

is a cause *per accidens*" (14), and that "there is no consummate badness (*summum malum*)" (15).<sup>196</sup>

Aquinas's reasons for producing this elaborate treatment of natural and moral badness at this very early stage of the development of his account of providence remain to be seen.

## IV. GOD AS NATURE'S GOAL

### 1. Reorientation

At the end of Book III's first, introductory chapter, Aquinas divides his projected investigation of divine providence into three big topics, the first of which he characterizes as having to do with "God himself in so far as he is the end of all things," God's omega-aspect (1.1867*b*).<sup>197</sup> Since III.64 is unmistakably the beginning of Aquinas's investigation of the second big topic, God's universal governance, it looks offhand as if he intends to devote chapters 2–63 to his treatment of God as the universal goal.<sup>198</sup> In the first two of those chapters Aquinas does carry out a general investigation of the nature of agents, actions, and ends that makes an altogether appropriate preamble to a consideration of his thesis that God is (somehow) the unique, universal, ultimate goal of the actions of created agents.<sup>199</sup> However, as we've just seen, Aquinas's chapters 4 through 15 constitute a treatise on badness. God is mentioned only briefly in the twelve chapters that make up the treatise, and it's unclear how, if at all, Aquinas intends his analysis of badness to contribute to his consideration of God as goal.<sup>200</sup> So, setting aside the uncertainly relevant treatise on badness, it seems right to say that Aquinas's investigation of God's omega-aspect occupies not III.2–63 but just III.2–3 and 16–63.<sup>201</sup> Within that latter series of chapters, he devotes III.16–24 to God as the goal of created things generally, the topic of this chapter, and III.25–63 to God as the ultimate goal of human beings specifically.

In chapter 16, Aquinas resumes the line of development that seems to have been interrupted by the treatise on badness, and he does so in a way that apparently acknowledges the interruption. In view of his having argued in chapter 2 that "every agent acts for an end" and in chapter 3 that "every agent acts for something good," it surely looks as if the main reason for arguing in chapter 16 that "something good is the end of each and every being" (16.1985) must be to remind the reader of what has already been established, before the treatise on badness. And, in fact, each of III.16's four paragraphs is closely related to one or more paragraphs in III.2 and 3.<sup>202</sup> Apparently, then, the primary function of III.16 is to reset the stage for a resumption of the account of agents, actions, and ends designed to lead to an explanation and justification of Aquinas's thesis that God is nature's

goal. Chapter 16 adds nothing substantive to the line of development begun in III.2–3, not even a reference to God, who goes unmentioned also in those two chapters at the head of the line.

## 2. Reintroducing God

On the basis of chapter 16's review and reorientation, Aquinas begins again in chapter 17 to move forward along the main line of development in at least two respects. For one thing, he now uses 'ultimate end' in an absolute, universal sense (as he typically wasn't using it earlier in Book III).<sup>203</sup> This is already apparent in the chapter's thesis, that "*all* things are in an ordered relationship to a *single* good as their ultimate end" (1989). Improbable as this thesis seems at first glance, it does have the look of a natural step to be taken by someone trying to show that God is nature's goal, in whatever sense Aquinas means to defend that claim. For another thing, it's in chapter 17 that Aquinas explicitly reintroduces God as essential to the universal teleological account he's developing in Book III. Although the chapter's thesis stops short of identifying the "single good" it refers to, every one of the chapter's eight arguments explicitly identifies it as God himself.

The first of those arguments is an attempt to identify the single good as God by inferring the identification from considerations developed in III.2–3 and reviewed in III.16. The argument has two fatal but instructive flaws. In the first place, its opening inference is plainly invalid:

If nothing tends toward any thing as an end except in so far as that thing is good, then it must be that what is good, in so far as it is good, is an end. Therefore, whatever is the *highest* good is above all (*maxime*) the end of *all* things.<sup>204</sup> (17.1990)

In order to support the crucial subconclusion derived in the second sentence, this opening inference needs more than it provides in its one premise; and some of what it needs it really cannot get. For instance, the inference would look stronger if it included a premise that can be found explicitly in another of the chapter's arguments: "all things are found to be ordered in various degrees of goodness under a single highest good" (17.1993). But of course this premise itself needs support. It seems very unlikely that all goods can be plausibly ordered in such a way that the various rankings plainly converge as they go up, even if we leave the ranking principles altogether implicit and intuitive. Consider just physical and intellectual pleasures, and take it for granted that the latter goods generally outrank the former, whatever the ranking of goods within each sort might be. The pleasure of proving a mathematical theorem, then, is a higher good than the pleasure of scratching an itch. But, even so, it doesn't follow that proving a theorem is for *all* things a higher good than scratching an itch.

Of course it's as plausible as it is inane to say, in very broad terms, that just as God is even better than theorem-proving, so is he far, far better than itch-scratching. However, the ranking of goods, even as crudely as that, isn't all that's at issue here.

What else is at issue might be described as the truth or falsity of the single, conditional premise. Its antecedent, "nothing tends toward any thing as an end except in so far as that thing is good," may be granted on the basis of III.3, but its consequent, "it must be that what is good, in so far as it is good, is an end," seems plainly false. For something to be X's end, it must be not only something good but also something that X intends or at least can intend (in the broad sense of 'intend' Aquinas is using in this investigation).<sup>205</sup> And Aquinas would agree that if X is a cat, X *cannot* intend any intellectual pleasure; and so no such higher good can be an end for a cat. But if that whole range of higher goods, or ends, is closed to cats, then what's to show that any cat could tend toward the *highest* good? What's to show that "the highest good is above all the end of *all* things," including cats? Even if we grant that all ends are goods, we have reason to deny, or at least to doubt, the premise's overstated consequent—namely, that all goods are ends.

Five more of the arguments of III.17 are like this first one in that they set out to infer the identification of the single good as God.<sup>206</sup> None of them is as flawed as the one we've just been looking at, but neither is any of them convincing. The most interesting of these five is the chapter's eighth and last argument, based on the etiological ordering of the four causes:

- 1       The end takes first place among the other kinds of causes,
  - 2       and all the other kinds of causes derive from it their function-
  - 3       ing as actual causes. For an *agent* does not act except for an
  - 4       *end* (as was shown [in III.2]), but it is by an agent that *matter*
  - 5       is brought to the actuality of a *form*. So matter becomes
  - 6       actually the matter of this particular thing, and, similarly, a
  - 7       form becomes the form of this particular thing, through the
  - 8       action of an agent and, consequently, through an end. More-
  - 9       over, since nothing is moved toward a proximate end except
  - 10       for the sake of an ulterior end, a *posterior* end is the cause of
  - 11       a *preceding* end's being [actually] intended as an end. There-
  - 12       fore, the *ultimate* end is the *first* cause of everything. But
  - 13       being the first cause of everything is necessarily associated
  - 14       with the first being, which is God (as was shown above [in
  - 15       II.15]). Therefore, God is the ultimate end of all things.
- (17.1997)

The etiological ordering of causes (in lines 3–8) might seem to be borrowing plausibility unfairly just because in place of efficient causes in general it features "agents," which we're naturally inclined to think of as cognitive agents, who act for ends in the full-fledged sense in which we do. Still, Aquinas's arguments in III.2 for broadening the concepts of agent and of end entitle him to this usage here.<sup>207</sup>

But the crucial principle in lines 9–10 is harder to justify on the basis of anything we’ve seen so far. Consider this example from the fourth of Aquinas’s arguments in III.17:

Among all ordered ends the ultimate end must be the end of all the preceding ends. For instance, if a potion is made up to be given to a sick man, and it’s given in order to purge him, and he’s purged in order to be made thinner, and he’s made thinner in order to be healthier, then [his] health must be the end of the thinning, of the purging, and of the other things that precede it in this ordered series of ends. (17.1993)

In the example, the man’s health is “the ultimate end” referred to in the first sentence, albeit only a *relatively* ultimate end.<sup>208</sup> It doesn’t strain imagination to take the example just one step further in a recognition that the man’s health is achieved for the sake of his happiness. But this familiar sort of ordering of ends does tend to come to a stop at the point at which we recognize a person’s happiness as the ultimate end of the person’s activity, and that individual ultimate end is obviously far from being either universal or readily identifiable as God.<sup>209</sup> Nevertheless, Aquinas proceeds in that same fourth argument (following the example) as if he has grounds on which to move from this ordering of mundane, individualized ends to God himself as the universal end:

Now all things are found to be ordered in various degrees of goodness under a single highest good, which is the cause of all goodness. Consequently, since goodness has the defining characteristic of an end, all things are ordered under God as ends preceding an ultimate end. Therefore, the end of all things must be God. (17.1993)

The flaw in this generalizing part of the argument is its dependence on what I’ve just identified as the overstated consequent in the premise of the first argument’s opening inference, represented here in the claim that “goodness has the defining characteristic of an end.”

