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REFORMING THOMISTIC ETHICS: THE *PARTES VIRTUTUM* AND ECOLOGICAL VIRTUE

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THE ENVIRONMENTAL MOVEMENT and Thomas Aquinas have had an ambivalent relationship. On the one hand, Aquinas's thought has been blamed for inspiring environmental degradation,[1] and judged to be completely irredeemable.[2] On the other hand, more recent scholarship has shown that Aquinas's metaphysics and theology are a much better fit for the environmental movement than was previously thought.[3] Nevertheless, this "Green Thomism" has (mostly)

[*] An earlier version of this article was presented at the "Aquinas at 800: *Ad multos annos*" conference at the University of Notre Dame, September 22-25, 2024.

[1] Lynn White Jr., "The Historical Roots of Our Ecologic Crisis," *Science* 155, no. 3767 (1967): 1205; Elspeth Whitney, "The Lynn White Thesis: Reception and Legacy," *Environmental Ethics* 35, no. 3 (2013): 313-31; Francisco Benzoni, *Ecological Ethics and the Human Soul: Aquinas, Whitehead, and the Metaphysics of Value* (Notre Dame, Ind.: University of Notre Dame Press, 2008).

[2] Louke Van Wensveen, "Christian Ecological Virtue Ethics: Transforming a Tradition," in *Christianity and Ecology*, ed. Dieter T. Hessel and Rosemary Radford Ruether (Cambridge, Mass.: Harvard University Press, 2000), 155-72: "I have shown how superficial similarities, upon closer inspection, dissolve into rather significant differences. This means that the option of simply retrofitting the Aristotelian-Thomistic virtue tradition for ecological purposes becomes unrealistic."

[3] Michael Northcott, *The Environment and Christian Ethics* (Cambridge: Cambridge University Press, 1996); Willis Jenkins, *Ecologies of Grace: Environmental Ethics and Christian Theology* (Oxford: Oxford University Press, 2008); Jame Schaefer, *Theological Foundations for Environmental Ethics* (Washington, D.C.: Georgetown University Press, 2009); Daniel Scheid, *The Cosmic Ecological Ethics* (Oxford: Oxford University Press, 2016); idem, "Thomas Aquinas, the Cosmic Common Good, and Climate Change," in

been the work of metaphysics and systematic theology.[4] Can we go further and conceive of a Thomistic ecological ethic? In other words, can Thomism adopt ecological virtues and vices? This question is important not only for answering some of the pressing questions of our day, but also for helping Thomists integrate the magisterium of the last four papacies. John Paul II highlights the moral dimension of the ecological crisis and says "an education in ecological responsibility is urgent. . . . The ecological crisis is a moral issue."[5] Benedict XVI challenges us to live faithfully in a covenant with creation.[6] In *Laudato si'*, Francis calls for an ecological conversion, posits ecological virtues, and says we can sin against creation (or live in communion with it).[7] Leo XIV continues the call for an ecological conversion, saying: "We cannot love God, whom we cannot see, while despising his creatures. Nor can we call ourselves disciples of Jesus Christ without participating in his outlook on creation and his care for all that is fragile and wounded."[8]

Confronting the Climate Crisis: Catholic Theological Perspectives, ed. Jame Schaefer (Milwaukee, Wis.: Marquette University Press, 2011); Christopher Thompson, *The Joyful Mystery: Field Notes Toward a Green Thomism* (Steubenville, Ohio: Emmaus Road Publishing, 2017); Gabriel Torretta, "Thomas' Green Thumb: Ecotheology Beyond Revolution and Reform," *Angelicum* 92, no. 2 (2015): 213-32; Stephen Brock, "Aquinas the Conservationist," in *In Search of Harmony: Metaphysics and Politics,* ed. James Hanink (Washington, D.C.: The Catholic University of America Press, 2019), 19-36; Marie George, "Aquinas on the Goodness of Creatures and Man's Place in the Universe: A Basis for the General Precepts of Environmental Ethics," *The Thomi*st 76, no. 1 (2012): 73-123; Robert Grant, *A Case Study in Thomistic Environmental Ethics: The Ecological Crisis in the Loess Hills of Iowa* (Lewiston, N.Y.: Edwin Mellen Press, 2007); Jill LeBlanc, "Eco-Thomism," *Environmental Ethics* 21, no. 3 (1999): 293-306.

[4] Christopher Thompson, "*Laudato si'* and the Rise of Green Thomism," *Nova et vetera* (Eng. ed.) 14, no. 3 (2016): 745-56.

[5] John Paul II, "Peace with God the Creator, Peace with All Creation," World Day of Peace Message (January 1, 1990), 13.

[6] Benedict XVI, *Caritas in Veritate,* 50.

[7] Francis, *Laudato si'*, 87, 217.

[8] Leo XIV, "Address of the Holy Father Leo XIV to the Participants in the 'Raising Hope' Conference on the Tenth Anniversary of the Encyclical *Laudato si'* (October 1, 2025) http://vatican.va/content/leo-xiv/en/speeches/2025/october/documents/20251001-conferenza-mariapoli.html.

This article argues that Aquinas's virtue ethics can incorporate ecological virtues and vices based on a built-in mechanism for adaptability: the *partes virtutum*. By conceiving of the virtues as wholes (*tota*), Aquinas allows for a reform of his ethics, but one that does not alter its fundamental principles.[9] Not only can Thomistic virtue ethics be reformed (in this case to add ecological virtues/vices),[10] but Aquinas's virtue ethics are an exemplar for how to build theological ethics in such a way as to anticipate, promote, and circumscribe reform. To argue these points, the article has three sections. The first attempts to specify the ecological virtues. The second explores Aquinas's doctrine of the *partes virtutum* as a structural place to admit and enact an ongoing reform of Thomistic ethics. Finally, the third section puts forward a concrete proposal integrating (some) ecological virtues into a Thomistic virtue ethics and concludes with some wider implications for Thomism and the Church as a whole.

I. What Are Ecological Virtues?

In considering reforming Thomistic virtue ethics, one must be clear what change is being asked of us: what are we being asked to incorporate into Thomistic ethics? What is it that we are missing that would improve Thomistic thought? What are ecological virtues?

This is, despite what one might expect, a difficult question to answer. One obstacle is the age of ecological scholarship, which is only seventy years old. Most scholars identify the first instance of it as Aldo Leopold's 1949 book *A Sand County*

[9] Torretta's definition of a reforming ecotheology, "working for a systematic overhaul of Christianity along ecological lines," is not the only possible reform. Aquinas built his ethics with what Benedict XVI calls a hermeneutic of reform, which is hardly a systematic overhaul. See Torretta, "Thomas' Green Thumb," 216.

[10] Although I speak of virtues as substances in this article, they are not. See *De virtut*., q. 1, a. 11, ad 4.

Almanac.[11] Environmental virtue ethics (EVE) is even younger. Most identify its beginning with a 1983 article by Thomas Hill, Jr., who wonders, "What kind of person would pave over their front yard?"[12] EVE took off considerably with Louke Van Wensveen's 2001 book, *Dirty Virtues*, wherein 189 virtues are identified in post-1970 environmental literature.[13] Since then, EVE literature has continued to expand. According to this body of literature, "an environmental virtue refers to a certain kind of trait of character or habit of behavior, the possession of which will partially enable a person to lead an environmentally good life."[14] The most commonly identified ecological virtues are care, respect for nature, love, compassion, humility, creativity, hope, and sensitivity, but there is deep diversity in the literature and no clear "set" has gained consensus.

Though less extensive than EVE literature, Catholic ethics have also begun to adopt a sense of ecological virtue. For example, in *Laudato si'*, Francis calls for an ecological conversion (roughly that one's relationship with Christ and the Church be reflected in how one relates to the environment and nonhuman creatures). He cites the bishops of Brazil, who exhort us to cultivate "ecological virtues."[15] Francis teaches that

[11] Juan Alberto Lecaros Urzua, "La ética medio ambiental: Principios y valores para una ciudadanía responsable en la sociedad global," *Acta Bioethica* 19, no. 2 (2013): 178. Urzua claims that the discipline began to be called environmental ethics and is united around the following question: "the study of human interactions with and impact on the natural world and natural system." All translations in this article are my own unless otherwise noted.

[12] Thomas Hill, Jr., "Ideals of Human Excellence and Preserving Natural Environments," *Environmental Ethics* 5, no. 3 (1983): 47.

[13] Louke Van Wensveen, *Dirty Virtues: The Emergence of Ecological Virtue Ethics* (Amherst, N.Y.: Humanities Press, 1999).

[14] Geoffrey B. Frasz, "What Is Environmental Virtue Ethics That We Should Be Mindful of It?," *Philosophy in the Contemporary World* 8, no. 2 (2001): 7; see also Thomas Hill, Jr., "Comments on Frasz and Cafaro on Environmental Virtue Ethics," *Philosophy in the Contemporary World* 8, no. 2 (2001): 59-62; and Steven Bouma-Prediger, *Earthkeeping and Character: Exploring a Christian Ecological Virtue Ethic* (Grand Rapids, Mich.: Baker Academic, 2019), 25.

