

SUÁREZ'S METAPHYSICS OF ACTIVE POWERS¹

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(Forthcoming in *Review of Metaphysics*)

In the last several years, there has been an uptick of scholarly interest in medieval theories of efficient causation.² Much of this interest has been focused on a single figure, the late scholastic thinker Francisco Suárez (1548–1617).³ Suárez has been singled out for at least two reasons.

- 1 To prepare this paper, I have used reprints of volumes 25 and 26 of the Vivès edition of Suárez's *Opera omnia*. See Francisco Suárez, *Disputationes metaphysicae*, 2 vols. (Hildesheim: Georg Olms Verlagsbuchhandlung, 1965). My references to this work use the abbreviation "DM," followed by disputation number, chapter number, and paragraph number. All translations are my own, but I have checked them against existing English translations where available, and have in some cases adopted their wording without significant changes. See Francisco Suárez, *On Efficient Causality: Metaphysical Disputations 17, 18, and 19*, trans. Alfred Freddoso (New Haven, CT: Yale University Press, 1994); and Francisco Suárez, *Creation, Conservation, and Concurrence: Metaphysical Disputations 20–22*, trans. Alfred Freddoso (South Bend, IN: St. Augustine's Press, 2002). For Suárez's other works, I have consulted the Vivès edition itself, unless otherwise noted. See Francisco Suárez, *Opera omnia*, 28 vols., ed. Charles Berton (Paris: Vivès, 1856–61).
- 2 For example, see Julie Loveland Swanstrom, "Creation as Efficient Causation in Aquinas," *American Catholic Philosophical Quarterly*, vol. 93 (2019): 1–27; Michael Rota, "Causation," in *The Oxford Handbook of Thomas Aquinas*, eds. B. Davies and E. Stump (Oxford: Oxford University Press, 2012), 104–14; Taneli Kukkonen, "Creation and Causation," in *The Cambridge History of Medieval Philosophy*, 2 vols., eds. Robert Pasnau and Christina Van Dyke (Cambridge: Cambridge University Press, 2010), 232–46; Rondo Keel, "Can God Make a Picasso? William Ockham and Walter Chatton on Divine Power and Real Relations," *Journal of the History of Philosophy* 45, no. 3 (2007): 295–311; and Robert Pasnau, "Form, Substance, and Mechanism," *Philosophical Review* 113, no. 1 (2004): 31–88.
- 3 See Jacob Tuttle, "Suárez on Creation and Intrinsic Change," *American Catholic Philosophical Quarterly*, vol. 93 (2019): 29–51; Jacob Tuttle, "Suárez's Non-Reductive Theory of Efficient Causation," *Oxford Studies in Medieval Philosophy*, vol. 4 (2016): 125–58; Stephan Schmid, "Efficient Causality: The Metaphysics of Production," in *Suárez on Aristotelian Causality: Investigating Medieval Philosophy*, vol. 9, ed. Jakob Leth Fink (Leiden: Brill, 2015), 84–120; Tad Schmaltz, *Descartes on Causation* (New York: Oxford University Press, 2008), 24–48; and Helen Hattab, "Conflicting Causalities: The Jesuits, their Opponents, and Descartes on the Causality of the Efficient Cause," *Oxford Studies in Early Modern Philosophy*, vol. 1 (2003): 1–22. For more general treatments of scholastic influences on early modern accounts of causation, with ample attention given to Suárez, see Dennis Des Chenes, *Physiologia: Natural Philosophy in Late Aristotelian and Cartesian Thought* (Ithaca, NY: Cornell University Press, 1998); and Walter Ott, *Causation and Laws of Nature in Early Modern*

First, his treatment of efficient causation has a special historical significance because it falls between the medieval and early modern periods. Accordingly, Suárez's account not only reflects an entire Aristotelian tradition of speculation on efficient causation, but also exercises considerable influence on subsequent early modern thinkers. Indeed, Suárez's views on efficient causation are now routinely cited in the literature on figures such as Descartes and Malebranche.⁴ Second, Suárez's discussion of efficient causation is remarkably well-developed. In fact, this is something of an understatement; in all, he devotes 8 of 54 disputations in his great philosophical work, the *Metaphysical Disputations*, to issues connected with efficient causation.⁵ Together, these disputations constitute what is likely the most detailed treatment of efficient causation in the history of philosophy, amounting to more than 800 pages of double-columned Latin text.