Aquinas’s arguments in chapter 17, in which he tries to derive the identification of God as the universal ultimate goal from general considerations regarding ends or goods, are all unsatisfactory. However, there are also two arguments of a stronger sort in III.17, a sort that works directly from claims already established about the nature and activity of God.<sup>210</sup> One of those two arguments, the chapter’s sixth, deserves a closer look. It depends on four established theses: (1) “the primary agent of all things is God (as was proved in the second book [in II.15])”; (2) “the end of God’s will is nothing other than his own goodness [argued in I.74]”; (3) God’s goodness “is God himself (as was proved in the first book [in I.37–8])”; (4) “there can be nothing that does not have its being from God (as was proved in the second book [in II.15])” (17.1995).

In the first part of this sixth argument, Aquinas prepares the ground for the introduction of these theses by developing some general points about agents and ends:

An ordering among ends follows from an ordering of agents. For just as the highest agent [in an ordered series of agents] moves all the secondary agents, so all the ends of the secondary agents must be in an ordered relationship to the highest agent's end. For the highest agent does whatever it does for the sake of its end, but the highest agent activates the actions of all the lower agents by moving all of them toward their actions and, consequently, toward their ends. From this it follows that all the ends of the secondary agents are ordered by the primary agent toward its own end. (17.1995)

At this point in the argument, Aquinas introduces theses (1), (2), and (3), enabling him to conclude that "all things whatever that are made by God, whether directly or by means of secondary causes, are ordered toward God as toward their end" (17.1995); for (1) God is the universally primary agent, (2) whose end is his own goodness, (3) which is identical with himself. Finally, then, on the basis of thesis (4), that absolutely everything must have its being from (or be directly or indirectly made by) God, "*all* things are in an ordered relationship toward God as toward their end" (17.1995).

Of all the arguments Aquinas offers in chapter 17, the sixth is the strongest, partly because in it he relies on previously well-argued theses about God. Despite the already noticed problems about the ordering of goods and of ends, there can't be similar problems about a single ordering of *agents*, given what Aquinas has established in SCG so far. Even if there are disparate orders of secondary agents, such that there is no single *non-divine* agent that is primary relative to all those orders, at this point in Aquinas's natural theology God is to be acknowledged as the universal primary (and omniscient and omnipotent) agent, linking all orders of secondary agents to himself as ultimately primary—like the supreme commander of a far-flung army the various units of which are controlled directly by obedient sub-commanders who have no power over or even knowledge of any of the other units.

This sixth argument also offers the first glimmer of light on what might be meant by saying that *God himself* is a goal or end. I've regularly inserted a parenthetical 'somehow' into my statements or quotations of Aquinas's thesis that God is the unique, universal, ultimate goal of created things,<sup>211</sup> just because it seems offhand to make no sense to identify a *person* as the goal of other agents' activities.<sup>212</sup> Where X is a person, we know what it would mean to have as a goal X's forgiveness or X's love, becoming more like X, knowing X better, living one's life with X, etc., etc. But what could it mean to have as one's goal just X herself or himself? A beginning of an answer to this question is suggested here: All the ends of all secondary agents are ordered by the universally primary agent toward its own end; the

universally primary agent = God; God's own end = God's own goodness = God himself; therefore, the ends of all secondary agents are ordered toward God himself.

At least two features of this beginning of an answer are worth noting. In the first place, since the identification of God's goodness with God himself depends on God's unique absolute simplicity,<sup>213</sup> it's no wonder that the identification of any *other* person as a goal should make no sense. In the second place, if the full explanation of Aquinas's thesis is going to develop along this line, then it looks as if no secondary, created agent—not even a human being or a purely intellective substance—need have God himself as its *consciously* intended end. According to this beginning of an explanation, God himself is the consciously intended end only of God, the universally primary agent himself, and only in a sense that depends entirely on God's own absolute simplicity. On this view as presented so far, then, every created thing has God himself as its ultimate end only on the basis of a technicality that no creature need be aware of, much less understand. In fact, it seems so far that Aquinas's universal teleology doesn't require that any creature, however advanced, be aware even *that* God himself is its ultimate end. As described so far, the mechanism of this teleology will draw all things to God whether or not any of them knows it or wills it.

### 3. How God is the Absolutely Ultimate, Universal, Unique End

In these circumstances, it's especially appropriate that Aquinas opens the very next chapter by acknowledging that “we still have to find out *how* God is the end of all things” (18.1999). With characteristic thoroughness, he first distinguishes two kinds of ends, one of which God himself could not be. As we've seen, ends come first in the etiologically ordering of causes: without a final cause to move it to action, no potential efficient cause brings about any effect.<sup>214</sup> But at least some agents can be moved by a kind of end that does not yet exist outside the agent's intention, something that the agent's action is intended to bring into existence. All final causes are etiologically first, but this kind of end or final cause is also *existentially last* in the ordering of causes:

there is a kind of end that is posterior in being, even though in respect of intention it does have first place causally. This happens, of course, in connection with any end that an agent by its own action *brings about* (*constituit*). For instance, a doctor brings about [someone's] health by his acting on a sick person. All the same, that person's [presently non-existent] health *is* the doctor's end. (18.2000)

The unhealthy patient's healthiness is the end that moves the doctor to act so as to bring that end into existence; it's what the doctor intends before he actually does anything to bring it about; it's the goal that moves him to do the

things he does in order to bring it about. But the patient's healthy state actually exists only after (and because) the doctor has carried out his intention. Obviously, God as the end of all things can't be an end of *this* kind.

But there is another kind of end that takes precedence in *being* just as it does in *causing*, as when we call that an end which something intends to *acquire* (*acquirere*) by its action or motion. Fire, for instance, intends to acquire a higher place through its movement; and a king intends to acquire a city through battle. God, therefore, is the end of things in the sense of something that is to be *attained* (*obtinendum*) by every single thing in its own way.<sup>215</sup> (18.2000)

If, as seems plausible, ends to be brought about and ends to be attained or acquired are the only two kinds of ends there are, then God himself must of course be an end of this second kind.

But *how*, exactly, is God himself to be attained by a created thing? Surely not in anything like the way the crown of the tree is finally attained by the fire that inexorably burns its way upward, and even more surely not in the way the conquered city is finally possessed by the victorious king. In classifying God as an end to be attained rather than brought about, this argument supplies what is hardly needed at this stage of Aquinas's natural theology.<sup>216</sup> In its two examples of ends to be attained, it seems more obfuscating than illuminating. And, at the very end, it bundles into its conclusion an important point that has neither been argued for nor explained: "God . . . is to be attained by every single thing in its own way." On the contrary, as we saw in the preceding section, the sixth argument of III.17 leaves the impression that God himself is everything's end in a way that has nothing to do with any distinctions among kinds of things and the various ways in which they might be thought to have God as their ultimate end. This first argument of III.18 can't be said to have supported its whole conclusion, nor does it make much progress in showing just *how* God is the end of all things. None of the chapter's three other arguments surpasses the first in that latter respect.<sup>217</sup> In the end, chapter 18's contribution to explaining how God himself is the universal end reduces to the simple, utterly obvious observation that God must be an already existent end to be attained rather than an as yet non-existent end to be brought about.