[15] National Conference of the Bishops of Brazil, *A Igreja e a Questão Ecológica* (Edições Paulinas, 1992), 53-54.

we must adopt radically new lifestyles, adopt "new habits."[16] Joshtram Kureethadam identifies seven virtues that Francis recommends: praise, gratitude, care, justice (in the anthropological sense), work, sobriety, and humility. Subsequent Catholic work in ecology has made some, but not extensive, use of the concept of ecological virtue.[17]

For our purposes, we need not consider some of these qualities. If we are looking for a reform in Thomistic ethics, we need not consider acts of another virtue (e.g., praise) or virtues already identified by Thomists (e.g., temperance). Something similar could be said for contentment, justice, simplicity, humility, or gratitude. Granted, Aquinas does not apply these virtues to an ecological context, but to do so is no change in Thomistic ethics (just as it would not be a change to apply his thought to other circumstances he could not have imagined).[18] Regarding these virtues it is not necessary that we reform Thomism but that we all become more Thomistic.[19] In addition, we need not consider character traits identified as virtues on spurious grounds. For example, many ecological virtue theorists treat virtues like rule utilitarians—that is, that virtues typically

[16] Francis, *Laudato si'*, 209.

[17] See also Vincent Miller, ed., *The Theological and Ecological Vision of Laudato si'* (Edinburgh: T & T Clark, 2017); Jame Schaefer, "The Virtuous Cooperator: Modeling the Human in an Ecologically Endangered Age," *Worldviews* 7, nos. 1-2 (2003): 171-95; and David Cloutier, "Personal Conversion and Civic Love: Individual and Social Change in *Laudato si'*," in *All Creation Is Connected: Voices in Response to Pope Francis' Encyclical on Ecology,* ed. Daniel R. DeLio (Winona, Minn.: Anselm Academic, 2017).

[18] If one were to follow Dulles strictly this would be an adaptation reform in morals. See Avery Dulles, "The Church Always in Need of Reform: *Ecclesia semper reformanda*," in *The Church Inside and Out* (Washington, D.C.: United States Catholic Conference, 1974), 37-50.

[19] For treatments of some of these virtues in an ecological key (though not intrinsically Thomistic), see Jeffrey Bilbro, *Virtues of Renewal: Wendell Berry's Sustainable Forms* (Lexington, Ky.: University Press of Kentucky, 2018), 62ff.; and Norman Wirzba, *Agrarian Spirit: Cultivating Faith, Community, and the Land* (Notre Dame, Ind.: University of Notre Dame Press, 2022), 132.

produce the best outcomes ecologically.[20] This may be true, but outcomes are not what make something a virtue. What is necessary in this case is not a reform of Thomistic virtue ethics, but a dialogue on what makes something a virtue in the first place.

In other words, for a reform one must find something that is a virtue in the Thomistic sense (i.e., it perfects a human power/human nature) but is not conceived of by Aquinas. Three virtues central to EVE (Catholic or not) can plausibly be argued to meet both criteria: respect for nature/ecological justice, benevolence/care for nonhuman creation, and wonder. I will treat each briefly based on EVE literature.

Respect for nature, or ecological justice, is central to EVE literature and is usually grounded on the independent and noninstrumental value of animals and plants (as well as future generations of humans), with a sense of debt or responsibility to preserve that good.[21] In ecological literature, humans are not the center of the universe (antianthropocentric) and thus ecological virtue ethicists usually conceive of the world as a network of relationships of dependence;[22] this is sometimes called biocentrism.[23] Because of the goodness of nonhuman creation in its diversity,[24] "justice recognizes that living beings deserve physical and behavioral spaces."[25] In other words, for EVE, it is possible to be unjust to an animal, a plant, or an ecosystem, that is, to harm them unnecessarily. This is an asymmetrical justice, with humans having responsibility to animals and plants but there being no reciprocal responsibility; animals and plants are

[20] Ronald L. Sandler, *Character and Environment: A Virtue-Oriented Approach to Environmental Ethics* (New York: Columbia University Press, 2007), 31-32.

[21] Ibid., 64ff.; Bouma-Prediger, *Earthkeeping and Character*, 25. Some of the justifications of this virtue are incorrect, e.g., species impartiality or equality between humans and animals. See Willis J. Jenkins, *Ecologies of Grace: Environmental Ethics and Christian Theology* (Oxford: Oxford University Press, 2008), 65ff. for different groundings.

[22] Nancy M. Rourke, *Ecological Moral Character: A Catholic Model* (Washington, D.C.: Georgetown University Press, 2024), 89ff.

[23] Thomas Berry, *The Dream of the Earth* (San Francisco: Counterpoint, 2015), 79.

[24] Van Wensveen, *Dirty Virtues*, 77.

[25] Rourke, *Ecological Moral Character*, 90.

not moral subjects.[26] Something similar could be said of the literature's positing of justice owed to future generations.[27] In short, "the virtue of ecological justice names the settled disposition to act fairly when faced with the recognized legitimate claims of creatures both human and non-human."[28]

Our second test virtue goes by diverse names, such as friendship, benevolence, or care. Like respect for nature, it is central to EVE literature and often very traditionally defined: "Benevolence is the willingness to promote the well-being of another as an end in itself, even if the bonds of affection are absent and even if no one's rights demand it."[29] In other words, ecological friendship/care/benevolence is the habitual willing of good for all creatures.[30] It extends not only to animals and plants, but even to place and other nonliving parts of our environment. In other words, EVE claims our ecology (plants, animals, place, ecosystems) is a neighbor of sorts (to use biblical language). "This virtue is the active and consistent care for the flourishing of more than humans"[31] which includes the "happiness, flourishing, health, interests, or well-being of both human and nonhuman others . . . whole species and particular places, biogeographic zones, ecosystems, and watersheds."[32]

The third virtue central to EVE is wonder. Wonder is "the tendency to experience awe or an unexpected attraction to something."[33] In evaluating EVE literature, Rosalind Hursthouse says that this seems to be a new virtue.[34] Liezl Van Zyl

[26] Sandler, *Character and Environment*, 67.

[27] Urza, "La Etica," 185ff.

[28] Bouma-Prediger, *Earthkeeping and Character*, 93.

[29] Ibid., 94.

[30] Ibid., 95.

[31] Ibid., 96.

[32] Geoffrey B. Frasz, "Benevolence as an Environmental Virtue," in *Environmental Virtue Ethics,* ed. Philip Cafaro and Ronald Sandler (Lanham, Md.: Rowan and Littlefield, 2005).

[33] Rourke, *Ecological Moral Character*, 113.

[34] Rosalind Hursthouse, "Environmental Virtue Ethics," in *Working Virtue: Virtue Ethics and Contemporary Moral Problems*, ed. Rebecca L. Walker and Philip J. Ivanhoe (Oxford: Oxford University Press, 2006), 161.

concurs and makes a distinction between surprise-wonder, which comes as a reaction to something new (requiring ignorance), and appreciative wonder, which does not depend on ignorance but is closer to an appreciation/joy found in something beautiful.[35] One specific reason that EVE literature cares about wonder is that it changes the way humans make decisions about the environment. "The more clearly we can focus our attention on the wonders and realities of the universe about us, the less taste we shall have for destruction."[36] We will recognize "human connectedness with all creatures."[37] In other words, the claim is that people who habitually wonder (in the second sense) will decide differently and be less likely to destroy the environment unnecessarily.

II. Thomas Aquinas and Virtues as Wholes

My contention is that Aquinas structures his virtue ethics in just such a way as to anticipate and allow for ongoing reform and development or adaptation, and that he does this by treating the cardinal virtues (and implicitly the theological virtues as well)[38] as wholes.[39] Most wholes exhibit properties that allow them to undergo change without corruption, and so by adopting this concept Aquinas implicitly makes the same claim about virtue.[40] Put differently, this is exactly what one

[35] Rachel Carson, *The Sense of Wonder* (New York: Harper, 1998), 76-77. See also Anders Schinkel, "Wonder and Moral Education," *Educational Theory* 68, no.1 (2018): 36.

[36] Carson, *The Sense of Wonder,* xix.

[37] Jame Schaefer, "Converting to and Nurturing Ecological Consciousness—Individually, Collectively, Actively," in DeLio, ed., *All Creation is Connected,* 136-52.

[38] *De virtut.,* q. 1, a. 11, ad 16. If infused virtue is not indivisible, then it is divisible, i.e., a whole with parts. See also *De virtut.,* q. 2, a. 4, ad 9.

