrast between the wonderer and one whose heart "has begun to die, to close itself off" from others. For Bergoglio, the paradigms of wonder are the child and the poet. Noting that philosophy begins in wonder, "which is the capacity for surprise," Bergoglio insists in this conversation that "we must cultivate the soul of a child and of the poet to maintain the capacity for surprise in the face of life" (Pope Francis et al. 2015, 118, 119). The person who does so will continuously bring forth new things and perspectives, like the poet or the artist, and like the child who wishes to hear the same story day after day, will discover in old things continuous novelty and freshness. The one who remains open to surprise—the wonderer—is a person of hope and creativity, for she never closes herself off to new possibilities. The wonderer is joyful too, for she encounters God, creation, and others anew, in a different way, each day, and this is a source of pleasure for her. Open to surprise, she is open to others, and so she is set on the path of relationship, love, and receiving from the other. She does not succumb to a utilitarian view of the world and its creatures, especially those on the margins—and here Bergoglio invokes his favorite examples of nonproductive treasures: the very young and the very old, children and grandparents. One who is open to surprise realizes that no thing's value can be reduced to its usefulness—or to its burdensomeness—in relation to us.

The wonderer's view of the world resists such reductionism and is, on the contrary, contemplative. Her openness to surprise attunes her to the depths concealed in otherness: "We must discover the richness within others," Bergoglio says, "in all people, and especially I mean to include people on the margins of society." The habit of wonder keys us into this hidden richness; by wonder we "know how to be surprised" by others, and wonder "open[s] the heart to listen to them" (Pope Francis et al. 2015, 119). The wonderer's world is a reservoir of potentially different viewpoints, possibilities, and beauties to be discovered. Attuning the wonderer to the surprising depths and potentialities of other creatures, wonder also attunes

her to the creating other, "the God of surprises," who makes all surprising things and all things surprising (Pope Francis et al. 2015, 116). As he will later write as Pope, "The Spirit of God has filled the universe with possibilities and therefore, from the very heart of things, something new can always emerge" (Pope Francis 2015, 80). The habit of wonder, then, is inseparable from openness to otherness, including divine otherness.

By holding the heart open to otherness, wonder keeps the life of the wonderer vital and resists the dulling routinization of existence. According to Bergoglio, "the capacity for surprise has the strength of transforming a fact—sometimes a banal one—into an event." While we pass over banal facts with hardly a notice, events make our lives and touch the heart (Pope Francis et al. 2015, 120). Surprised by the good—a rose, a mountain, an animal, the wisdom of a grandmother—the wonderer opens to hope, to love, to joy. Surprised by evil—a demagogue denying or demonizing the other, consumer society's reduction of young and old to "disposable material"—the wonderer refuses to normalize the evil and so resists it (Pope Francis et al. 2015, 115, 119). Such is the vital life of one who nurtures the childlike and poetic capacity for surprise.

On the other hand, one whose wonder diminishes in the face of life, who closes off to surprise, becomes inured both to good and to evil. The world loses its freshness for him; he loses the fire of hope and the capacity for joy. He slowly becomes, in Rabbi Skorka's words, "like a dead man walking." Echoing Skorka's sentiment with his own preferred image, Bergoglio says that such a man's heart has closed; it has become "stagnant ... putrid and unhealthy ... and has begun to die" (Pope Francis et al. 2015, 118). The one whose heart is closed descends into a utilitarian approach to the world and its creatures. He becomes complicit in the disposable culture, what Bergoglio will call in his *Te Deum* homily the following year, the "culture of the dump truck" (2012). Taking pleasure in the "dullest things life has to offer," he settles into "a certain spiritual laziness" (Pope Francis et al. 2015, 117).