However, III.18 merely opens the inquiry into ways in which created things may be said to have God himself as their end. In III.19 Aquinas advances the inquiry by making a different use of III.18's distinction between kinds of ends, as can be seen in a careful reading of the new chapter's opening sentence: "Now from the fact that created things acquire (*acquirunt*) divine goodness they are made (*constituuntur*) like God" (19.2004). In other words, for every created thing, divine goodness is an already existent end to be acquired; and a thing's acquiring that end to any degree entails its bringing about an end of the *first* kind—namely, bringing it about that the thing



itself is (thereby and to a corresponding degree) like God. Now it's certainly true that when X attains to Y's goodness to any extent, X becomes like Y to that extent. So becoming like God is an end that is logically posterior to acquiring divine goodness; and "therefore, if all things tend toward God as toward their ultimate end in order to achieve (*consequantur*) his goodness,<sup>218</sup> it follows that *the ultimate end of things is to become like God*" (19.2004).<sup>219</sup>

In that final clause we have the start of a new sort of answer to the question of what might be meant by identifying God himself as the ultimate end. If some degree of some aspect of God's goodness is the ultimate end to be achieved and, consequently, becoming like God in some respect and to some degree is the ultimate end to be brought about, then God himself, the exemplar that is the criterion for all such likenesses, is the indispensable super-ultimate end—an end that, considered just as such, can neither be brought about nor attained. If one of Scott's students wants more than anything else to achieve some measure of Scott's goodness at what he does and thereby to bring it about that she becomes like him in that respect, then within that limited context Scott himself is in that same way the indispensable super-ultimate end. So far, so good.

But this new sort of answer depends on the claims that "all things tend toward God as toward their ultimate end in order to achieve his goodness" and that "created things acquire divine goodness." Since every end is a good of some kind, there's no reason why acquiring some measure of even *divine* goodness couldn't be an end, even for creatures. But, more pertinently, we've already seen Aquinas claiming that *every* goodness of *any* sort is an aspect of the perfect divine goodness,<sup>220</sup> and there's another such claim in chapter 19 itself.<sup>221</sup> In making these sweeping claims about the acquisition of divine goodness as a universal end, he's depending on that conception of all goods as aspects of perfect goodness itself; and so he needn't be ascribing to *any* creature a direct intention to acquire some share of divine goodness considered just as such. A created thing's consequent assimilation to God can, therefore, also be an ultimate end that is utterly unrecognized under that description even by a rational creature that is well on its way to bringing it about in some respect or other. Still, since Aquinas's account ascribes the same ultimate end also to all incognizant beings, which are necessarily incapable of recognizing any end toward which they are tending, the fact that the ultimate end goes unrecognized for what it is also by very many intellective creatures does not in any way damage his theory.

As Aquinas views it, a created thing's bringing about in itself a likeness to God might be described more precisely as its extending and enhancing the requisite modicum of divine likeness without which the thing could not have existed to begin with. "Now all things have their being from the fact that they are made like God, who is subsistent being itself; for all [created] things exist only as participants in [divine] being" (19.2006). But even in the respect in which divine likeness is a concomitant of a thing's existing at



all, and so a necessary possession of absolutely everything there is, it is nonetheless also each thing's *end*, since

it is quite apparent that things have a natural appetite to be.<sup>222</sup> It's for this reason that if they can be corrupted by something, they naturally resist the things that corrupt them and tend in a direction in which they might be preserved. . . . Therefore, all things have an appetite for being made like God, as for their ultimate end. (19.2006)

On this basis, then, and in this sense and to this degree absolutely every created thing might be said to have as at least part of its ultimate end *sustaining* its fundamental if slight existential likeness to God.

#### 4. How Created Things are Assimilated to the Divine Goodness

After Aquinas's chapter 17 argues *that* God is the end of all things, chapter 18 sets out to show *how* God is the end of all things. Chapters 19 and 20 are paired in just the same way: after III.19 argues *that* all created things intend to become like God in respect of goodness, III.20 is supposed to show *how* they can accomplish this. Although we can by now acknowledge a respect in which it makes sense to identify God *himself* as the (super-)ultimate end of all things, *assimilation* to God is the absolutely ultimate end that any created thing can bring about (even if not altogether by itself) in acquiring some measure of God's *goodness*.<sup>223</sup> Consequently, Aquinas is now less likely than he was at first to identify the ultimate end as God himself, but to say instead the sort of thing he says at the outset of III.20: "it's clear that to become like God is the ultimate end of all things" (20.2009). And since "any and every being's end is something good," as III.16 argues (based on III.3), "strictly speaking, things tend toward becoming like God in so far as God is *good*" (20.2009), rather than in so far as God is, say, omnipotent or omniscient.

Of course, in virtue of absolute divine simplicity, no such distinctions apply strictly to the nature of God, in which omniscience = omnipotence = goodness = God himself, "because for God, to be, to live, to be wise, to be blessed, and whatever else evidently pertains to perfection and goodness—the *totality* of the divine goodness, so to speak—is the divine being itself" (20.2010).<sup>224</sup> And, of course, although all created things have a natural tendency to acquire a measure of divine goodness, they

do not attain goodness in the way goodness is in God, even though each and every thing does imitate the divine goodness in its own way. . . . So if each [created] thing is good in so far as it is, but none of them is its own being, then none of them is its own goodness. Instead, each of them is good by participation in goodness, just as it is a being by participation in being itself. (20.2010)

So Aquinas's first move in explaining how created things acquire divine goodness is to preclude anyone's supposing that X's acquisition of divine goodness could in any case amount to X's being its own goodness as God is his own goodness (or goodness itself). That is (as he has argued before), no created thing could be absolutely simple.<sup>225</sup>

Aquinas draws a primary distinction among three grades of substances (20.2011c)—*divine* (and thus absolutely simple), *separated* (from matter but metaphysically complex), and *composite* (involving matter as well as form). This hierarchy is based on the ways in which a substance has (or is) goodness. The divine substance *is* its goodness; a separated substance “participates in goodness in keeping with *that which it is*”—that is, a form alone; “while a *composite* substance participates in goodness in keeping with *something belonging to it*” as a component (20.2011c). He then draws more immediately relevant distinctions within what he calls the third grade of substances, the composites. These comprise all the things that make up the physical universe: all material objects, all terrestrial and celestial bodies. What he has to say about differences among levels of terrestrial things, from the simplest (which he identifies as the elements) to the most complicated (human bodies) as regards the ways in which they share in and thus manifest the divine goodness is often insightful, and certainly essential to the development of his project in natural theology. But his sharp metaphysical distinction between all heavenly bodies on the one hand and all earthly bodies on the other, based on Aristotelian astronomy, is utterly untenable.<sup>226</sup> However, although Aquinas makes a great deal of that distinction, I think it can be set aside without doing irreparable damage to his account of earthly bodies or even to his view of the way God governs the physical universe.<sup>227</sup> So, setting aside his distinction between heavenly and earthly bodies, I will consider only his account of the material substances he characterizes as “the elements and the things composed of the elements” (20.2012b), ignoring (as much as possible) the fact that in his view these are only the earth itself and such material substances as are found in the earth, on the earth, and above the earth (but below the lowest of the celestial spheres, the sphere of the moon).

The elements and all the things composed of them constitute the lower half of the third (lowest) grade of substances (the upper half being made up of the heavenly bodies). Their location at the bottom of this metaphysical hierarchy is determined by a feature of their matter-form (m-f) composition. In substances of this sort “the form does not fill up the *whole* potentiality of the matter” (20.2012b).<sup>228</sup> What this means can be seen by considering the two consequences he attributes to this ordinary, less-than-saturated sort of m-f composition. First, in the *whole* matter of any physical object “there still remains a potentiality for *another* form”; second, “in *another part* of the matter there remains a [further] potentiality for *this* form” that the object already has (20.2012b). That is, physical objects are essentially susceptible to (1) alteration—a change of forms—and (2) inten-

sification (or diminution)—an increase (or decrease) in the extent to which an object's matter is permeated by a form the object has. Aquinas does not say whether he means substantial or accidental forms, and he provides no examples.<sup>229</sup> But clear examples involving accidental forms aren't hard to find. By putting the end of an iron bar over a flame, I can alter its form from cold to hot; and by then turning it around and putting the other end over the flame, I can extend the form of heat into more of its matter.