[39] Aquinas is, obviously, not the first to think of the virtues as wholes. For some examples see Macrobius, *In Somn. Scip.* I; Cicero, *De Invent. Rhet.* 2.53; Aristotle, *Nic. Ethic.* 6.9-11; William of Peraldus, *Summa virtutum et vitiis, de quatuor virtutibus cardinalibus, tractatus quintus: de iustitua, pars IV: De divisionibus iustituae.*

[40] We must be careful not to conceive this change on the model of substantial change. This is especially a danger since we speak of forms as substances. See *De virtut.,*

would look for if one were building a virtue ethics to anticipate the structural possibility of reform. It is not my claim that this is why Aquinas treats virtues as wholes, but that it is an unanticipated benefit of his doing so.[41]

For Aquinas, the notions of whole and part are correlative concepts. "A whole [*totum*] is what has parts [*partes*] or what can be divided into parts, and a part is that into which a whole is divided."[42] These concepts, whole and part, he explains through more fundamental transcendental notions: unity and division.[43] *Unum* is that which is undivided. A whole *qua* whole is one (undivided), but according to its parts it is many.[44] Nevertheless, a whole is by definition (potentially) divisible (on account of having parts); it is not *indivisiblis secundum se* (simple, i.e., having no parts), but has parts that build the ordered perfection of the whole. This is true of wholes that are *unum simpliciter* (substantial unities) as well as wholes that are *unum secundum quid* (accidental unities).[45] Both have parts into which they could be divided (i.e., corrupted). Yet *qua* whole they are *unum,* that is, inasmuch as they are an *ens.* What is whole is thus perfect, lacking none of its requisite parts according to its nature.[46] In other words, a whole always has an intrinsic order: relations between parts and to the whole (a union of composition or order). Types of wholes are thus types of unities (distinguished from each other by the mode of their union and whether/into what they can be divided). Parts, in turn, are that into which wholes can be divided.

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q. 1, a. 11, co. and ad 4. Likewise, not every type of whole can change without corruption.

[41] The best case we could make for Aquinas knowingly using his mereology to render virtues adaptable would be based on his use of this feature to appropriate diverse parts of the tradition before him. See, for example, *ST* II-II q. 48, a. 1.

[42] Joachim Ritter, et al., "*Ganzes und Teil,*" in *Historisches Worterbuch der Philosophie* 3 (1976): 6. See *ST* I q. 8, a. 2, ad 3; *ScG* II, c. 72.

[43] See *Super Metaphys*. X, lect. 21; Ritter, et al., "*Ganzes und Teil,*" 3-11.

[44] *ST* I-II q. 17, a. 4, co.: "totum est unum, sed est secundum partes multa."

[45] Ibid.; *ST* I q. 11, a. 1.

[46] The requisite sense of perfect here does not mean unimprovable accidentally. See *ST* I q. 26, a. 6, co.

According to Aquinas's typical formulation, there are three types of wholes:[47] a universal whole, an integral whole, and a potential whole. Aquinas describes them thus:

> First is a universal whole, which is present to each part according to its whole essence and power. . . . Next is an integral whole, which is not present to each of its parts, neither by its whole essence nor its whole power. . . . Third is a potential whole which is in the middle of the other two, since it is present to its parts according to its whole essence, but not according to its whole power.[48]

Aquinas similarly describes parts: "parts are threefold, that is integral, as walls, roof, and foundation are parts of a house; subjective, as a cow and a lion are parts of animal; and potential, as nutritive and sensitive are parts of the soul."[49]

[47] Here I am simplifying Aquinas's mereology by focusing on the types of wholes relevant to virtue. For more see R. M. Salzillo, "The Mereology of Thomas Aquinas," *Philosophy Compass* 16, no. 3 (2021); David Svoboda, "Thomas Aquinas on Whole and Part," *The Thomi*st 76, no. 2 (2012): 273-304; and Ritter, et al., "*Ganzes und Teil,*" 3-11.

[48] *De spir. creat*., a. 11, ad 2: "Sciendum est triplex esse totum. Unum universale, quod adest cuilibet parti secundum totam suam essentiam et virtutem. . . . Aliud vero est totum integrale, quod non adest alicui suae parti neque secundum totam essentiam neque secundum totam suam virtutem. . . . Tertium est totum potentiale, quod est medium inter haec duo: adest enim suae parti secundum totam suam essentiam, sed non secundum totam suam virtutem."

[49] *ST* II-II q. 48, a. 1, co.: "Dicendum quod triplex est pars, scilicet integralis, ut paries, tectum et fundamentum sunt partes domus; subiectiva, sicut bos et leo sunt partes animalis; et potentialis, sicut nutritivum et sensitivum sunt partes animae." See also *Super Metaphys*. V, lect. 20; VII, lect. 9-11; X, lect. 1; XI, lect. 10; XII, lect. 12; and *Super Nic. ethic*. I, lect. 1: "It ought to be known, however, that the whole which is a civil multitude or family has only a unity of order, according to which it is not something *simpliciter unum.* For this reason, a part of this whole can have an operation which is not the operation of the whole, just as a soldier in an army has an operation which is not the operation of the whole army. Likewise, the whole itself has some operation which is not proper to its parts but to the whole, as the conflict of the whole army, or as the drawing of a ship is the operation of the many dragging the ship. There is also a kind of whole which has a unity not only of order but also of composition, conjunction, or even of continuity, according to which it is *unum simpliciter.* In this case, there is no operation of the part which is not of the whole. In continuous things the motion of the part and of the whole is one and the same, and it is similar in compositions or conjunctions, the operation of a part is principally of the whole. For

A (heterogenous) integral whole is made of differing parts, each of which contributes to the whole.[50] Each part has an operation or function that is for the whole, but the whole is not present to each part by its essence or entire power. The whole depends on its parts for existence. This has effects in predication;[51] the whole in this case is not predicated of its parts. A wall is not a house and neither is a roof, but both are necessary to have a house; a soul is not a human, nor is a body.[52] A universal whole, on the other hand, when divided results in each part having the entire essence of the whole. This type of whole is divided by being specified (i.e., parts are species). Its parts are thus called subjective because they are the subjects of which the whole is predicated. In this case, the whole does not depend on the parts but is present to each of them by its entire essence and power. The final type of whole is called a potential whole. The parts in this case are contained by the whole as a lower form is contained in a higher. Aquinas's typical example is how the rational soul contains the vegetative as a potential part. Hence, the whole in this case is essentially present in its parts, but its whole power is not expressed in each part. In predication, the whole is most properly predicated of the most principal part (in the example above, reason) and analogously of the others by their relation to the principal part.[53] The principal part contains the power of the whole in the deepest sense, but

this reason, consideration of the whole and its parts pertains to the same science, but this is not true in the case of wholes (and their parts) which only have a unity of order."

[50] Ritter, et al., "*Ganzes und Teil*," 9; Svoboda, "Thomas Aquinas on Whole and Part," 275ff.; Carl Lofy, "The Meaning of 'Potential Whole' in St. Thomas Aquinas," *The Modern Schoolman* 37 (1959): 39-48. This could be a substantial whole (as in the human person, with the parts of soul and body) or an accidental whole (as a house).

[51] Nicolas Kahm, *Aquinas on Emotion's Participation in Reason* (Washington, D.C.: The Catholic University of America Press, 2019), 51ff.

[52] I am ignoring some additional distinctions within integral wholes, e.g., integral wholes of composition versus noncomposition (which have only a unity of order), natural versus artificial integral wholes, and so on. See Aquinas, *Super Nic. ethic.,* I, lect. 1.

[53] Lofy, "The Meaning of 'Potential Whole' in St. Thomas Aquinas," 42.

that does not necessarily imply that it contains virtually the participations of all lower powers.[54]

Aquinas uses this mereology to understand the virtues' multiplicity and unity. In question 54, article 4 of the *Prima secundae*, he affirms that we find a certain multiplicity in habits.[55] Yet, habits are one by being directed to one thing, regarding the many under the aspect of that one thing (its formal object). In other words, virtues are wholes for Aquinas, qualities (habits) constituted by a composition of parts. This is why after considering each cardinal virtue *secundum se,* he considers each *de partibus*.[56] What is interesting about this is not only that he treats virtues as wholes, but that he claims each virtue is simultaneously an integral, universal, and potential whole (i.e., containing integral, subjective, and potential parts). In the second and third sense, a virtue contains other habits as parts, not in the sense of integral parts but as a genus has species (subjective parts) or as a lower form resembles a higher form (potential).

We see this mereology especially in Aquinas's treatment of the cardinal virtues. They are principal virtues (a synonym for cardinal),[57] which implies two senses of generality for Aquinas. First, it means that these virtues are common *secundum communes rationes formales*, which I will call a general virtue.

prudence is any virtue that causes good in the consideration of reason; any virtue which makes good in the due and right in operations is justice; any

[54] There is a development in Aquinas on this point. See Kahm, *Aquinas on Emotion's Participation in Reason*, 55ff. Lofy, "The Meaning of 'Potential Whole' in St. Thomas Aquinas," 48, affirms Aquinas's early position, though this is incorrect. For example, temperance, as specified relative to touch, is the principal part of temperance taken as a general virtue but does not have the power to produce all the acts of its potential parts (e.g., humility). As Kahm says (relative to the soul), "Each power has a limited sphere of operation."

[55] This makes sense given Aquinas's metaphysics of motion: even a *simplex* form can become *multiplex* if it is involved in motion. If habits are the activation of a potency and move toward an end, they must have parts. See Kahm, *Aquinas on Emotion's Participation in Reason*, 33ff.

[56] See *ST* II-II, q. 48.