One crucial component of the resulting theory of efficient causation is Suárez's notion of an active power (*potentia activa*). He conceives an active power as an ability or capacity that a thing has to perform a certain kind of action, and thereby to produce a certain kind of effect. For example, when a fire heats a kettle of water, Suárez takes it to be obvious that it is also able to heat the water, and moreover that there must be something that accounts for this ability. Accordingly, on his view, active powers account for what kinds of actions agents can perform, as well as what kinds of changes or effects they are able to bring about. And in fact, Suárez identifies efficient causation with the exercise or manifestation of an active power. Thus, on his

Philosophy (New York: Oxford University Press, 2009), chap. 3. Much of Alfred Freddoso's work also focuses on Suárez's theory of efficient causation. See especially Alfred J. Freddoso, "Introduction," in *Creation, Conservation, and Concurrence*.

4 See the previous note, as well as Geoffrey Gorham, "Cartesian Causation: Continuous, Instantaneous, Overdetermined," *Journal of the History of Philosophy* 42, no. 4 (2004): 389–423; and Andrew Pessin, "Descartes's Nomic Concurrentism: Finite Causation and Divine Concurrence," *Journal of the History of Philosophy* 41, no. 1 (2003): 25–49.

5 DM 17–22 are explicitly devoted to efficient causation and its various types. DM 48, *On Action*, and DM 49, *On Passion*, also play a crucial role in Suárez's theory of efficient causation. For discussion, see Tuttle, "Suárez's Non-Reductive Theory of Efficient Causation." For English translations of significant portions of DM 48 and 49, see Jacob Tuttle, "Suárez's Metaphysics of Efficient Causation," (PhD diss., Purdue University, 2013), 129–226.

view, when the fire produces heat in the kettle of water, it does so by manifesting its power to heat.

This brief characterization suggests a number of issues connected with Suárez's views about active powers. Perhaps the foremost of these issues concerns their precise nature or ontological status. That is to say, what are active causal powers in themselves? Suárez's answer to this question has not been adequately explored in the literature.⁶ Moreover, because of the state of scholarship on medieval accounts of causation and causal powers, it is not at all obvious what the answer should be. Accordingly, this paper has two primary aims. The first is to identify which items in Suárez's ontology function as active powers, and so to clarify his views about the precise nature of these powers. The second is to identify some of the most important dialectical considerations that inform and motivate these views.

It will be helpful to make a few remarks about the intended scope and strategy of the paper. Because efficient causation figures so prominently in Suárez's philosophical and theological work, he appeals to his theory of powers in a wide variety of specialized contexts. To name but a few examples, active powers play an important role in his treatments of motion or change (*motus*), chance and fortune, freedom of will, the immortality of the human soul, and the efficacy of the sacraments.⁷ I want to emphasize at the outset that this paper does not attempt

6 Scholarship on active powers in Suárez has mostly focused on the powers of the soul. For two recent examples, see James South, "Suárez, Immortality, and the Soul's Dependence on the Body," in *The Philosophy of Francisco Suárez*, eds. Benjamin Hill and Henrik Lagerlund (Oxford: Oxford University Press, 2012), 122–136; and Marleen Rozemond, "Unity in the Multiplicity of Suárez's Soul," in *The Philosophy of Francisco Suárez*, 154–72. There is also some relevant work included in treatments of Suárez's views on the substantial form. See Mauricio Lecón, "Francis Suárez on the Efficiency of Substantial Forms," *Review of Metaphysics* LXVII, no. 1 (2013): 107–124; Kara Richardson, "Formal Causality: Giving Being by Constituting and Completing," in *Suárez on Aristotelian Causality*, 65–84; Christopher Shields, "The Reality of Substantial Form: Suárez, *Metaphysical Disputations XV*," in *Interpreting Suárez: Critical Essays*, ed. Daniel Schwartz (Cambridge: Cambridge University Press, 2012), 39–61; and Helen Hattab, "Suárez's Last Stand for the Substantial Form," in *The Philosophy of Francisco Suárez*, 101–18.