The content of this televised dialogue is a good reflection of how wonder, surprise, astonishment, and amazement show up in the more than thirteen years of homilies and other messages from Bergoglio's tenure as Archbishop of Buenos Aires, which the Archdiocese has published. Bergoglio's use of the language of wonder pervades this material, weaving throughout his letters to educators, catechists, priests, consecrated religious, and lay faithful; addresses on important feast days and commemorations; the Archbishop's annual *Te Deum* addresses; Lenten messages; and Christmas and Easter homilies. Throughout, wonder is associated with hope, creativity, humility, open-mindedness and dialogue, patience, mercy, encounter and accompaniment, sobriety and self-restraint, social justice, attentiveness, and joy—in short, for Bergoglio, wonder is a vital part of a full and joyous life.

One might note in passing how Francis's treatment of wonder aligns him with the defense of wonder mounted by University of Birmingham's Sophia Vasalou, editor of *Practices of Wonder* and author of *Wonder: A Grammar*. Vasalou's defense of wonder first turns to the condition of wonder's subject. Vasalou rests her defense on the human desire for "something as basic as the value of a life lived consciously: as basic as our desire for conscious experience and aliveness to the world" (Vasalou 2015, 203). To wonder is to truly regard, to be awed in the regarding, to be attentively conscious and intensely alive to what confronts us. Thus, wonder restores life to the wonderer. And here Vasalou turns from the subject to the objects that provoke wonder, for when one opens the possibility of living in wonder one recognizes one's habitual indifference toward such marvels as the stars, the road one walks on, the trees one passes, the faces one greets, and the feelings one suffers and enjoys. Such things are lost in habitual modes of perception colored by self-referential plans and self-concern. Wonder then becomes "an achievement of attention," a self-limiting ethical achievement of a vision that does not exhaust itself in the vision of utility but honors the separateness, the otherness, of wonder's objects (Vasalou 2015, 205–06).

Aspects of Francis's invocations of wonder resonate unmistakably as well with certain views of Sideris on wonder, ethics, and ecology. At least three resonances stand out: the centrality of encounter, the affinity between wonder and certain environmental virtues, and an option for an ignorancebased worldview. Consecrating Science mounts a forceful critique of recent attempts to cash out an environmental ethic from sacralized scientific narratives of the universe. In particular, Sideris aims to expose what she sees as a continuing anthropocentrism latent in these projects, which inadvertently naturalize the Anthropocene and allow nature itself to drop out as a locus of value and motivation for environmental ethics. The positive upshot of this negative critique is a persuasive argument for the indispensability of firsthand sensory engagement with nature for motivating ecologically salient moral and aesthetic responses to the natural world. Directly encountering nature, for example, a tree or a flower, has the potential to enable human beings to transcend their self-referentiality. "[C]ontrary to the solipsistic impulse," wonder "takes us out of ourselves" and involves us with others as equals rather than objects. As Francis said, in wonder facts are transformed into events that make one's story and touch the heart. Sideris argues that such experiences help lead towards attitudes and actions of care for the natural world (2017, 195–96). In a similar way, Pope Francis consistently prioritizes direct encounter over abstractions and mediations, fleshly contact over projects of the mind, Incarnation over Gnosticism. In Evangelii Gaudium, the programmatic document of his papacy, Francis famously asserts that "realities are more important than ideas," and in Laudato si'he writes, in agreement with Sideris, that "going out of ourselves towards the other" can lead to joyful, self-limiting regard for otherness (2013, 231–33;

2015, 208). For both, wonder and encounter are reciprocally related concepts. For her part, Sideris echoes Sam Keen's invocation of Martin Buber's I/Thou encounter to explicate the involvement and relationality between the subject and objects of wonder (2017, 27). For Francis, as we have seen, the contemplative gaze of wonder resists reductive views that occlude the other's depth and richness; wonder is necessary for encountering the other as other.