[57] *ST* I-II, q. 61, a. 3, co.

virtue which restrains and depresses the passions is temperance; and any virtue which strengthens the soul against any passion is fortitude.[58]

In this sense, the cardinal virtues constitute some general mode of virtue in some principal matter.[59] In the second sense, Aquinas claims that the cardinal virtues are specific (as opposed to general) virtues (i.e., specified by their formal objects), but also still general with respect to other virtues.[60] This is because as a specified virtue each cardinal virtue is the principal part of the general virtue.[61] Each specific virtue is a whole in three different senses and these specific virtues are general with respect to all other virtue because the formal objects that specify them (or matter on which they are exercised) are general or principal.[62] This is why, for example, Aquinas says that fortitude taken as a specific virtue has no subjective parts (while the other cardinal virtues do); its matter is *valde specialem* (though it does have both integral and potential parts).[63] Put differently, the virtues are wholes, unities of order, that when taken together constitute the *secundum quid* unity of the moral life. The virtues themselves are wholes and divisible, but their objects and subsequent form give them oneness, or indivisibility.[64]

Aquinas claims that, when taken as a quasi-integral whole,[65] a type of *per accidens* totality dividing a cardinal virtue taken specifically,[66] virtue is a whole whose parts co-constitute the whole by each contributing a unique activity and forming a

[58] Ibid.

[59] *ST* II-II, q. 129, a. 5, co.

[60] *ST* I-II, q. 61, a. 3, co. Lofy, "The Meaning of 'Potential Whole' in St. Thomas Aquinas," 47f.

[61] Lofy, "The Meaning of 'Potential Whole' in St. Thomas Aquinas," 46-47.

[62] *ST* I-II, q. 61, a. 3, co.; *ST* I-II, q. 61, a. 4, co.

[63] *ST* II-II, q. 128, a. 1, co.

[64] *De virtut*., q. 1, a. 11, ad 16.

[65] Aquinas sometimes names these parts quasi-integral and other times simply integral. "Quasi-integral" is more precise. Since virtues are simple forms, they do not enter intrinsic composition. See *ST* I-II, q. 53, a. 2, ad 1.

[66] *ST* I, q. 76, a. 8.

unity of order.[67] In this sense, habits/virtues perfect the dispositions of nature toward the end.[68] "Habits help the soul's parts operate together as a unified whole according to our human nature."[69] The integral parts of virtue must be distinguished from what Aquinas calls the acts of virtue. The acts of a virtue are the subject of which the virtue is technically predicated: attack/endurance (fortitude), command (prudence), touching (temperance), and external actions (justice). These are not what Aquinas means by the quasi-integral parts of a virtue. These acts are the very acts qualified by the virtue.[70] (Quasi-) integral parts of a virtue, rather, are in relation to these acts and form a unity of order with them. Quasi-integral parts of virtues are those (other) acts that "must concur for a perfect act of that virtue."[71] Aquinas calls them "conditions of a virtue integral to it" in both the *Commentary on the Sentences* and the *Summa theologiae*.[72] Integral parts as acts/conditions are not separate virtues (inasmuch as they relate to the principal virtue, though an act of another virtue can be an integral part of a separate virtue—e.g., *eubulia* and prudence).[73] These integral acts/conditions are part of the many that can be made one by the virtue since it incorporates these acts into itself by directing them toward its act/object. In other words, quasi-integral parts are the actions that can be said to be required by a kind of fitting necessity (final causality) for the expression of the main

[67] The Thomist tradition has nearly uniformly understood these as actions. Michael Labourdette, *La Prudence* (Les Plans-sur-Bex, Switzerland: Parole et Silence, 2016), calls them psychological conditions. It is clear they are actions as conditions.

[68] Kahm, *Aquinas on Emotion's Participation in Reason,* 112.

[69] Ibid., 114.

[70] *ST* I-II, q. 54, a. 4, ad 2.

[71] *ST* II-II, q. 48, a. 1, co.

[72] In his use of "quasi," Aquinas seems to be predicating integral analogously here and taking the prime instance from heterogeneous material wholes. Virtue, being a quality and habit, is immaterial and hence is not strictly composed by diverse parts co-constituting the whole.

[73] *ST* II-II, q. 51, a. 2, co. They do name virtues when the conditions/actions necessary for the main virtue are engaged on their own. This is one of the meanings of a potential part. See, for example, *ST* II-II, q. 128, a. 1.

act/habit.[74] Hence, each integral part is an operation or function that is for the whole, but the whole is not present to each integral part by its essence or its power, but depends on them for its existence. This has effects in predication: the whole in this case is not predicated of its parts—for example, memory is not prudence. Yet memory is required for the perfection of prudence and is directed toward acting prudently and thereby enters a type of union with prudence's main act, command.

Dividing virtue as a universal whole, a *per se* totality dividing a virtue taken specifically,[75] is a matter of specification for Aquinas. In other words, a virtue considered as a universal whole is general by predication.[76] If one can make distinctions in a virtue's formal object, then one can divide the virtue into subjective parts. Specific differences in object make for new virtues, yet the general virtue is predicated univocally of them all. Divisions in this sense would thus be species, being specified by a particular aspect of the good (serving as a formal difference). Parts in this case name virtues, distinct from each other, but not separate from the whole.[77] Hence, the whole essence and power of the virtue is present to each of its species and is expressed therein. Just as every human is fully an animal,

[74] One might wonder whether this implies an infinite number of integral parts. I do not think so. They are the necessary conditions for this act of a virtue, not simply any condition for any act of virtue. In other words, the conditions are only those that are within a line of causality begun by the end/object of the virtue.

[75] The division of a virtue as a universal whole seems to be of a virtue taken specifically. For example, temperance is divided as a specific virtue (with differing species according to specific differences in the formal object—pleasure with respect to touching). Fortitude has no subjective parts because death is one. Aquinas is clearly dividing temperance and fortitude specifically. In the case of prudence and justice, he also seems to be dividing these virtues taken as specific virtues. See *ST* II-II, q. 48, a. 1 and q. 61, a. 1. This would imply that commutative and distributive justice are species of general justice and that individual, domestic, and military prudence are species of regnative prudence. This makes sense given that general justice and regnative prudence have the most common object and other virtues are specifications of the common good and ordered to it.

[76] *ST* II-II, q. 58, a. 6, co.

[77] Both genus and species indicate the whole in this case, but under different aspects. See *ST* I-II, q. 67, a. 5, co.

so too each species of a virtue is fully that virtue. They are, however, distinct from each other by some aspect of the general matter that specifies them as particular virtues. For example, Aquinas divides temperance univocally into sobriety, abstinence, and chastity.

Virtue, taken as a potential whole, is another type of *per se* totality and divides virtue taken in general.[78] Here we find Aquinas at his most creative. By treating virtues as potential wholes, he can appropriate a wider swath of the tradition before him, while still drawing all of the virtues into a unified portrait of the moral life.[79] As he says, "in assigning parts to the virtues, we principally consider the similitude regarding the mode of virtue."[80] In this sense the whole is the general virtue, general by predication. Nevertheless, whereas the whole is predicated univocally of the parts considering a universal whole, it is only analogously predicated of the parts when it is considered a potential whole.

> The point of a potential whole is not that the parts are not really distinct but rather that each potential part truly (essentially) shares in some perfection, but only one of these parts possesses the full power of that perfection, whereas the others share in that power in decreasing series of less perfect ways.[81]

Aquinas's main comparison for this type of whole is the human soul (though he says nature too is a potential whole).[82] The soul encompasses all its *potestates,* but its principal part is the intellect. Hence, the soul as mover has virtual parts—rational, sensitive, and vegetative—though it is only one form. "The potential whole is a kind of sum total of what the soul can

[78] Interestingly, Aquinas sometimes calls these quasi-potential parts and sometimes just potential parts. I have not found a pattern in his usage. This contrasts with integral parts, which Aquinas uniformly calls quasi-integral.

[79] Jean Porter, *Justice as a Virtue: A Thomistic Perspective* (Grand Rapids, Mich.: Wm. B. Eerdmans Publishing Co., 2016), 43-44.

[80] *ST* II-II, q. 161, a. 4, co.

[81] Lofy, "The Meaning of 'Potential Whole' in St. Thomas Aquinas," 48.

[82] Kahm, *Aquinas on Emotion's Participation in Reason,* 105.

do."[83] Similarly, in the case of virtues, the *ratio* of the whole is present to the parts in a hierarchical and unequal fashion.[84] "The potential parts of a virtue are the virtues said to be joined to it which are ordained to some secondary acts or matter, as if not having the whole power of the principal virtue."[85] They "participate in something of the mode which is principally and perfectly found in some virtue."[86] The cardinal virtues taken specifically are the greatest realization of the general virtue and hence perfection is most properly predicated of them; they are the principal members in this analogical community.