As Aquinas sees it, this less-than-saturated sort of m-f composition characteristic of ordinary material substances means that they must be at the bottom of the heap also as regards their capacity for acquiring a likeness to the divine goodness. Their metaphysical composition is uneven, as we've just been seeing, and Aquinas identifies the gaps as privations: "a privation is a negation in a substance of that which can inhere in the substance" (20.2012*b*). So "it's obvious that adjoined to this form that does not fill up the whole potentiality of the matter there is a *privation* of the form" (20.2012*b*). It's such privations, or unactualized potentialities, that underlie the mutability of material substances, "since it's obvious that motion [or change] cannot occur where there is no potentiality for anything else" (20.2012*b*). And it is this feature of material substances that relegates them to last place among substances also as regards their capacity for goodness. For,

since it's obvious that badness is the very privation of goodness, it's plain that in this last order of substances there is mutable goodness that is mixed together with the opposing badness—the sort of thing that can't happen in the higher orders of substances. Therefore, this kind of substance, which we've described as being in the last mode [of substances], is the last grade in respect of goodness just as it is the last grade in respect of being. (20.2012*b*)

It's mildly interesting that Aquinas goes so far here as to introduce the concepts of privation and badness that are central to the treatise on badness in III.4–15, since this is his first allusion to any of that material after chapter 15. But he might have done better to make his point more generally, based only on material substances' mutability, presumably in respect of goodness as in other respects. For while his claim that "badness is the very privation of goodness" looks as if it needs no support, the notion of privation he must rely on here is unacceptably weak by the standards he carefully and emphatically develops in the treatise on badness when he's dealing with the badness of substances. Here he says broadly—too broadly—that "a privation is a negation in a substance of that which *can* inhere in the substance." On that criterion, every brunette suffers a privation of blondness (and vice versa)—the very sort of absurdity he rejects in III.5&6.1899. There he says that only "in privation understood *properly and strictly* is there always the

defining characteristic of badness,” because “every privation, if ‘privation’ is taken properly and strictly, is a privation of something that someone [or something] [1] is naturally suited to have and [2] *ought* to have”—the very terms in which he defines the badness of substances earlier in the same passage.<sup>230</sup>

Having distinguished grades of goodness among kinds of m-f composites generally (celestial and terrestrial), Aquinas goes on to draw finer-grained distinctions of that sort among kinds of ordinary (terrestrial) material substances. In devising an order of goodness that’s supposed to provide a ranking of the composite itself, its form, and its matter, he’s making good on his claim that “a composite substance participates in goodness in keeping with something belonging to it” as a component (20.2011c).

For since the matter considered in itself is a being in potentiality, while the form is its actuality, and the composite substance is actually existent through the form, the *form* will of course be *good in itself* while the *composite substance* will be *good in so far as it has the form*, but the *matter* will be *good in so far as it is in potentiality to the form*. . . . (In this connection it’s apparent that ‘good’ is in a certain respect wider in scope than ‘being’).<sup>231</sup> (20.2013)

If this ranking is really there to be extracted, I suppose that Aquinas’s reason for spelling it out may be to try to show that it isn’t just each composite created thing considered as a whole that is assimilated to the divine goodness, but even its metaphysical components considered just as such. He sees God as the goal (through likeness to the divine goodness) not just of each of nature’s primary substances but also of the ultimate metaphysical components of each of them—an extremely, perhaps excessively, generous sense in which to claim that God is the ultimate end of *all* things.<sup>232</sup>

Perfect goodness is of course essentially and uniquely associated with absolute simplicity, and we’ve already seen several indications that when goodness and being as they occur below that summit are considered altogether universally, the higher degrees of accessible goodness correspond to lower degrees of complexity of being—as in Aquinas’s three grades of substances.<sup>233</sup> But when we’re considering ordinary m-f composite substances, the relationship between goodness and simplicity is inverted. The highest degrees of goodness theoretically within the range of such beings are accessible only to the most complex m-f composites.

God is in possession of the highest perfection of goodness in his very being. A created thing, on the other hand, possesses its perfection not in unity but in multiplicity.<sup>234</sup> . . . God is said to be powerful (*virtuosus*), wise, and active in one and the same respect, but a created thing

[possesses its versions of such attributes] in various respects. And the more distant from the first goodness a created thing is found to be, the more that created thing's perfect goodness will require greater multiplicity. . . . [N]onetheless, lower [corporeal] substances—such as the elements—are found to be *simpler* than some of their superiors—such as animals and human beings—because they cannot attain the perfection of [sensory] cognition and of intellect that animals and human beings do achieve. (20.2014)

It's only such living corporeal things as attain a certain level of complexity that can be animated by a sensory soul, and it takes a still higher level of corporeal complexity to provide the proximate matter for an intellective soul.<sup>235</sup>

Aquinas seems to think that he needs to explain how created things that exist can, nonetheless, be in a position to *attain* goodness—perhaps because he argues that anything is good to the extent to which it is, and that perfect being is perfect goodness.<sup>236</sup> Thus, he says that

although God in keeping with his simple being has his goodness perfect and whole, created things do *not* attain to the perfection of their goodness only through their being, but through several things. For that reason, even though each of them *is* good in so far as it is, it cannot be called good *without qualification* if it lacks other things that are required for its goodness. For instance, a man who is destitute of virtue and given over to vices is indeed called good *in a certain respect*—namely, in so far as he is a being, and in so far as he is human. *Without qualification*, however, he is called not good but bad. Therefore, for no created thing is it the same to be and to be good without qualification, even though each of them is good in so far as it is. (20.2015)

Consequently,

things are ordered toward God as their end not only in respect of [their] substantial being but also in respect of things that are accidental to them and pertain to their perfection, and even as regards their proper operation, which also pertains to the perfection of a thing. (20.2016)

The special importance of a created thing's operation as a determinant of its goodness (or of its likeness to the divine goodness) is borne out in the rest of Aquinas's account of God as nature's goal.<sup>237</sup>

## 5. How Created Things are Assimilated to God Through Causality

When we first encounter Aquinas's thesis that God himself is the universal, unique, ultimate goal for all created things, it looks like a powerful but

mysterious claim—one that needs to be explained before the challenge of justifying it can be taken up. But now, given the explanation Aquinas has been developing for it, its justification is looking surprisingly easy, even perfunctory. It turns out, at least so far, that God himself is each thing's goal only in so far as each thing has a natural tendency to become assimilated to God. Moreover, it turns out that each thing *is* assimilated to God—wittingly or unwittingly, willingly or unwillingly—in so far as it (a) has being, (b) has goodness (consequently) in the respects in which and to the extent to which goodness is being's essential concomitant, (c) has goodness in respect of certain essential or accidental characteristics that pertain to the excellence of the sort of thing it is, and (d) has goodness in respect of the operations that are proper to that sort of thing. Given this explanation of the thesis so far, absolutely every thing ineluctably achieves its ultimate goal, at least in respects (a) and (b), merely by showing up in the real world. And it seems that any natural thing that we would be likely to call good of its kind, when we have absolutely no theological considerations in mind, would count as having achieved its ultimate goal in respects (c) and (d) as well. So far, then, God's omega-aspect and the return of all created things to their creator seem not grandly, cosmically climactic, as those descriptions and Aquinas's thesis make them seem, but anticlimactic to the point of being unnoticeable.<sup>238</sup> Aquinas hasn't quite finished his account of the assimilation of non-human created things to God, but if it comes to little more than this in the end, we should be not just disappointed, but instructed, too. If his account falls short of our expectations, it won't have failed to live up to any promises he's made about it. For all the grandeur of its mode of expression, his thesis that absolutely every created thing has God himself as its ultimate goal certainly admits of the interpretation he's giving it.