For both Sideris and Francis, wonder is relevant for developing certain "other-acknowledging" moral qualities. In the closing pages of *Consecrating Science*, Sideris—drawing especially on Rachel Carson, Sam Keen, and R. W. Hepburn—sketches wonder's ethical trajectory. Wonder possesses affinities with certain virtues needed to face wisely the present ecological moment: openness, receptivity, and a reverence toward otherness; epistemological and moral humility; the courage to accept vulnerability; and compassion, generosity, and gentleness (Sideris 2017, 198–99). The resonance with Francis's vision of the wonderer that emerges in his conversation with Rabbi Skorka and Figueroa is unmistakable.

Sideris and Francis's argument for wonder's ethical importance thus recapitulates Martha Nussbaum's argument about the developmental significance of wonder in the life of human infants. In *Upheavals of Thought:* The Intelligence of Emotions, Nussbaum claims that wonder is "as noneudaimonistic as an emotion can be"—that is, it does not, in immediate and obvious ways, serve the wonderer's well-being. Whereas other passions react to objects laden with value in reference to the subject's own flourishing, in wonder "the subject is maximally aware of the value of the object [wondered at], and only minimally aware, if at all, of its relationship to her own plans." Hence wonder's tenuous connection with action, its being as likely to lead into contemplation as inquiry, or anything else. On the other hand, "wonder plays an important part in the development of a child's capacity for love and compassion. . . . [by] mov[ing] distant objects within the circle of a person's scheme of ends" (Nussbaum 2003, 54-55). The child's early wonder registers "that the world into which the child arrives is radiant and wonderful [and] claims its attention as an object of interest and pleasure in its own right" (Nussbaum 2003, 189). This wonder shepherds the child out of its (developmentally appropriate) egoism, enabling its emotional, relational, and moral development, culminating in compassion (cf. Nussbaum 2003, 191, 213, 217, 237, 320-22, 337). In compassion, the gap is bridged "between the child's existing goals and the eudaimonistic judgment that others (even distant others) are an important part of one's own scheme of goals and projects, important as ends in their own right." Wonder is crucial in bridging that gap, for "the non-eudaimonistic element of wonder strongly reinforces or motivates my eudaimonistic concern. . . . [W]hen I see with compassion the beating of an animal, a wonder at the complex living thing itself is likely to be mixed with my compassion, and

to support it" (Nussbaum 2003, 321–22). As with Sideris and Francis, so with Nussbaum's infant: wonder opens the heart to an acknowledgment of others.

Aside from wonder itself, the environmental disposition most valorized in *Consecrating Science*'s concluding chapter is "virtuous ignorance." Against claims of the triumphal progress of knowledge made by science's consecrators, Sideris commends a more "'Jobian' perspective" that she associates with Rachel Carson and with more recent writers who maintain a robust sense of the vastness of human ignorance and the universe's ineradicable ambiguity and mystery. Such an "ignorance-based worldview," she believes, could feed an "ethic of caution" in contrast to the reckless technoscientific Prometheanism funded by knowledge-based worldviews (Sideris 2017, 185–86). Like Sideris, who invokes Gabriel Marcel's distinction of problems and mysteries to exhort epistemic humility, Francis writes at the outset of *Laudato si*' that the universe is not "a problem to be solved [but] a joyful mystery to be contemplated with gladness and praise" (2015, 12).

A source of this enduring mystery is the chaotic, complex interconnections threaded throughout creation. Not only is everything connected, but the connections are inexhaustible and, ultimately, outstrip our ability to fully explore and understand (Pope Francis 2015, 138). The reductive "technocratic paradigm"—in which we are implicated and which levels all things down to "sources of profit and gain"—is insensible to this "mysterious network of relations between things." For this reason, when we turn to technological fixes for environmental problems, we sometimes solve "one problem only to create others," unforeseen in our triumphal ignorance (Pope Francis 2015, 82). Like Sideris, Francis does not place his hope for environmental solutions in greater technoscientific mastery; rather, Francis hopes for the technocratic paradigm's replacement by new lifestyles and spiritualities, ones that can promote a joyful "self-restraint" (2015, 102). Such a lifestyle would eschew the shallow pleasures of solipsistic consumption for the joy of contemplative fraternity and the contemplation of beauty, in which the capacity for wonder and what Bergoglio, in a 2008 message for educators, had called a "wise ignorance" are deeply involved (Pope Francis 2008; 2015, 112).