Comparison of their formal notions (their mode) is the way Aquinas establishes a virtue as a potential part, by a kind of likeness to the mode (form) of a general virtue.[87] "Two things ought to be considered concerning virtues joined to some principal virtue, that these virtues are in some way fitting with the principal virtue and that in some way they fall short of the perfect *ratio* of it."[88] As Labourdette says, potential parts "only analogically realize the notion of the cardinal virtue to which they are related."[89] This judgment "is not only attendant on the matter, but more so on the mode, because in everything form is stronger than matter."[90] The potential parts "participate in something of the power of the whole."[91] In other words, potential parts of a virtue (separate virtues) resemble in some way the principal virtue (the principal part of the analogical community),[92] but also fall short in some way of the *ratio* found especially in the principal virtue (hence, the comparison to

[83] Ibid., 59.
[84] Ibid., 61.
[85] *ST* II-II, q. 48, a. 1, co.
[86] *Super Sent.* III, d. 33, q. 3, a. 1, qcla. 1.
[87] *ST* II-II, q. 157, a. 3, ad 2.
[88] *ST* II-II, q. 80, a. 1, co.
[89] Labourdette, *La Prudence,* 60.
[90] *ST* II-II, q. 137, a. 2, ad 1.
[91] *Super Sent.* III, d. 33, q. 3, a. 1, qcla. 1.
[92] This is exactly how Labourdette divides a subjective from a potential part: one is strict predication, and one is analogical (Labourdette, *La Prudence*, 60).

potential parts of the soul).[93] This general consideration helps make sense of the diverse reasons Aquinas gives for labeling something a potential part: it concerns a secondary matter, it is ordered to the end of the principal virtue, it is less difficult, and so on. Each of these implies a falling short of the full essence and power of the principal virtue. Put simply, together with the principal virtue, potential parts build an analogical community by their diverse realizations of a common general perfection. Hence, these virtues are not types/species of the principal part of this community, but simply potential parts.

III. Reforming Thomistic Virtue Ethics

By conceiving of the virtues as wholes, Aquinas has built in a mechanism for the reform of his virtue ethics. This claim requires more than what is argued above: one must argue that the types of wholes can change and that this corresponds to a proper notion of reform. I will start with reform and then return to the virtues.

Reform entails, in the first place, that the subject undergoing reform is "in an imperfect but perfectible state."[94] Thus, reform has traditionally been defined as a *mutatio in melius*, a change that further perfects the subject.[95] In other words, it is a species of change intentionally undertaken to improve some aspect of ecclesial morality, discipline, governmental structures, or doctrine.[96] Lateran IV says that reforms should be undertaken for *urgens necessitas vel evidens utilitas.*[97]

Two conditions help us to distinguish reform from its perverse imitations.[98] First, a true reform must be directed

[93] *ST* II-II, q. 80, a. 1, co.

[94] Dulles, "The Church Always in Need of Reform," 39.

[95] John W. O'Malley, "'The Hermeneutic of Reform': A Historical Analysis" *Theological* St*udies* 73, no. 3 (2012): 517.

[96] Dulles, "The Church Always in Need of Reform," 43ff.

[97] Norman P. Tanner, *Decrees of the Ecumenical Councils*, vol. 1, *Nicaea I to Lateran V* (Washington, D.C.: Georgetown University Press, 1990), 257.

[98] According to Dulles, reform comes in five main types: removing corruption, adaptation, accretion, development, and creative transformation/revolution. The first

toward the sanctification of humans. As Ulrich Lehner says: "the salvation of souls cannot be downplayed."[99] In other words, the *telos* of reform is spiritual renewal, a re-living and re-centering of life around Christ, and not "an overhaul of church teachings."[100] It is for this goal that the Church (and as a part of it, Thomism) must undertake reform. Second, though change is essential to reform, it must leave an identity intact. As John O'Malley says, "reform presupposes continuity with what has gone before."[101] In articulating this continuity, Benedict XVI says that reform consists in a "continuity of principles" and that "only the principles . . . express the permanent aspect."[102] This is what he calls the hermeneutic of reform: "It is precisely in this blending, at different levels, of continuity and discontinuity that the nature of true reform consists."[103]

If this is what reform means, it seems that Aquinas has built his virtue ethics in just such a way as to anticipate reform: a continuity of principal virtues with adaptability via the *partes virtutum*. In other words, he allows for both the virtues as well as our virtue ethics to change without undergoing corruption. This makes sense, not only because moral theology is an imprecise discipline, but also because Aquinas used the *partes virtutum* to incorporate the many different historical, philosophical, psychological, and ecclesial considerations of his time.

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type claims that things could be improved by removing something from current teaching, structure, discipline, or morality (a type of *reformatio ad pristinum*). Adaptation is simply another description of the Italian *aggiornamento*, various applications or differing emphases. Accretion is the integration of foreign ideas and practices into the life of the Church. Development is simply the actualization of the potentialities already present in a particular teaching, discipline, etc. Finally, creative transformation/revolution is the introduction of an innovation of something that is wholly new and in no way related to previous morality, discipline, structures, or doctrine.

[99] Ulrich L. Lehner, *The Inner Life of Catholic Reform: From the Council of Trent to the Enlightenment* (Oxford: Oxford University Press, 2022), x.

[100] Ibid., 3.

[101] O'Malley, "The Hermeneutic of Reform," 517.

[102] Benedict XVI, "Address of His Holiness Benedict XVI to the Roman Curia Offering them His Christmas Greetings", The Holy See (December 22, 2005).

[103] Ibid.

Furthermore, it implies that Thomists could use the *partes virtutum* similarly. If a change is for the better (greater conformity of life to Christ, e.g., an ecological conversion) and intentionally undertaken, we have an authentic reform of Thomistic ethics. The theological and cardinal virtues are continuous at the level of principal virtues, but subject to adaptation in a secondary sense, either concerning the integral parts, potential parts, or subjective parts. This is a prime example of what Paul Scherz calls Thomism's "openness to development and adaptation."[104]

When we are discussing change of a virtue considered as an integral whole,[105] we are not speaking of change in the central act of the virtue but of other acts that enter a united action with the central act. According to Labourdette, integral parts are "diverse acts or psychological attitudes . . . dispositions."[106] Recall that quasi-integral parts are parts of a virtue first by final causality (unity of order), not by formal causality (which belongs to subjective and potential parts).[107] The virtue could be expressed (but only imperfectly) without its quasi-integral parts.[108] Without windows, a house is still a house; a family is still a family when a member dies. Given the nature of integral parts as well as unities of order, it seems clear that a virtue could lose or gain a quasi-integral part without being corrupted itself. Many or fewer acts could be ordered to one object. Some conditions/acts could be necessary in some situations but not

[104] Paul Scherz, "Prudence, Precaution, and Uncertainty: Assessing the Health Benefits and Ecological Risks of Gene Drive Technology Using the Quasi-Integral Parts of Prudence," *The Thomi*st 81, no. 4 (2017), 507-37.

[105] Concerning an integral whole, a virtue can change in subject. This denotes a virtue becoming more rooted in the psychological acts of the soul or forming more of the acts it orders to its object. "Nevertheless, we can say it is changeable insofar as the subject which participates in it more or less changes with respect to it." (*De virtut.*, q. 1, a. 11, ad 2).

[106] Labourdette, *La Prudence,* 59-60.

[107] Speaking more precisely, a quasi-integral part does have a kind of shared formal causality: the order serves as a shared form. Yet Aquinas does not think that this shared order results in the predication of the main virtue of its integral parts.

[108] Labourdette, *La Prudence,* 60.

others.[109] These types of unions endure despite losing or gaining members.[110] This means that the virtue (and our virtue ethics) could change by the addition of a new condition/act necessary given our time.[111] Aquinas would probably call this a change in subject, that is, an increase in the depth that the subject participates in the virtue (and this, he holds, is an essential change in the virtue but not in the subject).[112] Likewise, though it seems less likely, it is possible that Aquinas identified something as a necessary condition for a virtue which is not really a condition (or no longer a condition). So the virtue (and our virtue ethics) could change by a kind of subtraction as well. Furthermore, different acts/psychological attitudes might be necessary for different species within a virtue (e.g., a condition/act is necessary for political prudence but not individual).[113] Aquinas's definition of integral parts is expansive, and so one could easily identify a certain set of such parts for individual

[109] Aquinas even has an example of this: *euboulia*. That counsel is not always required for prudence is evidence that it is a separate virtue and a mere potential part of prudence. Its act becomes integral (i.e., enters a united action), though, when ordered to the end of prudence.

[110] F. Russell Hittinger, *On the Dignity of Society: Catholic Social Teaching and Natural Law* (Washington, D.C.: The Catholic University of America Press, 2025), 20 and 39.

[111] A good example of this might be new psychological research naming different conditions/psychological states necessary for fortitude. For an example see Nathan King, *The Virtues of Endurance* (Oxford: Oxford University Press, 2025).

[112] Ruling out an increase or decrease in a virtue due to an increase or decrease in cause in *ST* I-II, q. 52, a. 2, co., Aquinas says "For if this growth is understood by addition, this could only be on the part of the form itself or on the part of the subject. If on the part of the form, that addition or subtraction would change the species, just as the species of color changes when a pale thing becomes white. If this addition is understood on the part of the subject this is only because some part of the subject, which did not previously have it, receives the form (as it is said that cold increases in a human who was merely cold in one part and is now cold in many parts) or because some other subject comes to partake in the same form (as a hot thing is added to another, or white to white). But in both ways, we do not say we have more white or hot, but greater." Yet a change of subject is an essential change for the habit. See *De virtut*. q. 1, a. 11, co. See also William Mattison III, *Growing in Virtue: Aquinas on Habit* (Washington, D.C.: Georgetown University Press, 2023), 107ff.