In III.21 Aquinas presents what at first seems to be an addition not only to (a)–(d) as aspects of creaturely likeness to God but even to goodness generally as a respect in which creatures are assimilated to God: “things intend a divine likeness *also* in their being *causes* of other things” (21.2017). However, as the chapter's arguments show, the novelty of this claim is only apparent. It really is a corollary of the claim about the assimilation of created things to God by way of their acquiring goodness.<sup>239</sup> More particularly, it's a gloss on (d) above, as can readily be seen in a combination of the chapter's first and third arguments: “A created thing tends toward a divine likeness through its operation,” as was pointed out in 20.2016 above. “But it's through its operation that one thing becomes a cause of another. Therefore, things intend a divine likeness also in being causes for other things” (21.2018). Not just goodness itself but also

an ordered relationship to goodness [not yet fully attained or not wholly the agent's own] has the defining characteristic of goodness (as is clear from things already said [in 20.2013]). But each thing has an

ordered relationship to goodness in virtue of being a cause of something else. This is because goodness is caused only *per se*, while badness is caused only *per accidens* (as has been shown [in III.10]).<sup>240</sup> Therefore, to be the cause of other things is good. But in keeping with any and every good to which anything tends, it intends a divine likeness, since any and every created good is a result of participation in divine goodness. Therefore, things intend a divine likeness in their being causes of other things. (21.2020)

I introduce these two arguments only because they bring out the lack of real novelty in the claim that things are assimilated to God also in respect of causality. I don't think they're very good arguments, even if we're thoroughly comfortable with Aquinas's technically broad use of 'intend.'<sup>241</sup> In the first argument (21.2018), for instance, even if we accept its two premises (quoted just above), the conclusion follows only in case we *restrict* the meaning of 'intend' to having an *unwitting* tendency toward bringing about some thing, event, or state of affairs. The same restriction applies in the third argument (21.2020), which also involves difficulties over the etiology of badness.<sup>242</sup>

Other arguments in the chapter, those that don't expressly treat creaturely causality as simply an aspect of creaturely goodness, are a little more interesting if not a great deal better as arguments. For instance, Aquinas founds the fourth of the chapter's six arguments on the plausible claim that "the principles through which an effect *is a cause* of other things are conferred on it by the [effect's] agent just as are the natural principles through which the effect *subsists*" (21.2021). He provides an example drawn from the univocal causation that is characteristic of biological reproduction: "just as an animal while it is being generated gets from its generator a *nutritive* power, so also does it get a *generative* [or reproductive] power."<sup>243</sup> Therefore, the effect tends toward a likeness of the agent not only as regards its species but also as regards its being a cause of other things." But the claim could be exemplified as well by artificial production. The causal powers that belong to any thing you make are simply consequences of the ingredients you use and the way you combine them, even when you make a dinner that, apart from your intention and to your great distress, sickens you and your family with food poisoning.<sup>244</sup> Consequently, on the basis of that fundamental claim interpreted as it is in such examples, the conclusion that "an agent *intends to assimilate its patient to itself* not only as regards the agent's being but also as regards its *causality*" may seem to go too far, unless the only agent at issue is omniscient, omnipotent God himself. The argument's final conclusion does suggest such an aim:

things tend toward a likeness of God as effects tend toward a likeness of the agent (as was shown [in III.19]). Therefore, there is a natural intention in things to become like God in being causes of other things.



But that's not what the rest of the argument suggests, especially because Aquinas's only example involves biological reproduction, a kind of causation that is definitely not God's own.<sup>245</sup>

## 6. How Different Sorts of Things are Differently Directed Toward Their End

In discussing Aquinas's chapter 18, I pointed out that the conclusion of one of its arguments contains the claim that "God . . . is to be attained by every single thing in its own way" (18.2000), a claim that is not only unsupported by that argument but seems also to conflict with the impression that Aquinas's account had been making until then: that God himself is everything's end in a way that has nothing to do with any distinctions among kinds of things and the various ways in which they might be thought to have God as their ultimate end.<sup>246</sup> The impression has only been deepened through chapters 19, 20, and 21. However, in III.22 Aquinas is finally ready to explain in just what respects and to what extent he thinks certain kinds of non-human things are differently directed toward their ultimate end.

In his view, the relevant differences among kinds of things are to be found only in fully developed individuals of those kinds. At the end of III.21 he says that before X "can cause another thing," X must have attained its full natural development. Unless he's thinking of X's causing another thing solely in terms of biological reproduction, this claim seems ludicrously false: a two-year-old can make a mud pie. But even if he has tacitly decided that the only kind of causality that entails being assimilated to God is the causing of another thing, thinking of it in terms of reproduction alone would inappropriately narrow the claim to cover only living beings.<sup>247</sup> Still, he concludes on that basis that "although a created thing tends toward a divine likeness in many ways, this one, whereby it seeks (*quaerat*) a divine likeness through being a cause of other things, comes to it *last*" (21.2023). The "many ways" he mentions here clearly refer to all modes of assimilation to God, including all the respects in which a thing is or can be good, as well as a thing's simply being.<sup>248</sup> But in III.22 the different ways in which he thinks different things are directed toward their ultimate end are confined to various sorts of *operations*:

from things already said it can be made quite clear that the *final* aspect through which each and every thing is directed toward its end is its operation—but in various ways, corresponding to the variety of the operation. (22.2024)

It's hard enough to see what Aquinas means at the end of III.21 by picking out a thing's acquiring the ability to cause other things as the culminating stage of its development, but here, at the beginning of III.22, he seems to

be advancing an even less plausible version of that claim, one in which a thing's operation *generally* depends on its full development.<sup>249</sup> I don't have a satisfactory explanation of these implausible claims, but I think that their implausibility doesn't affect Aquinas's main purpose in III.22, where the developmental status of a thing's ability to perform operations is not an issue.

Since his aim in this chapter is to sort out the different ways in which different things are directed toward their ultimate end, it would be natural to expect that the differences he notes among operations will be fairly specific, or at least not as unspecific as they turn out to be. However, the basic distinction he lays down is about as broad as any distinction among operations could be. "[1] One sort is *the operation of a thing as a mover of something else*—for example, heating and cutting" (22.2025). This, of course, is the very familiar, ubiquitous, transeunt sort of activity—doing something to something else—that Aquinas has already discussed in some detail in SCG II in connection with his account of God's creative activity.<sup>250</sup> "[2] Another sort is *the operation of a thing as moved by something else*—for example, being heated and being cut" (22.2025). Even though Aquinas is cataloging "operations" (*operationes*) here rather than activities or actions (*actus* or *actiones*), it may seem very odd that the sheer *passivity* of being heated or being cut is included among the very few kinds of *operation* on the basis of which Aquinas means to sort out the different routes taken by different things on their way to their ultimate goal. But his notion of operation really does seem to have been broad in just that way, as may be seen in, for example, QDA 12c: "a power is nothing other than a thing's principle of operation, whether it is action or passion." "[3] Another sort of operation is *the perfecting of an actually existing agent without any tendency to bring about a change in anything else*" (22.2025). As this rather odd description may suggest, and as his examples later in this passage confirm, this type-3 operation, which he discusses elsewhere under the designation 'immanent activity,' is typified in sensation, or in mental activity.<sup>251</sup> So for present purposes his basic distinction among kinds of operation associated with kinds of things appears to be (1) transeunt activity, (2) passivity, and (3) immanent activity. Offhand, this is an unlikely basis on which to achieve his aims in this chapter. To pick out only one of its more obvious drawbacks as a sorting device, among non-human created things, at least all the higher animals are characterized by *all three* of these kinds of operation, and absolutely all animals, plants, and non-living things seem to be characterized by at least *the first two* of these three kinds.

The peculiarities of this basic distinction among kind of operations are not superficial, but some of the special difficulties in the text immediately following the distinction may be superficial in the sense that an emendation of the text would remove them. Still, I haven't seen just what such an emendation should be.<sup>252</sup> Here is a literal translation of the text presented in the best editions: "of which they differ in the first place from passivity and

from moving (*motu*), in the second place from action (*actione*) that brings about a change of external matter” (22.2025). The very next sentence—“Intellection, sensation, and volition are instances of this sort of operation”—provides some basis for retrospectively imposing on the disordered passage a reasonable facsimile of what must be its intended sense: (3) Immanent activity differs in the first place from (2) passivity (and from moving), in the second place from (1) action that brings about a change of external matter. But this rewriting leaves me uncertain why Aquinas would bother spelling out in this way the difference between the type-3 operation and the other two types, and what exactly he means by including “moving” in this list.<sup>253</sup> It’s true that the type-1 operation is a kind of moving (as distinct from being moved), and when it’s introduced at the beginning of 22.2025, it’s described as such; but it’s much more precisely described in the final clause of this later sentence. Although the parenthesis in my rewriting of the passage is awkward, I think that developments in the rest of the chapter make it look like what Aquinas may have intended here.