MEDIATED AND MEDIATING NATURE

In spite of undeniable resonances between Sideris and Francis, attention must be paid to two ways that Francis's wonder challenges Sideris's arguments. Both have to do with Sideris's suspicions of mediated wonder, more particularly, her suspicion of both science mediating natural wonder and nature mediating theistic wonder. Sideris's concern with wonder directed toward the findings of the sciences is that scientific explanations of nature threaten to siphon off wonder from nature itself; the *explanans* eclipses the

explanandum. It is a short step from wondering at explanations delivered by the sciences to "reality censorship," wherein ordinary human level perceptions and engagements with the natural world are "demoted to unreality" (Sideris 2017, 68). With reality censorship, "abstractions themselves stand in for the 'reality,' the very 'is-ness' of things" (Sideris 2017, 195). And it is just another short step from wondering at the abstract explanations of scientific experts to wondering at the experts themselves and at the marvels of human intelligence. In contrast to wondering at the products of reason, Sideris "stake[s] a particular claim on the value and indispensability of the sensory realm as the locus—indeed, we might say, the scale—of our . . . deepest attachments" (Sideris 2017, 194).

While Francis shares Sideris's criticism of scientific Prometheanism and solipsistic anthropocentrism, he is pronouncedly more comfortable than Sideris with wondering responses to scientific deliverances. For Francis, the sciences not only explain; they can also serve to mediate encounter with nature. Indeed, in some ways the encounters of which we and nature are in most dire need can only occur through the mediations of perceptual scale enabled by scientific inquiry.

Laudato si's first chapter is a relatively detailed review of several aspects of the present ecological crisis. There Francis tries to draw "on the results of the best scientific research available today, letting them touch us deeply and provide a concrete foundation for the ethical and spiritual itinerary that follow[s]" in the encyclical (2015, 15). Significantly, the language of "touching deeply" is the very language Bergoglio used (in his conversation with Skorka and Figueroa mentioned earlier) to describe what wonder does for banal facts: transforms them into events that touch us deeply, at the heart's depths.

Even more striking is Francis's sentence introducing certain scientific findings pertaining to pollution and climate change: "Our goal is not to amass information or to satisfy curiosity, but rather to become painfully aware, to dare to turn what is happening to the world into our own personal suffering and thus to discover what each of us can do about it" (2015, 19). It is a heartrending passage that speaks to encounter—a genuine encounter, to the point of becoming sensible to, and suffering with, another. But the other in question here, "the world," is not another that can be engaged at the human individual's perceptual scale. Sideris writes that "the scale of the universe is not a human scale" (2017, 8). I would add, neither is the scale of "the Earth." The deliverances of the sciences are necessary here to form a perceptual bridge between two subjects—human, Earth—operating on vastly different scales of time and space in ways that are, nonetheless, dramatically, even fatally, determining each other.

An analogy can be made between this mediation of scale and another Bergoglio comment in a 2006 message to educators (Pope Francis 2006a). After using the parable of the Good Samaritan to remark on the face-to-face dimension of encounter as the essential one and the greatest strength of love, Bergoglio notes that the face-to-face dimension of love is not enough. The face-to-face encounter can even "prevent us from seeing what is important. It can exhaust itself in the here and now. On the other hand, a truly effective love . . . should reflexively elaborate the relationship between obviously painful and unjust situations and the discourses and practices that originate or reproduce them."