7 For references to Suárez's discussion of motion or change, see Tuttle "Suárez on Creation and Intrinsic Change," as well as notes in the remainder of the paper. For chance and fortune, see DM 19.12. For freedom of will, see

anything like a systematic overview of how powers figure in each of these cases. Instead, it aims to shed light on the nature of active powers by examining cases that Suárez himself regards as paradigmatic instances of efficient causation. The paper is loosely organized around two such kinds of cases. One of these is motion or change that occurs by way of transeunt (*transiens*) efficient causation. Following others in the Aristotelian tradition, Suárez understands instances of transeunt efficient causation as cases in which an agent or efficient cause produces an effect outside itself.⁸ Framing this point in terms of active powers, we can say that in transeunt efficient causation, the active power that is manifested exists outside the subject in which the change occurs. Our example of fire heating water is such a case, because in it the fire produces heat in another subject—namely, the water. The other kind of paradigmatic case I shall consider is that of substantial change or generation. One of Suárez's favorite examples of substantial change is the production of one fire by another, as when a combustible object, such as flax, is ignited by a fire.

The paper is divided into three parts. In the first part (section I), I examine Suárez's reasons for rejecting occasionalism, and consequently for thinking that creatures have genuine active powers. This discussion turns out to be important not only for its intrinsic interest, but also

DM 19.1–10. For the immortality of the soul, see Francisco Suárez, *Commentaria una cum questionibus in libros Aristotelis De anima*, 3 vols., ed. Salvador Castellote (Madrid: Sociedad de Estudios y Publicaciones [vols. 1 and 2] and Fundación Xavier Zubiri [vol. 3], 1978-1991). Part of this work, including material on the immortality of the soul, has recently been translated into English. See Francisco Suárez, *Selections from De Anima: On the Nature of the Soul in General, On the Immateriality and Immortality of the Rational Soul*, trans. John Kronen and Jeremiah Reedy (Munich: Philosophia Verlag, 2012). For discussion, see South, "Suárez, Immortality, and the Soul's Dependence." For Suárez's treatment of the sacraments, see his theological work *De Sacramentis in genera, Baptismo, Confirmatione, Eucharistia, Missae Sacrificio*.

⁸ In contrast, in cases of immanent (*immanens*) efficient causation, the agent or efficient cause produces its effect within itself. That is to say, in immanent efficient causation, the agent and the subject of change are the very same entity. As a result, in immanent efficient causation, the active power that is manifested exists within the very same subject that undergoes the change. For Suárez's treatment of the distinction, see DM 48.2.1, DM 48.6.9–10, and DM 18.7.45–51. For discussion of transeunt and immanent efficient causation in Suárez, see Lecón, "Suárez on the Efficiency of Substantial Forms;" and Dennis Des Chene, *Life's Form: Late Aristotelian Conceptions of the Soul* (Ithaca, NY: Cornell University Press, 2000): 57–66.

because it introduces a methodological commitment that influences Suárez's views about which entities can function as active powers. In the second part (sections II–III), I describe Suárez's account of the active powers in paradigmatic cases of accidental change. I argue that on his view, in such cases of accidental change the relevant active power will always be an accident in one of the first three species of the Aristotelian category of quality. In the third and longest part (sections IV–VIII), I turn to Suárez's account of the active powers in substantial change. He presents this account in the course of his discussion of an important scholastic controversy about the roles of substantial and accidental forms in substantial change. Because this controversy is itself of considerable philosophical interest, I discuss the dialectical alternatives to Suárez's own view in more detail than might otherwise be necessary. However, it is important to emphasize that I present these options as I take Suárez to understand them. Although I take Suárez's interpretation of his opponents to be basically correct, the case for my own interpretation of Suárez does not depend on this.