Aquinas considers his opening distinction among types of operation, along with these immediately following comments on the distinction, to have provided him with grounds on which to move forward with the claim that

it’s obvious that things that either [2] are merely moved or [3] operate without moving or making anything [are things that] tend toward a divine likeness in so far as they are [A] perfected in themselves. But those that [1] make and move something, considered just as such, tend toward a divine likeness in being [B] causes of other things. Finally, [1a] those that *move [other things] as a result of being moved [themselves]* intend a divine likeness in both respects [A and B]. (22.2025)

It seems clear that A and B, the two kinds of divine likeness sorted out here, are those that have until now been distinguished as goodness and causality, respectively. So it seems right to say that the type-2 and type-3 operations promote divine likeness only in respect A—at least in the sense that they surely don’t do so in respect B. It’s almost as clear that the type-1 operations may be said to tend toward divine likeness in respect B. But I see no reason why type-1 operations shouldn’t also be recognized as promoting divine likeness in the other respect: a knife that is having its potentiality for cutting actualized is thereby having its goodness enhanced, at least in a technical sense Aquinas recognizes, by bringing into second actuality what is otherwise merely its first actuality.<sup>254</sup> And it’s surprising to find that he considers even heating and cutting as instances of the causing of *other things*, so that even the sun’s warming a stone would somehow qualify as its causing another thing. We’ve seen the notion of causing other things acquire importance as this account has developed, partly because there’s some point in supposing that it’s only productive efficient causality of that sort that would contribute to a created thing’s likeness to God the creator. If

merely heating or cutting something else are modes of causality that also confer divine likeness in respect B, then Aquinas's use of reproduction in his examples of respect B, along with some of the things he's said earlier about it, seem misleading.<sup>255</sup>

But it's the last sentence of the passage quoted above that contains the most obviously novel and most difficult ingredient in the advance Aquinas is making here, in a claim that also sets the stage for the remainder of the chapter. As my numerical designation '1a' is intended to show, I'm inclined to think that these things that move other things as a result of being moved themselves are supposed to be a subgroup of 1, the things that move other things, so that the only other subgroup, 1b, would have to be self-movers, things that move other things on their own and not as a result of being moved by something else.<sup>256</sup> In any case, it's only the members of 1a that Aquinas describes as intending a divine likeness in *both* respects: A, becoming perfected in themselves, and B, causing other things. And so it's obviously their being actually moved by something else that constitutes their advancing toward their own perfection, considered just as movers whose very nature requires their being moved by other things in order to fulfill their role of moving still other things. We'll see more clearly what Aquinas means by this claim, although not in a way that will explain all its peculiarities.

Some of the difficulties we've been encountering in connection with III.22's preliminary distinctions among agents and patients, operations and movements, are a consequence of the abstractness of the distinctions. We need examples. Aquinas begins to supply them at once, in ways that may seem surprising as well as elucidating: "terrestrial bodies, in so far as they are moved with natural movements,<sup>257</sup> are considered as *merely moved*—not as *movers*, however, except *per accidens*" (22.2026). So all the material substances we know best, including our own bodies, considered just as bodies, appear to belong in group 2, things whose only natural operation is being moved by something else. In science's persistent, perhaps perpetual, hunt for deeper and deeper explanations of corporeal events and states of affairs, such a view of the natural world is certainly accepted and even relied on. Even in our own case (which isn't specifically at issue yet), Aquinas and many contemporary philosophers who accept the existence of self-movers wouldn't identify the human body or any part of it as a *self-mover*. Recognizing a *person* as a self-mover in no way precludes our wanting to know what *besides* her face *caused* her frown—in psychological terms at least, but perhaps also in physiological terms. Neither her face alone nor her body considered in its totality moves itself or anything else, except *per accidens*, as a result of first having been moved. Heating and cutting, Aquinas's paradigms of type-1 operations, of course involve terrestrial bodies on the active as well as on the passive side. But the bodies that bring about heating and cutting *per se* and not just *per accidens* are more than inert terrestrial bodies. They are animated.

In Aquinas's philosophy of mind, the part or aspect of a person that

moves any corporeal part or aspect of her—such as her mouth when she talks, or her hand when she shifts gears—but isn't moved in turn by something else, can't itself be corporeal. A body moves only when and as something else moves it.<sup>258</sup> That's one of the reasons Aquinas has for maintaining that the distinctively human rational soul, including intellect and will, must itself be incorporeal.<sup>259</sup> And it's on the basis of such considerations that he explains the exclusively *per accidens* status of (mindless) terrestrial bodies considered as movers: "For the fact that a falling stone sets in motion something that was in its way is accidental. It's like that in the case of alteration, too, and the other sorts of movement" or change, such as increase and decrease in size, that are brought about by the movements of terrestrial bodies (22.2026). The billiard-ball model of cause and effect suits this account perfectly as regards local motion, and modifying it to suit other sorts of change as described here does not require much imagination.

But Aquinas's main topic in III.22 is the different ways in which different sorts of things acquire their likeness to God, and his detailed analysis of the lowly role of terrestrial bodies in the world's causal scheme now yields a definitive account of the only way in which they can become like God. Because they are all members of the purely passive group 2, "the end of their movement is that they attain to a divine likeness in so far as they are [A] perfected in themselves," and they are perfected in so far as they have "[A1] their proper form and [A2] their proper location" (22.2026). Theoretically, their various changes or movements contribute to their attaining A1 and A2.

Matter, for instance, "tends toward its perfecting" via alteration, "in virtue of acquiring actually a form that it earlier had potentially, even though it [then] ceases to have another form that it earlier had actually" (22.2027). In this account, then, the perfecting of matter consists not in its acquiring some one superb, consummate form, but simply in its continuing to actualize its fundamental potentiality of taking on (and putting off) forms.<sup>260</sup> Although matter isn't, strictly speaking, a terrestrial *body*, its metaphysical character and its role as a component of every terrestrial body make it a paradigm for Aquinas's claims about the fundamentally passive status of terrestrial bodies in this connection.

A little later in III.22, in another account of matter's part in the process of divine assimilation, he does suggest another sort of perfecting for matter, one that involves its ascent through ranked forms to the summit of terrestrial forms:

the more advanced (*posterior*) and the more perfect any actuality is, the more fundamentally matter's appetite is drawn toward it. And so the appetite of matter by which it seeks form must tend toward the ultimate and most perfect actuality matter can attain. . . . For *prime* matter is in potentiality first of all to the form of an *element*, but matter existing under the form of an element is in potentiality to the form of a

*mixture*<sup>261</sup> for which reason elements are the [proximate] matter of a mixture. And [some] matter considered under the form of a mixture is in potentiality to a *vegetative soul*, since it is of such a body that a soul is the actuality. And, again, a vegetative soul is [sometimes] in a state of potentiality to a *sensory* soul, while a sensory soul [may be in potentiality] to an *intellective* soul. (22.2030a–b)

Without my bracketed interpolations, the last two sentences of this passage on the hierarchy of terrestrial forms can be misleading. Vegetative (or nutritive) souls are the forms only of mixed, not elemental, bodies; but obviously not *every* mixture constitutes proximate matter for a vegetative soul. A grain of salt has absolutely no potentiality for existence as a plant—no more in Aquinas's view of nature than in ours. Similarly, the generative succession from a vegetative to a sensory soul is confined to the embryonic development of animals. What animates dogwood has absolutely no potentiality for animating dogs. And the succession from a sensory to an intellective soul takes place only in the pre-natal development of human beings.<sup>262</sup>

Although the details of this passage are less clear than they should have been, it does at any rate lay the foundation for the clearly stated natural hierarchies that immediately follow it:

The process of [human] generation shows this. For in [human] generation there is first of all a fetus living the life of a plant, later the life of an animal, and finally the life of a human being. But, among things that can be generated and corrupted [i.e., terrestrial bodies ] there is no next, nobler form to be found after *that* form. Therefore, the end of *all* generation is a human soul, and matter tends toward that as toward its ultimate form.<sup>263</sup> Therefore, the elements are for the sake of (*propter*) mixed bodies, which are for the sake of living things, among which plants are for the sake of animals, animals for the sake of the human being. Therefore, the human being is the end of all generation. (22.2030c–d)

These hierarchies of generation are bolstered by a hierarchy of preservation that can, much more clearly than the generative hierarchies, be empirically confirmed:

mixed bodies are sustained through appropriate qualities of [their] elements, plants are nourished by mixed bodies, animals have their nourishment from plants, and some more highly developed and stronger animals from others that are less highly developed and weaker. (22.2031b)

Taking off from this platform of hierarchies, Aquinas details the natural supremacy of human beings in ways that show that no other terrestrial

created things are their equals or superiors in what might be thought of as a chain of creaturely command:

a human being uses all kinds of things for its own benefit—some for food, others for clothing. That's why a human being is brought into the world naked by nature, as able to prepare clothing for itself from other things. And that's why nature prepared no food appropriate for a human being other than [human] milk, so that it might seek out food for itself from various things. But a human being uses still other things for transportation, since people are found to be weaker than many animals in swiftness of motion and in strength to bear burdens—other animals having been prepared, so to speak, to help human beings. And, in addition to all these things, a human being makes use of sensible things for the perfecting of its intellectual cognition. (22.2031*c*)

Much of this account of human terrestrial supremacy is stage-setting for the detailed examination to come of the distinctively human assimilation to God.<sup>264</sup>

## 7. Glancing Skyward

However, the detailing of human excellence in III.22 is interwoven with a feature of Aquinas's account of nature that is irredeemably false and, from our point of view, likely to seem incongruous with what he has to say here about human beings. For the only created things to which he here expressly assigns type-1a operations—the only type of operation so far assigned that counts as moving other things *per se*, the only type that, he says, assimilates its agent to God in *both* respects A and B—are the heavenly bodies. He makes this assignment largely on the basis of Aristotelian astronomical theories that can't any longer be taken seriously.<sup>265</sup> These theories lie behind his taking it for granted in III.23 that (i) the heavenly bodies have an indispensable role as movers of terrestrial bodies, especially as regards their generation. They also lead to the chapter's lengthy development of the thesis that (ii) the movers of the heavenly bodies must themselves be incorporeal, intellectual substances. Since the falsity of Aquinas's account of the heavenly bodies isn't merely superficial, and since the account seems not to be nearly so important to his natural theology as he believed it to be, I won't examine it in any detail. But I want to make just a few remarks about his view of the heavenly bodies as (i) movers contributing to terrestrial developments and as (ii) movers that are themselves dependent on being moved by intellectual substances.<sup>266</sup>

John Russell provides a very helpful summary of the problems Aquinas thought were best solved in terms of his thesis that (i) heavenly bodies are movers contributing to terrestrial developments:



(1) the inadequacy of the Aristotelian four elements with their limited set of properties—warm or cold, moist or dry, heavy or light—to explain the great diversity of inorganic compounds; (2) the particular difficulty of explaining how entirely new properties such as magnetism, or life, could emerge spontaneously from these elementary properties; (3) the tendency of terrestrial bodies to belong to a limited number of well-defined species, which suggested that every member of a given species must have been determined by a single universal causal agent; (4) the stability and order of the universe as a whole, which seemed to go far beyond the capacities of matter as such. All these considerations pointed to some higher unifying cause which transcended the limitations of the terrestrial realm.<sup>267</sup>

Of course, Aquinas could have brought on omniscient, omnipotent God himself as a *deus ex machina* whose direct, ubiquitous intervention would effortlessly dispel all these problems and more, in the style of seventeenth-century occasionalism.<sup>268</sup> But to do so would have required him to suppose that God had given the vast perpetual motion machine that surrounds the earth no practical purpose in creation commensurate with its complex grandeur.<sup>269</sup> At the end of the twentieth century, a natural-theological account of terrestrial processes doesn't face all the problems Russell sets out, mainly because we aren't faced with the special difficulties presented in the four-elements theory. But the problems in his list that are still recognizable could now be given nonoccasionalist explanations that are, like Aquinas's, attempts to identify and describe the device through which the creator organizes and controls nature. Putting the matter in appropriately broad terms, the theoretical role played by Aquinas's heavenly bodies has been taken over by the basic physical-chemical structure of the universe and the laws of nature.

As for (ii), the thesis that the heavenly bodies' terrestrial causality depends on its being the case that "the prime mover of the movement of the heavens is something intellective" (23.2034), Aquinas first develops and defends it in six complex arguments (23.2035–40), the most illuminating being perhaps the second of them, in 2036. He devotes most of the rest of the chapter to arguing that the movement of the heavens is "natural" despite having "something intellective" as its source.

Nonetheless, it must not be denied that the movement of the heavens is natural. For any movement is said to be natural in virtue not only of an active but also of a passive principle. . . . [T]he movement of a heavenly body is not natural, but rather voluntary and intellective, as far as its *active* principle is concerned. As far as its *passive* principle is concerned, however, it is natural, since a heavenly body has a natural aptitude for that sort of movement. (23.2041)

Although no twentieth-century natural theology could incorporate any of the details of Aquinas's account of the source of astronomical move-

ments, any theistic cosmology would have to include some version of the main thesis of Aquinas's chapter 23, that "the prime mover of the movement of the heavens is something intellectual" (23.2034)—namely, God—even if that intellectual prime mover plays that role only via a divinely instituted system of natural laws. And so the chapter's concluding paragraph is especially reassuring, although it doesn't offer precisely this (as yet unimagined) option among its acceptable interpretations. Aquinas's lack of commitment to any particular one of the interpretations is appropriate and attractive, an apparent indication that he had a keen sense of the radically speculative character of the details of his account of the nature and operations of the heavenly bodies:

Now as long as it has been established that heavenly movement stems from an intellectual substance, it makes no difference for present purposes whether [a] a heavenly body is moved by an intellectual substance conjoined with it, which is its soul, or [b] by a separated substance; or whether [c] each of the heavenly bodies is moved by God directly, or [d] none of them is moved by God directly but by means of created intellectual substances; or whether [e] only the first is moved by God immediately but the others by means of created substances. (23.2045)

## 8. How Even Nonintellectual Things can Acquire a Divine Likeness

From very near the beginning of this investigation of Aquinas's thoroughgoing teleology with its unique, universal, ultimate goal, it has been obvious that the difficulties of applying it to nonhuman nature and, further, to noncognitive and nonliving nature would be even greater than those associated with applying it to us.<sup>270</sup> Nevertheless, Aquinas has largely bypassed this special difficulty so far, primarily by imposing a broadened, technical sense of such terms as 'agent' and 'intend' in order to include incognizant created things within his account.<sup>271</sup> He has, of course, noted some relevant differences between cognizant and incognizant agents;<sup>272</sup> but he has also, and perhaps more often, sketched an all-inclusive account of the way God's directing of created things—cognizant and incognizant alike—toward their goal is an extension of his having created them.<sup>273</sup> God's general governance of creation consists in providing for every sort of created thing at least (a) its ultimate end—that is, whatever is best for its nature (and, as we'll soon see, for something else as well); (b) the principles or faculties that equip it to act in ways that tend toward that end; and (c) some direction on its way toward its ultimate end. God's providing (a) and (b) is naturally associated with his creating, and (c) is

specifically associated with God's absolutely universal directing of created things. According to Aquinas,

The effect of this governance of course appears in various ways in connection with various things, in accordance with the difference of their natures. Some things are produced by God in such a way that, having intellect, they bear his likeness and represent his image. For that reason they are not only directed; instead, they also direct themselves toward their requisite end in accordance with their own actions. (1.1865)

Along with all other created things, human beings are subject to, dependent on, divine direction. But simply in virtue of their intellectivity, the respect in which they most resemble God, to some considerable extent "they also direct themselves."