Love needs "long arms," he writes, and so the parable of the Final Judgment in Matthew 25 "comes to make us discover other dimensions of love." In the parable, of course, the sheep are surprised to find that they had already encountered the Lord. Commenting on this, Bergoglio writes, "Obviously, this does not refer to what we can do directly as a response to 'face to face', which is fundamental, but to another dimension." As he explains, "I am referring to the institutional dimension of love. The love that passes through institutions . . .: historical ways of concretizing and making intentions and desires enduring. Which, for example? The laws, the instituted forms of coexistence, the social mechanisms that make justice, equity, or participation . . . the 'duties' of a society. . . . " (2006a). Though Bergoglio always prioritizes direct, bodily encounter to abstract knowledge and reasoning, it is evidently not to the exclusion of certain institutional mediations of scale. In this instance, it is the "institutional dimension of love" that mediates between the individual's practices and certain "painful and unjust situations," scaling up the individual's practice to address the social conditions which are the source of the suffering encountered at the face-to-face level.

Similarly, in *Laudato si'* Pope Francis uses "scientific knowledge gained through ... abstract theorizing and high-tech tools" (8) to register harms which originate in our (individual) consumptive practices but which elude individual human perception due to the disproportion of scale between human and Earth. Despite the disproportion, it is real suffering that is shared, and real intimacy that emerges. This is very different from mediations that isolate one from encounter, that prevent the kind of involvement that touches the heart. Of these, Francis is consistently critical. For example, one can read Bergoglio's admonition to the Argentine national authorities in 1999 that they resist the "temptation to see your people through multiple mediations, which perhaps serve as functional, but do not touch the heart" (1999). In light of the way Francis introduces Laudato si's first chapter, however, he evidently does not think this criticism applies in the case of at least some scientific mediations. Sideris may not disagree; she does not claim "that wonder at scientific knowledge is (always) inappropriate and problematic or (generally) irrelevant for the cultivation of wonder for nature" (2017, 8). Palpably lacking in Consecrating Science, though, amidst all the detritus of hubristic scientism, are examples of "wholesome," science-based wonder. Perhaps Laudato si', as presented here, challenges

Sideris's argument, or perhaps it simply fills in an example of a possibility Sideris means to hold open.

Some encounters and intimacies, it would seem, are not possible without mediation: encountering "the Earth," for example, and, turning to Francis's second challenge to Sideris, encountering divinity. For Sideris, science is not all that threatens to deflect wonder from nature in ecologically problematic ways. In a conversation with Celia Deane-Drummond published in Grounding Religion in 2011, Sideris suggests that theism performs a similar deflection. "I am increasingly persuaded," she writes, "that nontheistic forms of wonder are more potent [than theistic wonder]. Wonder ultimately directed at God is a kind of conversation stopper: Wonder 'ends' in and with God in more than one sense. I worry that theistic wonder answers too many questions about the objects of wonder. In this sense, it becomes something like wonder at science, where one's wonder is directed at the explanation of the mystery ... and not at nature" (Deane-Drummond and Sideris 2011, 70). In theistic forms of wonder, nature becomes a signpost directing wonder beyond itself to its explanation. And so nontheistic wonder, which does not leave nature behind, is to be preferred for the purpose of cultivating ecological concern and virtue.

Sideris's objections—about both theistic and scientific modes of explanation—have purchase. Yet, it should be emphasized that Sideris's comments on theistic wonder were published in 2011, several years prior to 2017's Consecrating Science, and the latter work does not repeat them. Still, the structure of Consecrating Science's main argument about wonder, nature, and science expands on an argument Sideris dialogically sketched, in rudimentary form, in the same 2011 conversation in which her remarks on theistic wonder appear. Moreover, the very same argumentative structure—involving reality censorship, explanans eclipsing explanandum, and encounter-oriented versus solipsistic modes of wonder—could be applied to theistic wonder, as well, and Sideris did indeed make that application in 2011. While Consecrating Science does not foreclose the possibility of an appropriate form of theistic wonder, neither does it reverse Sideris's earlier argument in Grounding Religion.