The most important textual source for Suárez's views about active powers is DM 18, *On the Proximate Efficient Cause, and its Causality, and Everything that it Requires in Order to Cause*. Of the eleven disputed questions that he considers there, the first six concern issues that are directly connected with active powers. In this paper, I rely heavily on DM 18.1, "Do created things truly produce anything?"; DM 18.2, "What is the principle by which one created substance produces another?"; and DM 18.4, "Which accidents can be principles of acting?"⁹ Suárez also discusses active powers in a variety of other contexts throughout the *Metaphysical Disputations*, including in DM 42, *On Quality in General*, and DM 43, *On Potentiality and Actuality*.¹⁰ I draw

9 DM 18.1, "Utrum res creata aliquid vere efficiant;" DM 18.2, "Quodnam sit principium quo substantia creata efficit aliam;" DM 18.4, "Quae accidentia possint esse principia agendi."

10 DM 42, De qualitate in communi; DM 43, De potentia et actu.

on these texts wherever I think it is helpful.

I

The Causal Efficacy of Creatures. Suárez regards the transeunt actions of natural agents as paradigmatic instances of efficient causation. However, he thinks that this view requires some defense, and he devotes the first section of DM 18 to the question whether creatures truly produce anything. In the course of answering this question, he considers three alternatives to his own opinion. The most important of these alternatives is what would later come to be called "occasionalism"—namely, the view that God is the only genuine efficient cause. As we shall see, Suárez's discussion of the occasionalist position introduces a methodological commitment that will be significant for the way in which he develops his own views about active powers.

Suárez describes the occasionalist position as follows:

[T]here was an old opinion asserting that creatures do not do anything, but that in their presence God produces everything. Moreover, action is attributed to fire, water, and so on because of appearance, and because God has as it were resolved (*pepigit*) not to produce such effects unless such things are present.¹¹

Creatures are thus causally inert, but they appear to act because God has ordained that he will regularly produce certain kinds of effects under certain circumstances. That is to say, the satisfaction of certain conditions constitutes an occasion for God's action. For example, God has

¹¹ DM 18.1.1.

decided that whenever a vessel of water exists in proximity to fire, he will produce heat in the water, and so on.

Suárez struggles to think of anyone who has definitively endorsed this view.¹² However, some scholars have suggested that it can be traced back to the Islamic occasionalist tradition, and this seems plausible.¹³ In any case, Suárez vehemently opposes the opinion, and he offers a variety of objections to show that it is false.¹⁴ I want to consider two of these objections here. The first is that occasionalism threatens our knowledge of the natural world. Suárez argues that much of our knowledge of things in the natural world depends on inferences from certain kinds of observable effects to certain kinds of efficient causes. For example, we infer that fire is hot because we observe that it regularly produces heat in other objects. Accordingly, if it turns out that fire is not a genuine agent, as occasionalists think, then there is no longer any good reason to suppose that fire is hot. After all, it is God's power that is being exercised when something is heated, and he may manifest this power just as well in the presence of something hot as in the presence of something cold. Suárez writes:

For, if fire does not heat, but rather God [heats] in the presence of fire, he could heat equally naturally in the presence of water. Therefore from that action we could not gather

12 See DM 18.1.1. He notes that the opinion is mentioned by Averroes, Albert the Great, and Aquinas, but that these thinkers do not attribute it to any particular author.

13 See Kara Richardson, "The Metaphysics of Agency: Avicenna and his Legacy," PhD diss., (University of Toronto, 2008), 151. For a more sustained examination, see Dominik Perler and Ulrich Rudolph, *Occasionalismus: Theorien der Kausalität im arabisch-islamischen und im europäischen Denken* (Göttingen: Vandenhoeck & Ruprecht, 2000). For one prominent Islamic discussion of occasionalism, see Averroes, *Ibn Rushd's Metaphysics: A Translation with Introduction of Ibn Rushd's Commentary on Aristotle's Metaphysics, Book Lām*, trans. Charles Genequand (Leiden: Brill, 1986), Commentary 18.