[113] Aquinas explicitly says this for vengeance. See *ST* II-II, q. 80, a. 1, ad 1.

prudence or prudence in general, but when taken specifically (as a particular species), new (or more specific) acts/conditions become integral.[114] In each of these ways, the integral whole of a virtue can change without corrupting.

Change of virtue considered as a universal whole is a change intrinsic to virtue. So, as above, both the virtue and our virtue theory would change. As Aquinas says, virtues can grow or diminish by addition or subtraction within the essence.[115] In other words, this would be growth by determination,[116] a change caused by the discovery of a new species of virtue. This would be akin to discovering a new biological species. Perhaps, there is a new species of temperance, for example. As is well known, Aquinas posits three species of temperance, relative to food, drink, and sex.[117] I have had students suggest that we should posit separate virtues relative to the pleasures associated with both sleep and technology, that these pleasures are specifically distinct types of touching/contact and so have separate habits relative to them. A commonsense confirmation of this is the ability to have moderation in relation to one of these objects but not others. "It is characteristic of virtue that one act virtuously in all cases."[118] If one could observe moderation with food, drink, and sex but not sleep, then there would seem to be a specific difference in object and thus a separate virtue. Aquinas's theory could very easily accommodate this addition. Similarly, we could plausibly subtract a species from a virtue or relocate it into a different genus (thus predicating a virtue of a new subject, or denying predication to an old subject). Aquinas built his theory to anticipate this type of intrinsic change in a virtue.

[114] On Aquinas's conception, one could even posit a new virtue for the secondary acts of a virtue (for memory, for example) whose act would then be an integral part of the main virtue but would be a potential part in itself.

[115] *ST* II-II, q. 24, a. 5, co.

[116] *De verit.,* q. 21, a. 1, co.

[117] *ST* II-II, q. 143, a. 1.

[118] *De virtut*., q. 1, a. 11, ad 10.

Change of a virtue considered as a potential whole is purely a change in virtue theory, not in the principal virtue itself. It is no change in a virtue to say that some other habit resembles it. As seen earlier, this is a formal consideration (like subjective parts), but rather than univocal predication of the virtue, a separate virtue resembles the principal virtue (prime analogate) within the general virtue (analogical community). Considering potential parts, our virtue ethics could easily grow or diminish without corruption. By diminishment, Thomists have, possibly, posited a potential part of a virtue which is no longer considered a virtue. Addition seems more likely. Any habitual perfection of a human person that resembles the principal virtue but falls short of the perfect *ratio* is a potential part of that virtue. Following Aquinas, we do not need to be strict concerning this category. If one can rightly predicate the general virtue of both the main virtue and the secondary virtue (e.g., by an analogy of proportion or proportionality), one can rightly say that there is a potential part of that virtue, even if we have not (or Aquinas has not) identified this perfection previously.

IV. Reforming Thomistic Virtue Ethics: The Ecological Virtues

As a test case for how this structural possibility for reform could function, we can return to the ecological virtues identified in part I: wonder, respect for animals, and care/benevolence. Can Aquinas's treatment of the virtues as wholes help us to assimilate these virtues?

Regarding respect for nature, is there a special aspect of the good here that would require Thomists to posit an additional virtue by which humans owe things to animals/plants? Inasmuch as this point rests on the noninstrumental good of nonhuman creatures (as it does for a lot of EVE literature), Aquinas's metaphysics are surprisingly accommodating.[119] Nevertheless, the

[119] For the claim that nonhumans are completely instrumental see Benzoni, *Ecological Ethics and the Human Soul,* 41ff. For better accounts, see George, Brock, and Torretta. The major mistake Benzoni makes in his analysis is taking the term

good of something, intrinsic or otherwise, is not the ground on which Aquinas posits justice. Strictly speaking on Aquinas's terms, we cannot owe anything to nonrational creatures, whether they are intrinsically good or not. They cannot possess a *ius,* strictly speaking.[120] Aquinas's ethics could not, without fundamental alteration, accommodate another subjective species of justice. This truth about nonhuman animals and plants, however, does not completely preclude an extended notion of justice. Aquinas often extends the notion of justice beyond its strict sense, one that requires both parties to be rational agents. For example, he says that we can be unjust to children (who are not strictly other than their parents and who do not yet have full use of their rational faculties) or to oneself (who, though rational, is clearly not other).[121] It is in this larger sense of justice that it seems possible to find a place for an ecological justice. In other words, treating the virtues as wholes opens new possibilities for integrating a sense of debt to nonhuman creatures.

Put simply, it seems possible to claim that ecological justice—what we owe to other nonhuman creatures—is a potential part of justice. For a potential part one needs only to have a resemblance to justice properly speaking: a relation *ad*

"instrumental" in a uniquely modern sense, that is, as a means (as opposed to Aquinas's sense of *ad finem*). For Aquinas, many things are both good in themselves (formally) as well as ordered toward higher goods (finally). Instrumental in Aquinas's sense is about the relation between two goods (or even more precisely, between two agents' activities) but does not imply a purely extrinsic account of the good. See Daniel McInerny, *The Difficult Good: A Thomistic Approach to Moral Conflict and Human Happiness* (New York: Fordham University Press, 2006), and Brock, "Aquinas the Conservationist," 35: "Now we should not confuse what Thomas here calls being 'good for another' or 'of another' with being good merely as a means. A means, as such, is good only as conducive to some further result, some end. Yet even a genuine end, a noble good, can be a mere 'good of another' in the sense that it is only for another to enjoy." Even if instrumentality were taken in a purely modern sense, nonhumans are not instrumental toward the human good alone. Their instrumentality to humans would be limited by their instrumental ordering to other goods, e.g., the glory of God.

[120] *ScG* III, c. 112.

[121] *ST* II-II, q. 58, a. 2; q. 59, a. 3; q. 26, a. 9.

alterum[122] and some kind of exchange/debt between rational and nonrational creation. It is easy to establish the claim of alterity with nonhuman creation. The heavier conceptual lift is an exchange/debt. It seems possible, nevertheless, to argue that the human to nonhuman relationship bears an analogous (or metaphorical, depending on the other side of the relation) likeness to an exchange (both in the commutative sense and in the distributive). With respect to distributive justice, if Aquinas allows that we can analogously predicate distributive justice of God in relation to humans,[123] then it does not seem to be much of a stretch to say that humans could owe something to nonhumans in justice (especially if we, like God, have undertaken a previous act that implies future debt).[124] As Aquinas says, God rules the lower through the higher (i.e., distributive justice), and the higher owe things to the lower.[125] Likewise, tilling and keeping, as Francis teaches, "implies a relationship of mutual responsibility between human beings and nature," resembling commutative justice.[126] Of course, ecological justice would fall short of both aspects of justice strictly speaking. Though there is alterity, there is not equality between humans and animals/plants, nor is there a strict notion of debt based on exchange. Nevertheless, this is exactly the role potential parts play in Aquinas's ethics.[127] They merely resemble the main part, and ecological justice seems to resemble justice. For further evidence, one can simply look at a debate that recently played out in the pages of the *American Catholic Philosophical*

[122] As Merkelbach says, being *ad alterum* is the minimum to reflect a likeness to justice. See Benoit Henri Merkelbach, *Summa Theologiae Moralis* (Paris: Desclee de Brouwer et Soc, 1938), 269.

[123] *ST* I, qq. 21-22.

[124] Properly speaking, we would owe things to ourselves. See *ST* I, q. 21, a. 1, ad 3.

[125] *ST* I, q. 103, a. 6, co.

[126] Francis, *Laudato si'*, 67.

[127] Nor would this claim contradict *Cathecism of the Catholic Church* 2418: "It is contrary to human dignity to cause animals to suffer or die needlessly." Of course, this is the case. It does not follow, however, that one action cannot be contrary to two virtues. Causing animals to suffer needlessly could be analogously unjust to animals (strictly unjust to God) and contrary to human dignity (wronging ourselves).

Quarterly on this very topic.[128] Both sides admit that, according to analogous predication, one can say that we have a debt to nonhuman creation.[129] That is all Aquinas needs to posit a potential part.[130]

I am not convinced the same can be said for wonder in its first sense. As is well known, Aquinas takes wonder to imply ignorance (it is a desire for knowledge). So wonder, inasmuch as it is a lack (not inasmuch as it is a desire), is not a virtue.[131] What about appreciative wonder? Could Thomists take on this notion? It is clear they already have. Josef Pieper, for example, developed the Thomistic sense that wonder is the cause of pleasure.[132] Certainly, if Thomists were trying to be precise, they would want to reduce appreciative wonder (the joy of achieving one's desires relative to knowledge) to contemplation, joy, or wisdom. Nevertheless, that Aquinas has a name for this activity (the joy caused by apprehension of a beautiful object) and names it a perfection of the human person (possibly *the* perfection: contemplation) would seem to point to the possibility of adopting at least some EVE claims about wonder and the environment. Likewise, Aquinas's doctrine of wholes seems to allow this sense of wonder a clear place in practical reason. Aquinas has other integral parts of prudence that affect

[128] Paul A. Macdonald, Jr., "Acknowledging Animal Rights: A Thomistic Perspective," *American Catholic Philosophical Quarterly* 95, no. 1 (2021): 95-116; William Diem, "Why Animals Have No Rights," *American Catholic Philosophical Quarterly* 96, no. 3 (2022): 485-97; Paul A. Macdonald, Jr., "Expanding the Domain of Justice to Include Animals and Animal Rights," *American Catholic Philosophical Quarterly* 96, no. 3 (2022): 473-84; William Diem, "Reply to Macdonald," *American Catholic Philosophical Quarterly* 96, no. 3 (2022): 505-10; Paul A. Macdonald, Jr., "Animal Subjects and Animal Rights: A Response to William Matthew Diem," *American Catholic Philosophical Quarterly* 96, no. 3 (2022): 499-504.