In response to Sideris's argument in *Grounding Religion*, Francis's wonder shows that, just as explanation is not the only mediating mode between science and nature, neither is explanation the only bridge between deity and nature. Were explanation the mediating mode of wonder, then indeed "reality censorship" might loom and threaten to relegate nature to the status of "mere stepping stone or signpost to God"—the final cause, the really real reality (Deane-Drummond and Sideris 2011, 70). However, invocations of deity in moments of natural wonder may have nothing at all to do with explaining nature's wondrousness. Theism need not function like the "harsh disenchantment" of scientism, Richard Dawkins's "explaining away" of the rainbow, or Edward Slingerland's declaration of parental love

"false" in light of its explanation in terms of genes and kin selection (cf. Sideris 2017, 32, 70–71). Another possibility for the theistic wonderer is that nature's wondrousness mediates divine presence without reducing to it. Nature mediates divine presence precisely by being—in itself—wonderful. This, I believe, is the bipolar tension Francis tries to maintain. In the closing sections of *Laudato si*', Pope Francis comments on the "mystical meaning to be found in a leaf, in a mountain trail, in a dewdrop, in a poor person's face," and he writes: "in each of these sublime realities is God. . . . [T]he mystic experiences the intimate connection between God and all beings, and thus feels that 'all things are God.' Standing awestruck before a mountain, he or she cannot separate this experience from God" (2015, 233–34; the internal quotation is from Saint John of the Cross). Transcendence and immanence held together, two poles in tension but inextricable.

It is crucial to observe that, for Francis, if one cannot separate the experience of created beings from God, one also cannot separate the experience of God from encounter with created beings, with earthly otherness. There is, Francis wrote to Buenos Aires Archdiocesan educators in 2006, "a mysterious imbrication of the earthly and the celestial," and "[i]t is not possible for us to deal with things 'of heaven' without being immediately forwarded to 'the earth'" (2006a). "How can it be," Bergoglio asked later that year, "that there are people who say that God does not speak. ... Of course, it's people who do not listen to the poor, the little ones. ... (2006b)." And on Christmas Eve that year, Bergoglio referred to the "pedagogy of the manger," which teaches the "always surprising novelty of God and God's way of manifesting ... to the world. ... We need to be surprised again by a God who chooses the periphery . . . to manifest [God's self]" (2006c). God is revealed "on the sacred ground of the other" (Pope Francis 2013, 169), and thus one who would encounter the divine other must not leave the world of creatures behind—as with a "signpost"—but must continually look to the world, and especially to the world's most surprising places: its humble, hidden, and crucified places. For it is there, on the peripheries, that "adoration of the ever greater God begins" (Pope Francis 2007b).

This feature of Francis's theism—this imbrication of the earthly and the heavenly, which continually directs attention deeper into the world's peripheries—is what inoculates his species of theistic wonder against the reduction of created otherness to disposable stepping stones on the way to divinity. Transcendence for Francis is to be sought by descending deeper into the world and its possibilities, not leaving or pushing beyond it. Bergoglio attempted to explain his understanding of Christian transcendence in a 2007 message to educators: transcendence is not found "outside' the world! Placing ourselves fully in our transcendent dimension has nothing to do with separating ourselves from created things, with 'rising' above this world. It consists in recognizing and living the true 'depth' of the created" (Francis 2007a).

CONCLUSION

Sideris has expressed anxiety that the explanatory modes of both science and theism siphon wonder from nature and redirect it toward science, the scientist, human genius, or God—at any rate, away from that which needs our attention and gentleness most: nature. Francis shares some of Sideris's unease with mediations. In Francis's case, he believes many mediations take the heart out of encounter, converting what ought to be encounter and accompaniment into managerial technique. However, certain encounters and relationships require mediation. Encountering what Francis calls the most afflicted of God's poor—the Earth itself—requires more than direct engagement with individual creatures. To encounter and grieve Earth's great sufferings takes mediations of perceptual scale that can only be achieved by scientific modes of attentiveness. Mediation is indispensable, as well, to another encounter, that with the transcendent God. Francis's theism rejects spiritual flight from creation as illusory. Rather, encountering divinity occurs in and through encounter with human (and more-than-human) otherness. Mediated or direct, encounter's condition of possibility is a capacity for wonder. Wonder opens the heart to others, to the Earth, and to transcendence.