14 The best existing treatment of the medieval reactions to occasionalism in English is Alfred Freddoso, "Medieval Aristotelianism and the Case Against Secondary Causation in Nature," in *Divine and Human Action: Essays in the Metaphysics of Theism*, ed. Thomas Morris (Ithaca, NY: Cornell University Press, 1988), 74–118.

any moreso that fire is hot than that water is.¹⁵

Suárez anticipates the response that God does not produce effects arbitrarily, but rather has resolved to bring about certain kinds of qualities only in the presence of pre-existing, similar qualities. We might say that according to this response, God fixes the laws of nature by resolving that he will produce certain kinds of entities only in the presence of similar entities. For example, he will produce heat only when there is already something hot in the vicinity, and cold only when there is something cold. Our knowledge of the natural world is thus preserved, because the laws that God has ordained allow us to infer that like is produced only in the presence of like.¹⁶

Suárez's response to this way of developing the occasionalist theory is not particularly satisfying. He proposes as a counterexample that there are some qualities that are not reliably associated with the production of new instances of similar qualities. For example, white things are not reliably produced in the presence of other white things.¹⁷ He also notes that this way of developing the theory does not account for efficient causes that are different in kind from their effects—what he calls "equivocal causes" (*causae aequivocae*).¹⁸ For example, when the sun produces minerals in the earth, it is producing something of a very different kind than itself. In this sort of case, the pre-existing creature is not relevantly similar to the effect, and so violates the restriction that God will only produce like in the presence of like.

15 DM 18.1.6.

16 "Dicere potest aliquis pactum illud non fuisse omnino arbitrarium, sed fundatum aliquo modo in naturis rerum, non quia illae activae sint, sed quia habent qualitates similes producendis; et ita colligimus ignem esse calidum, eo quod Deus calefacit ad praesentiam ejus, quia hoc pactum fundatum fuit in tali qualitate ignis" (DM 18.1.7).

17 "[E]adem ratione juxta naturas rerum debuisset Deus producere albedinem ad praesentiam albedinis, quia si ex se non est magis activa qualitas calor quam albedo, ergo ex natura rei non est magis debitum pactum illud calori quam albedini" (DM 18.1.7).

18 "Tum etiam quia illud non habet locum in causis aequivocis, in quibus non est similis forma vel qualitas, neque est necessario eminentior, si illae nihil sunt acturae" (DM 18.1.7).

Although Suárez is correct that these cases constitute counterexamples to the modified theory, he seems to have underestimated the ability of a stubborn occasionalist to specify further the laws that God has resolved to enact. Indeed, the occasionalist could respond that it is an empirical matter which laws God has in fact decided upon, and that our understanding of these laws is always open to revision on the basis of new observations. Accordingly, the occasions for God's action may well turn out to be very complicated, but this does not in any way imply that occasionalism destroys our knowledge of the natural world.

I want to turn now to a methodological objection that Suárez raises against occasionalism. The core of the objection is that occasionalists gratuitously appeal to supernatural causes in order to explain natural phenomena. Suárez insists that when there is a natural causal explanation available for a phenomenon, we should prefer this explanation over a supernatural one. Although he employs this principle in a variety of contexts, his clearest statement of it is in DM 18.2, where he writes:

[T]he correct disposition of the universe requires that whatever can suitably and connaturally be accomplished through secondary causes is [in fact] accomplished [through them].¹⁹

What Suárez means by a secondary cause is a creature.