However, before turning to develop his detailed account of the divinely directed but distinctively human approach to nature's unique, universal, ultimate goal, Aquinas tries to sum up his completed account of God as the goal of nonintellective nature. As might be expected, the summing-up depends heavily on his theory of the natural instruments or intermediaries through which divine direction is imparted to all terrestrial things, events, and states of affairs—his theory that mistakenly identifies those intermediaries as the heavenly bodies and their movements.<sup>274</sup> But much or all of what he wants to say along those lines in his chapter 24 could also be said, much more plausibly, if the heavenly bodies and their movements were replaced throughout with the basic physical-chemical structure of the universe and the laws of nature.<sup>275</sup>

In line with the account of heavenly bodies presented in III.23, Aquinas speaks here of the mover of any heavenly body as "an intellective substance." But it's clear, even in III.23, that any such created intellective substance could be no more than an instrument for carrying out the plan of the supreme intellective being that creates and governs the universe. So the intellective movers that figure in III.24 can all be thought of as no more than stand-ins for God as the prime mover and universal governor whose action ultimately explains the character and operations associated with any natural intermediaries, however they may be identified.

For instance, the first argument in III.24 is to the effect that the "principal agent" of "the forms and movements of terrestrial bodies" must be an intellective being working through natural instruments. In the argument as Aquinas wrote it, those natural instruments are of course identified as the heavenly bodies, but it would work quite as well if the principal agent were identified immediately as God and the natural instrumentation were identified as the physical structure and laws of the universe. The modified conclusion might then read this way: Therefore, the forms and the movements of terrestrial bodies are caused and intended by God as the principal

agent, but by the physical structure and laws of the universe as the [agent's] instrument.<sup>276</sup> But at least one of Aquinas's arguments in III.24 needs no revising to be read as presenting the explanation of the teleological character of incognizant nature in terms of God and the basic structure and laws of nature:

it isn't hard to see how natural bodies that lack cognition are moved toward and act for an end. For they tend toward an end as they are directed toward it by an intellective substance, in the way an arrow tends toward a target as directed by an archer. For just as the arrow gets its inclination toward a determinate end from the archer's shooting it, so do natural bodies get an inclination to natural ends from natural movements, from which they get their forms, powers, and movements.<sup>277</sup> (24.2049)

Of course, by 'natural movements' in this argument Aquinas means those associated with the heavenly bodies, but the designation can easily be applied to the most basic physical things, events, and states of affairs, whose natural occurrences or changes are codified in the laws of nature.<sup>278</sup>

Aquinas's summing-up explanation of goal-seeking among nonintellective things concludes with two accounts designed to show how such created things can be said to acquire divine likeness in being (A) perfected in themselves and (B) causes of other things.<sup>279</sup> And the way he puts these accounts here shows, more clearly than before, just how likeness in respect B may be seen as an outgrowth of likeness in respect A.

He begins by explaining, in connection with A, that it makes no difference whether we say that

even things that lack cognition can [i] operate for an end, [ii] seek what is good on the basis of natural appetite, [iii] seek a divine likeness, or [iv] seek their own perfection. . . . For in virtue of the fact that they [iv] tend toward their own perfection, they [ii] tend toward what is good, since anything is good to the extent to which it is perfected. But in so far as anything [ii] tends toward what is good, it [iii] tends toward a divine likeness, since anything is assimilated to God to the extent to which it is good. But this or that particular good thing is desirable in so far as it is a likeness of the first goodness. Therefore, anything [ii] tends toward its own good because it [iii] tends toward a divine likeness, and not vice versa. And so it's clear that all things [iii] seek a divine likeness as [i] their ultimate end. (24.2051)

Having summarized and clarified his account of divine likeness in respect A—in respect of a creature's acquisition of perfection, or goodness—Aquinas takes up the *diffusiveness* of goodness, codified in the Dionysian principle, and turns it into a bridge from A to B, likeness in respect of causing other things.<sup>280</sup>

On this basis it's clear that to the extent to which anything is more perfect in power and more outstanding in its grade of goodness, to that extent it has a more general appetite for goodness and seeks it more and carries it out more in connection with things remote from itself. For *imperfect* things tend only to the good of *their individual selves* [—as in acquiring food—] *perfect* things to the good of their *species* [—as in producing and defending offspring —] *more perfect* things to the good of the *genus* [—as in the sun's equivocal causation of terrestrial effects]<sup>281</sup>—but *God*, who is *most perfect* in goodness, to the good of *the totality of being*. That's why some people say, and not inappropriately, that goodness, considered just as such, is diffusive, because the better anything is found to be, the more it diffuses its goodness to more remote things.<sup>282</sup> And . . . it must be that God, who is most perfect in his goodness and most universally diffusive of his goodness, is in his diffusiveness the exemplar of all diffusing agents. However, in so far as anything diffuses goodness into other things, it becomes a cause of other things. From this it is clear also that anything that tends toward being a cause of other things tends toward a divine likeness and all the same tends toward its own goodness. (24.2053)

In III.16–24 Aquinas repeatedly and emphatically identifies God as the unique, universal, ultimate end of created things. He also provides a reasonable amount of detail regarding the inner structure of nonintellective nature's possession of and tendency to acquire more likeness to God, having identified likeness to God as the mode in which God himself, the exemplar of such likeness, can be nature's goal in practice. And he provides grounds on which to attribute "ends," "appetites," "intentions" or "tendencies," and "actions" to minerals and plants as well as to non-human animals, lower and higher. But, of course, he doesn't claim that any of those created things literally cognizes or desires God or its own likeness to God. On the contrary, especially in the summing-up in III.24, he emphasizes the need for divine direction and impetus to make this universal teleology work:

it isn't hard to see how natural bodies that lack cognition are moved toward and act for an end. For they tend toward an end as they are directed toward it by an intellective substance, in the way an arrow tends toward a target as directed by an archer.<sup>283</sup> (24.2049)

By this stage in Aquinas's account we can readily provide a short description of the goal of all created things as he sees it: in theory, God himself; in practice, likeness to God in respect of goodness or causality. Why do they all intend that goal? Because God directs them toward it. Why does God direct them toward it? As Aquinas has repeatedly shown in his account, that goal is made up entirely of things that are variously good for various created things, and so God's motive might reasonably be identified as the creator's benevolence toward his creatures. Yes, but if that were the whole

story, there'd be no need to tell it in terms of an ultimate end for created things, or to stress the identification of that end as itself divine. Something more than benevolence to creatures lies behind the story Aquinas has been telling. To put the issue in terms he himself provides, what is the cosmic archer's target? What would motivate God to organize nature so as to manifest a manifold likeness of his goodness?

When the question is put that way, it suggests the answer in terms of a concept we've already seen to be important in Aquinas's explanation of God's creating. "Speaking absolutely, . . . God's goodness has no need of things that stand in an ordered relationship to it, *except for purposes of manifestation*, which can be carried out appropriately in various ways" (QDV 24.3c).<sup>284</sup>

It pertained to God, therefore, *to introduce his likeness among created things most perfectly*, to the extent to which that is compatible with created nature. But created things cannot attain a perfect likeness of God on the basis of just one species of created thing<sup>285</sup> because, since a cause surpasses its effect, what is in the cause simply and as one is found complexly and as many in the effect, unless the effect belongs to the species to which the cause belongs. . . . Therefore, in order that a perfect likeness of God might be found in created things in the way that pertains to a created thing, there had to be multiplicity and variety in them.<sup>286</sup> (SCG II.45.1220)

It seems that all the detailed development of the account of the ways in which nature's unique, universal, ultimate end is attained is to be understood as Aquinas's portrayal of the way God's manifold manifestation is worked out within nature itself.

Although manifold manifestation does not appear clearly as an element in the account Aquinas provides in these chapters of SCG, it certainly is a part of the parallel discussion in CT I.100–103, written soon after SCG. For instance, here are the last sentence of 101 and the beginning of 102:

It's for this reason, then, that all things have been made: in order to be assimilated to the divine goodness. From this, therefore, we must extract the reason for the diversity and distinction among things. For since it was impossible for the divine goodness to be represented perfectly, because of the [metaphysical] distance of each and every created thing from God, it was necessary that it be represented through many things, so that what is lacking in one may be supplied in another. (101.197–102.198)