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REFERENCES

- Deane-Drummond, Celia, and Lisa Sideris. 2011. "Ecology: A Dialogue." In *Grounding Religion:*A Field Guide to the Study of Religion and Ecology, edited by Whitney A. Bauman, Richard R. Bohannon II, and Kevin J. O'Brien, 64–72. New York, NY: Routledge.
- Nussbaum, Martha C. 2003. Upheavals of Thought: The Intelligence of Emotions. Cambridge, UK: Cambridge University Press.
- Pope Francis (Jorge Mario Bergoglio). 1999. "Petición por las nuevas autoridades nacionales Catedral Metropolitana (Te Deum 11/12/1999) (desgrabación)." Accessed December 15, 2018. http://www.arzbaires.org.ar/inicio/homilias/homilias1999.htm#Petici%C3%B3n por las nuevas autoridades nacionales.
- . 2006a. "Desgrabación de la Homilía del Sr. Arzobispo en la Misa por la Educación. Mensaje del Arzobispo de Buenos Aires a las Comunidades Educativas." Accessed December 15, 2018. http://www.arzbaires.org.ar/inicio/homilias/homilias2006.htm#Misa_por_la_Educaci%C3%B3n.
- 2006b. "Homilía del Sr. Arzobispo en la Fiesta de San Cayetano." Accessed December 15, 2018. http://www.arzbaires.org.ar/inicio/homilias/homilias2006.htm#San_Cayetano.
- . 2006c. "Homilía del Sr. Arzobispo en la Misa de Nochebuena." Accessed December 15, 2018. http://www.arzbaires.org.ar/inicio/homilias/homilias2006.htm#Misa_de_Nochebuena.

- 2007a. "Desgrabación de la Homilía del Sr. Arzobispo Cardenal Jorge M. Bergoglio, sj. en la Misa Por la Educación." Accessed December 15, 2018. http://www.arzbaires.org.ar/inicio/homilias/homilias2007.htm#educacion.
- 2007b. "Parroquia y Familia' Intervención del Sr. Arzobispo en la Plenaria de la Pontificia Comisión para América Latina." Accessed December 15, 2018. http://www.arzbaires.org.ar/inicio/homilias/homilias2007.htm#indice.
- 2008. "Mensaje del Sr. Arzobispo en la Misa por la Educación." Accessed December 15, 2018. http://www.arzbaires.org.ar/inicio/homilias/homilias2008.htm#Misa_por_la_Educaci%C3%B3n.
- 2012. "Homilía del Sr. Arzobispo de Buenos Aires Cardenal Jorge Mario Bergoglio s.j., pronunciada en el Te Deum en la Catedral Metropolitana." Accessed December 15, 2018. http://www.arzbaires.org.ar/inicio/homilias/homilias2012.htm#TEDEUM.
- . 2013. Évangelii Gaudium: Apostolic Exhortation on the Proclamation of the Gospel in Today's World. http://w2.vatican.va/content/francesco/en/apost_exhortations/documents/ papa-francesco_esortazione-ap_20131124_evangelii-gaudium.html.
- . 2015. Laudato Si': On Care for Our Common Home. http://w2.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20150524_enciclica-laudato-si.
- Pope Francis, Abraham Skorka, and Marcelo Figueroa. 2015. *The Bible: Living Dialogue: Religious Faith in Modern Times*, compiled by Marcelo Figueroa. Translated by Brendan Riley. Philadelphia, PA: American Bible Society.
- Sideris, Lisa H. 2017. Consecrating Science: Wonder, Knowledge, and the Natural World. Oakland: University of California Press.
- Vasalou, Sophia. 2015. Wonder: A Grammar. Albany: State University of New York Press.