[129] Diem, "Why Animals Have No Rights," 488.

[130] Of course, the primary sense of ecological injustice is toward God or other humans (and possibly angels). See Brock, "Aquinas the Conservationist," 30. An extended notion of debt would not imply that animals, plants, and ecosystems bear rights in the proper sense.

[131] See, for example, his treatment of wonder in Jesus, *ST* III, q. 15, a. 8.

[132] *ST* I-II, q. 32, a. 8, co.; Josef Pieper, *Only the Lover Sings: Art and Contemplation,* trans. Lothar Krauth (San Francisco: Ignatius Press, 1990).

decision making only occasionally (possibly for only one species). Could wonder be similar? Inasmuch as prudence considers the use of nonhuman creation, ecological wonder (the contemplation of the goodness and beauty of God in creation)[133] can be a condition or act necessary for that virtue. Wonder affects the conditions of prudence by being incorporated into decision making concerning nature. The one who wonders, contemplates, and rejoices in the goodness of creation will decide differently.[134]

What of care (beneficence) or benevolence for nonhuman creatures?[135] In some sense, this EVE virtue is the most difficult to incorporate into Thomistic ethics. The first difficulty is that Aquinas does not clearly treat the theological virtues as wholes, though he does hint in this direction. If one were to make a case, it is easier with integral and potential parts than with subjective.[136] Yet, even if we posited integral or potential parts

[133] For the classic treatment that moves from a sacramental/contemplative function to some kind of care for creation, see Jenkins, *Ecologies of Grace*.

[134] Alternatively, one could claim that wonder is annexed to wisdom and, as Aquinas says, wisdom is also practical and not simply contemplative/speculative.

[135] For the best discussion of this from a Thomistic perspective, see Brock, "Aquinas the Conservationist." For another author who agrees that Thomas's thought here has environmental relevance see Jean-Pierre Torrell, *Saint Thomas d'Aquin: Maître spirituel* (Paris: Cerf, 2015), 320.

[136] At least a plausible case can be made that the theological virtues are also integral, universal, and potential wholes. Considering the theological virtues as universal wholes would seem to present the most difficulty. They all have God for their object, so there can be no special aspect of the object that would divide the virtue into subjective parts. Nevertheless, if one includes the secondary objects (e.g., truths of the faith for faith), one might have a case. We assent to the whole of divine revelation (Catholic faith) but others only assent to part of the secondary object (other Christian denominations). This is not equivocation but a division of the secondary object. Something similar could perhaps be said for hope and love. What about integral or potential parts? Take faith for example. Are there not many other acts/conditions necessary for one to make an act of faith? Aquinas treats love as a kind of integral part of the act of faith, a causal act that is ordered toward faith. Concerning potential parts, one might say that there are habits we have of faith that do not have God as their object (i.e., we are habitually inclined to believe certain people, such as our parents). These resemble the virtue of faith but fall short and so would be potential parts. Something similar could be said about love. Love has many conditions or acts that are integral to it. For example, attention is central to

of charity, benevolence for nonhuman creatures would be neither. Benevolence and beneficence are interior and exterior acts, respectively, of charity (not an integral or potential part of charity).[137] On the other hand, if benevolence is an act of charity, a Thomistic case can be made that we have benevolence for nonrational creatures. A distinction Aquinas draws in question 27, article 3 of the *Secunda secundae* can help to ground this claim. There, Aquinas says that the preposition "for [*propter*]" is used in different senses relative to the four causes. In the formal sense, we love something for its intrinsic goodness, "formally good, and for this reason loveable."[138] The beauty and goodness of a landscape, an ecosystem, a tree, an animal, and so on, make them intrinsically loveable.[139] For Aquinas, all things are good and therefore loveable.[140] "Its goodness, real or imaginary, calls forth our love, by which we will that it should preserve the good it has, and receive besides the good it has not, and to this end we direct our actions."[141] It is for this reason that we want things for nonhuman creatures.[142] Aquinas says that we "wish for their preservation [*conservari*] for the honor of God and their usefulness to

love (as many note). Likewise, Aquinas takes the virtue of love to be friendship with God, yet other *communicationes* (not based on God), like political friendship, or friendships of use or pleasure, fall short of but still resemble true friendship. One might argue the same thing for natural hope and for the conditions of hope (if there is such a thing as natural hope).

[137] *ST* II-II, q. 31, s.c.

[138] *ST* II-II, q. 27, a. 3, co.: "formaliter est bonus, et per consequens diligibilis."

[139] Brock ("Aquinas the Conservationist," 25) and George ("Aquinas on the Goodness of Creatures and Man's Place in the Universe," 83-84) disagree on this point. George thinks that we can love nonrational creatures with a love of benevolence, Brock only with a love of concupiscence. Speaking technically, Brock is right. Nevertheless, it seems possible that we make acts of love that terminate in a nonrational creature, if we habitually will higher goods as well as understand "terminate" here in a metaphorical sense since nonrational creatures cannot really possess the good we will for them.

[140] This simply follows from Aquinas's metaphysics. Love is deeper than simply willing something for someone. It is the fundamental *complacentia* or *unio* to a good. See Josef Pieper, *Faith, Hope, Love* (San Francisco: Ignatius Press, 1997), 139ff.

[141] *ST* I, q. 20, a. 2, co.

[142] Brock, "Aquinas the Conservationist," 26.

humans."[143] The first part of this clause implies that we will the things necessary for nonhumans to continue existing and this is to love them (as long as we realize that since they are not rational creatures they cannot possess the good in the proper sense and so we love them metaphorically speaking, and more properly love persons and God).[144] The second part of the quotation brings in *propter* inasmuch as it relates to both efficient/material and final causes. Love, Aquinas says, could be on account of what induces us to love something good. All creation is sustained in being, that is, loved, by God himself. This induces us to love nonhuman creation on account of its origin. Considering the final cause, since plants, animals, and ecosystems are not the highest good we love them on account of others: human use (including their quasi-sacramental contemplative function) and the honor of God.[145] Nor is this sense of "for the sake of" in competition with the intrinsic goodness of these things and our will to preserve that intrinsic goodness, just as a formal and final cause are not in competition.

Furthermore, even considering the aspect under which nonhuman creation is *ad finem*, the higher good is not only human use.[146] Diverse higher goods—material, spiritual, and divine—put diverse limits on use.[147] We should love and be beneficent toward nonhuman creation as long as this remains limited by the higher goods of universal human use and the glory of God. Put differently, we will goods for nonhuman creatures as long as these remain ordered to higher goods; this is a qualified love, in other words.[148] Likewise, Aquinas acknowledges senses in which the integral wholeness of the world is a greater good than humans (at least in extension).[149]

[143] *ST* II-II, q. 25, a. 4, co.

[144] *ST* II-II, q. 25, a. 3, co.

[145] Brock, "Aquinas the Conservationist," 26ff.

[146] Leblanc, "Eco-Thomism," 295.

[147] Brock, "Aquinas the Conservationist," 29ff.

[148] *ST* I-II, q. 26, a. 4, co.; Brock, "Aquinas the Conservationist," 35. This is simply another way of distinguishing between a love of concupiscence and a love of benevolence, a qualified vs. an unqualified love.

[149] *ST* I, q. 7, a. 2; q. 50, a. 2, ad 4; Brock, "Aquinas the Conservationist," 32.

That too would limit human use to preserve the integral wholeness of the world. If the above is correct, then destroying nonhuman creation would be contrary to charity if it is not for the sake of a higher good. It would be distorted self-love, not true love for human beings, or God, or subrational creation. Put differently, Aquinas does allow a type of metaphorical *communicatio* with nonhuman creation,[150] possibly a potential part of charity not sharing fully in the proper *ratio* of friendship.[151] In this sense, all creation shares a fellowship in being created by God, reflecting his goodness in the ordered diversity of the world, and ordered to God's glory. These extended senses could firmly ground a Thomistic ethics of love for nonhuman creation and thus the sense of communion with nature that Francis teaches.[152]

[150] Brock, "Aquinas the Conservationist," 22-23.