The methodological principle that Suárez articulates here seems plausible. It thus looks as if the most promising strategy for the occasionalist is to deny that secondary efficient causes confer any explanatory benefit. And in fact, this is the main line of defense that Suárez offers on

¹⁹ DM 18.2.15.

behalf of his unnamed occasionalist opponents. Like others in the Christian tradition, Suárez thinks that in order for creatures to act, God must cooperate or concur in their action. However, he argues on behalf of the occasionalist that once this is granted, there is no longer any theoretical motivation for insisting that creatures really do act. After all, surely God's power is sufficient to produce the effect without the concurrence of any creature. Indeed, the alternative would detract from God's perfection. And if this is right, then it is superfluous to posit a secondary cause that operates alongside God.²⁰

Suárez provides a detailed response to this argument in DM 22, where he treats divine concurrence.²¹ Indeed, his response to the argument is a crucial component of his defense of his theory of concurrence. However, because this discussion involves complications that would take us beyond the scope of this paper, I shall not consider it here. For my purposes, it is sufficient to note that Suárez denies that secondary causes are theoretically idle. They make a genuine contribution to the production of their effects, in spite of the fact that they require God's concurrence.

Let us now turn to Suárez's views about the nature of active powers, beginning with his treatment of active powers in paradigmatic cases of accidental change.

II

Quality and the Other Categories of Accidents. It will be useful to begin by briefly considering

20 "Si autem Deus omnia efficit, interrogo rursus an immediate et sufficienti virtute, an mediate tantum et insufficienti virtute. Hoc posterius derogat divinae perfectioni. Si autem primum verum est, superflua est omnis alia efficientia, quia una causa sufficiens et efficax, satis est ad effectum" (DM 18.1.2). For a helpful discussion of this argument, see Freddoso, "The Case Against Secondary Causation."

21 For a restatement of the objection, see DM 22.1.4. For Suárez's response, see DM 22.1.16–23.

how Suárez understands accidental change. He analyzes accidental change in terms of the production of a new accidental form in a pre-existing subject. Thus, our paradigmatic case of fire heating water is to be analyzed in terms of the fire's producing a new quality of heat in the water. As it turns out, Suárez thinks that in such cases, the relevant active power is itself to be identified with an accident that exists in the agent.²² Continuing with our example, the fire's power to heat just is the accidental form of heat that exists within the fire. To put the point somewhat differently, Suárez thinks that it is precisely in virtue of being hot that fire is able to produce heat in other objects. Likewise, it is in virtue of being cold that water is able to cool other objects, and so on. In light of this view, it is natural to wonder which kinds of accidents function as active powers in accidental change. In this section, I reconstruct and explain Suárez's answer to this question.

Like other Aristotelians, Suárez acknowledges nine categories of accidents, and it is not immediately clear which from among these is suited to the role of an active power.²³ He takes up this question in DM 18.4, where he argues that among accidents, only those from the category of quality can function as active powers. He writes:

[A]mong accidents, only quality is a *per se* principle of acting.²⁴

Suárez's main argument for this thesis is from empirical considerations. He thinks it is clear from experience that the three kinds of accidental changes acknowledged by Aristotelians

22 "[Q]uando accidens fit per propriam actionem a naturali resultantia distinctam, principium proximum efficiendi illud, semper est aliquod accidens" (DM 18.3.15).

23 These are quantity, quality, relation, action, passion, when, where, situation, and habit. Suárez treats each of these categories, and some of their species, in DM 40–53.

24 DM 18.4.7.

—namely, alteration, augmentation and diminution, and local motion—are all accomplished by means of qualities. This is perhaps easiest to appreciate in the case of alteration, which Aristotelians understand as change in respect of quality. Our paradigmatic example of efficient causation is an instance of alteration, because in it the water changes from having the quality of coldness to having the quality of heat. As we have seen, Suárez thinks that the fire is able to bring about this change in virtue of one of its own qualities, and he thinks that this is in fact the case in every observed instance of alteration.²⁵