[151] Leblanc, "Eco-Thomism," 300. This issue is intimately bound up with eschatology because the *communicatio* of charity is intrinsically eternal. For Aquinas's claims about what kind of creatures will share in eternity see George, "Aquinas on the Goodness of Creatures and Man's Place in the Universe," 120ff. Aquinas is quite clear that there will be no plants or animals in heaven. This seems to be based on two commitments: that animals and plants are not integral parts of the universe and that to exist eternally would do violence to them. If one were to contest either claim, one could do so from other parts of Aquinas's thought. First, Aquinas at least strongly suggests that the perfection of the universe requires every grade of being. See, for example, *De spir. creat.*, a. 5, co.; and Gregory Doolan, "Aquinas on the Demonstrability of Angels," in *A Companion to Angels and Medieval Philosophy,* ed. Tobias Hoffman (Leiden: Brill, 2012). One could argue that nonrational animals and plants are essential parts of the universe and not mere adornment, similar to the angels. In other words, one would have to argue that material nonrational creatures are integral parts of the universe. Likewise, taking the second point, it does seem clear that eternal existence does a certain amount of violence to a material creature "who is made for the world of change." But if it is possible to think that eternity does no violence to human bodies (or the elements of which Aquinas thinks they are composed and so will exist in the eschaton), then possibly a similar argument could be made for nonrational animals. This would have to be based on a shared passive potency in human bodies and nonhuman bodies. For a short discussion on the use of friendship in a metaphorical vein see Thomas Hill, Jr., "Comments on Frasz and Cafaro on Environmental Virtue Ethics," *Environmental Virtue Ethics* 8, no. 2 (2001): 59-62.

[151] *ST* I, q. 47, aa. 1-2; q. 65, a. 2, co.

[152] E.g. Francis, *Laudato si'*, 240. This would, in turn, allow us to understand the vices vis-à-vis non-human creation as well (e.g., apathy, or sloth). For an example, see

Finally, though I did not mention it above, it is possible to consider an expansion of Thomistic ethics via a subjective part. EVE literature does not often posit a separate aspect of the good to correspond to environmental decision making, preferring to outline what it is and its qualities. On the other hand, Thomists could posit a new species of prudence to account for decision making that is ordered toward the good of the ecosystem, or the ecological common good.[153] This virtue would not be an art (i.e., the use of subrational creation to produce artifacts), even if it is practical. This species of prudence would denote commanding in light of the whole of an ecosystem. Like other species of prudence, this type of prudence would rely on rightly ordered human desires concerning the use of nonhuman creation considering this whole and would deliberate relative to them. Love for the goods identified earlier, in other words, serves as the beginning of this type of prudence: the continued existence of the species, the order/relations of the ecosystem, use by all other humans (including future humans), and finally the glory of God. One could call this ecological prudence. As Aquinas says, "[Regnative] prudence . . . is divided into different species, based on the diverse species of multitudes."[154] Wherever there is a special sense of a multitude (many ordered toward a common good), there is a different species of prudence. Certainly, there is a diverse ecological multitude ordered *ad unum* (God's glory) according to Aquinas. He even thinks that humans and all other existing things are integral parts of the universe and form this whole together.[155] If there is a particular shared good here, and humans have a directive role (at least over subsections of the rest of creation), then there can

Philip Cafaro, "Gluttony, Arrogance, Greed, and Apathy: An Exploration of Environmental Vice," in Cafaro and Sandler, eds., *Environmental Virtue Ethics,* 135-53.

[153] In fact, Thomists have already done this. For an example, see Nicanor Austriaco, "Living the Natural Moral Law and Respecting the Ecological Good," in *Green Discipleship: Catholic Theological Ethics and the Environment* (Winona, Minn.: Anselm Academic, 2011), 150-62.

[154] *ST* II-II, q. 48, a. 1, co.

[155] Jenkins, *Ecologies of Grace*, 148ff.

be a particular species of prudence. This would be ecological prudence: the habitual inclination to counsel, deliberate, and command toward the ecological common good.[156]

CONCLUSION

In the end, even if my suggested integration of ecological justice, benevolence/care for creation, and wonder cannot be sustained (at the very least it needs further elaboration), the larger point is solid: by conceiving of the virtues as simultaneously integral, universal, and potential wholes, Aquinas's thought can integrate and adapt to new developments. Developments in the Church's moral theology do not require "an entirely new vision of the Christian moral life."[157] Built into the virtues, as well as Aquinas's virtue ethic, is already an adaptability—continuity in principal virtues but change in the virtues' parts. This is clearly another instance of Thomism's "incomparable vigor and capacity of invention."[158] It anticipates what Benedict XVI later called a hermeneutic of reform. In conclusion, I would like to highlight some of the additional benefits this brings to Thomism, the Catholic environmental movement, and the Church as a whole.

One of the primary benefits of conceiving the virtues as wholes is that it allows Thomism to maintain itself as a historical community of inquiry but also adapt within the Church. In other words, Thomism is a living Catholic tradition. As Gilson says, "This creative activity of Thomism is what we now need to revive, and the only way to revive it is to put its principles to good use again."[159] The infused virtues are

[156] Another proposal, with a stronger case, would integrate ecology into each of the other common goods identified by Aquinas rather than positing a separate common good and therefore a separate virtue of prudence.

[157] Torretta, "Thomas' Green Thumb," 224.

[158] Georges Cottier, "Le Thomisme et modernité," in *Saint Thomas au XXe siècle : Colloque du centenaire*, ed. Serge-Thomas Bonino (Toulouse: Saint-Paul Editions Religieuses, 1993), 352-61, at 358.

[159] Etienne Gilson, *The Spirit of Thomism* (New York: P. J. Kenedy, 1964), 95.

precisely those "through which humans relate well to the order in which they are citizens with the saints and part of the household of God."[160] If this household can change, so can the virtues. By conceiving of the virtues as wholes, Aquinas has given Thomism the ability *agere ut pars,* as Cajetan puts it.[161] The last four pontificates have emphasized ecological issues, posited ecological virtues (and thus also ecological sins), and called Catholics to "live in communion with God, with others, and with all creatures."[162] If Thomism refuses to incorporate these elements, it will cease to act as a part in some sense. On the other hand, one could easily make the opposite error, allowing a new context or concerns (ecological concerns in this case) to generate a purely separate set of virtues or (even worse) an entirely different moral methodology, which has happened to Thomists (or at least some Dominicans) in the past (e.g., casuistry).[163] This leaves us with a disintegrated moral account. This is not true reform. Aquinas's conception of the *partes virtutum* allows us to avoid both.

In addition, this insight of Aquinas (that virtues are wholes) also brings numerous benefits for environmental ethics and for the Church. Primarily, it keeps Catholic environmental ethics from becoming sectarian.[164] Some scholars claim that traditional virtue ethics are incompatible with the environmental movement and thus they invent a whole new virtue ethic.[165] In other cases, Catholic environmentalists make extensive use of

[160] *ST* I-II, q. 63, a. 4, co.

[161] Yves Congar, *I Believe in the Holy Spirit,* trans. David Smith, vol. 2 (New York: The Crossroad Publishing Company, 2006), 18; Yves Congar, *True and False Reform in the Church,* trans. Paul Philibert (Collegeville, Minn.: The Liturgical Press, 2011), 229ff. and 338-39.

[162] Francis, *Laudato si'*, 240.

[163] James Keenan, "Applying the Seventeenth-Century Casuistry of Accommodation to HIV Prevention," *Theological Studies* 60, no. 3 (1999): 492-512; Albert Jonsen and Stephen Toulmin, *The Abuse of Casuistry: A History of Moral Reasoning* (Berkeley, Calif.: University of California Press, 1988).

[164] Congar, *True and False Reform,* 224ff.

[165] Louke van Wensveen, "Cardinal Environmental Virtues: A Neurobiological Perspective," in Cafaro and Sandler, eds., *Environmental Virtue Ethics*.

implicitly utilitarian moral methodologies for analyzing environmental issues.[166] Both of these impulses are disintegrating, at best. If Catholic moral theology is to have any unity, it must have a continuity of principal virtues. It is through these that we can integrate new virtues in a way that does not fundamentally change the Catholic vision of the human person. On the other side, Aquinas gives the Church a method for incorporating new insights in ethics that connect them to the wider Christian vision of the human good.[167] If environmental virtues are to have historical staying power, they must be integrated into a wider vision of the human good and be lived by a community. Aquinas's conception can help integrate them into the Church's vision and the community of the Church.

Finally, Aquinas's conception helps both catechesis and pastoral care. Catechetically, organizing the virtues as wholes gives a clear, easy, and succinct way of teaching them. We often teach the theological and cardinal virtues. If we relate other considerations to them as parts it gives us a clear place to teach new virtues as well. Likewise, speaking pastorally, Aquinas can help us articulate more concrete standards for Catholic environmental (virtue) ethics. After reading *Laudato si'*, for example, many were left wondering how to specify ecological virtue and sin. Aquinas's conception not only gives the ecological virtues a stable foothold in Catholic anthropology, but also enables us to cultivate them and, ultimately, confess our moral failures vis-à-vis the environment, ourselves, others, and God.[168]

[166] The key to avoiding utilitarian moral methodology in environmental ethics is integrating remote effects of actions (which for Aquinas are normally circumstantial but are central to many environmental harms) into prudence.

[167] For a great example of this, see Scherz, "Prudence, Precaution, and Uncertainty," 525ff.

[168] Francis calls these "sins against creation." See Francis, *Laudato si',* 8.

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