Likewise, he claims that vital actions—which he apparently means to include augmentation and diminution—are accomplished partly by means of qualities.²⁶ Aristotelians understand augmentation and diminution as increase and decrease in quantity, respectively. Although Suárez does not offer a specific example of a vital action in this context, elsewhere he describes the process of metabolism as one in which a living thing incorporates the matter from its food into its body, and thereby increases in quantity. Importantly, he thinks that this change is accomplished at least partly in virtue of the animal's vital heat.²⁷ Finally, Suárez also insists that local motion—that is to say, change in place—is always accomplished by means of some quality. In this case he offers the example of projectile motion, noting that in order to explain this motion, "the philosophers reckon that it is necessary that there be an impressed impetus, which is a

25 Suárez makes this point in an oblique way, by referring to qualities that function as active powers in the generation of substances. He writes: "[A]ctiones omnes, quae tendunt ad substantiam, fieri solent mediis qualitibus, vel primis, vel quae eminenter contineant primas..." (DM 18.4.3). In order to understand the significance of this point for alteration, it is important to understand that Suárez thinks that every natural instance of substantial change is preceded by alterations that prepare or dispose the matter to receive a new substantial form. Moreover, he also appears to think that every instance of alteration tends toward the generation of some substance or other. He alludes to these points in DM 18.4.1. For a more detailed discussion of the alterations that precede substantial change, see section V of this paper.

26 "[A]ctiones etiam vitales mediis qualitibus fiunt..." (DM 18.4.2).

27 "Item, calor ignis est instrumentum ejus ad generandum ignem, et calor vitalis vel potentia nutritiva, ad producendam carnem..." (DM 17.2.14). For discussion of vital action, emphasizing metabolism, in scholastic philosophy and theology, see Philip Reynolds, *Food and the Body: Some Peculiar Questions in High Medieval Theology* (Leiden: Brill, 1999).

motive quality."²⁸

While Suárez thinks that experience confirms that paradigmatic cases of accidental change are accomplished in virtue of some quality or other, he thinks it also shows that the remaining eight categories of accidents are not suited to serve as active powers. He considers each of these categories individually, in each case concluding that empirical considerations show that the items falling under it are inactive. Although it would take us too far afield to recount this whole discussion, the most important themes are illustrated by what he has to say about the category of where. He writes:

[I]f we are speaking about where, insofar as it is an intrinsic presence, or mode of the located thing, in this case it is immediately clear that it is not a principle of any action. Of course, it is sometimes a condition for acting because of nearness.... However, it is not the reason or principle of acting, as experience itself sufficiently establishes.²⁹

In this passage, Suárez draws attention to his distinction between an active power, and what he elsewhere calls a *sine qua non* condition for acting. As it turns out, he thinks that natural agents can only exercise their active powers under certain circumstances. Although these circumstances differ to some extent depending on which active power is involved, one of the most important requirements he identifies is that the agent and patient be in sufficient proximity to one another. For example, a fire cannot heat a vessel of water unless the two are located nearby. Accordingly, in this case Suárez would say that the proximity of the fire and the vessel of

28 DM 18.4.3.

29 DM 18.4.7.

water is a *sine qua non* condition for the fire's acting on the water. And because items in the category of where account for this proximity, he notes in the above passage that these items are sometimes conditions for acting.

It is worth emphasizing that Suárez thinks that the distinction between active powers and *sine quibus non* conditions is based on a real metaphysical difference. He often describes action as proceeding from its agent and from that agent's active power. Moreover, he thinks that this language is grounded in a real relation that the action bears to that agent and that active power. On the other hand, Suárez denies that *sine quibus non* conditions stand in any such relation to the actions for which they serve as prerequisites. For this reason, he insists that, unlike active powers, *sine quibus non* conditions, "do not *per se* instill [being] into an effect or an action."³⁰

Suárez does not explicitly say which empirical considerations show that where is at most a *sine qua non* condition for acting, and not an active power. And in fact, he notes elsewhere that, as an epistemic matter, it is sometimes difficult to determine whether a given prerequisite for acting is a full-blown active power or a mere *sine qua non* condition.³¹ However, his point seems to be that there is no observable correlation between a subject's being located in a particular place, and its performing a particular type of action. Indeed, if we know only that two substances are located nearby one another, but not what kinds of substances they are, or what other attributes they have, there is little hope that we shall be able to predict how, or whether, they will interact causally. For this reason, it looks as if proximity, and the items in the category of where that account for it, are best understood as mere *sine quibus non* conditions for acting.

30 DM 17.2.5.

31 "Solum adverto, quoniam hujusmodi conditio sine qua non, cum principio per se actionis in eo convenit, quod est ex necessitate requisita, interdum non esse facile ad discernendum, utro modo aliqua dispositio seu proprietates rei concurrat ad actionem, an, scilicet, ut principium per se, an solum ut conditio sine qua non" (DM 17.2.5).

III

Power and the Other Species of Quality. After concluding that, among the accidents, it is exclusively those in the category of quality that function as active powers, Suárez considers which kinds of qualities are suited to this role. He frames his discussion in terms of the four Aristotelian species of quality. These are habit (*habitus*) and disposition (*dispositio*), which are treated as a single species; power (*potentia*); sensible quality (*qualitas passibile*); and shape (*figura*).³² Referring to this traditional division, he writes:

[I]t ought to be said that neither is every species of quality enumerated by Aristotle active, nor is every quality contained under those individual species, but only the first three species with respect to some of the qualities contained under them.³³

It might initially seem surprising that Suárez should acknowledge any active powers outside the second species of quality. After all, it is natural to assume that he posits the species of power precisely in order to accommodate the active and passive powers that figure in his theory of efficient causation. And for this reason, one might well have expected him to confine active powers to this species. In order to appreciate why Suárez instead locates active powers in the first three species of quality, it is important to understand that, like other medievals, he acknowledges several senses of the term "power" (*potentia*). He distinguishes two senses that are

³² See *Categories*, chapter 8, 8b25–11b6 in *The Complete Works of Aristotle: The Revised Oxford Translation*, 2 vols, ed. Jonathan Barnes (Princeton: Princeton University Press, 1995). For a detailed and interesting discussion of issues surrounding quality in late medieval and early modern philosophy, see Robert Pasnau, *Metaphysical Themes: 1274–1671* (Oxford: Clarendon Press, 2011), chaps. 19–23.

³³ DM 18.4.8.

important for my purposes here.³⁴ In the first place, we can understand powers "very broadly" (*latissime*) or "transcendentally" (*transcendenter*), and in this sense, anything that accounts for a thing's ability to act or to be acted on will qualify as a power. He writes:

[R]eal power taken broadly...is said of any principle of acting or being-acted-on [...].³⁵

[R]eal or physical power extends broadly, for in general it can be said and customarily is said of any power (*vi*) of acting, or capacity (*capacitate*) for receiving [form]....³⁶

As Suárez goes on to emphasize, it is in this broad sense that active and passive powers extend beyond the second species of quality. Arts (*artes*) and virtues (*virtutes*), for example, function as active powers even though they fall in the species of habit and disposition. Likewise, heat and cold are active powers that fall in the species of sensible quality.³⁷ Indeed, it turns out that some powers in the broad sense fall outside the category of quality altogether. For example, God plays the role of an active power because he is omnipotent, and his omnipotence is not accounted for by any attribute that is really distinct from himself. He is, as it were, his own principle of acting. Likewise, as we shall see later, substantial forms function as active powers

34 Some of these senses have more to do with Suárez's modal theory than with his theory of efficient causation, and I shall ignore these here. See the Prologue to DM 43. As evidence of the many ways in which medieval Aristotelians understood "*potentia*," consider that the entry for the term in the standard Aquinas lexicon is a full five pages long. See *A Lexicon of St. Thomas Aquinas, based on The Summa Theologica and selected passages of his other works*, eds. Roy Deferrari, Sister Inviolata Barry, and Ignatius McGuinness (Washington, DC: Catholic University of America Press, 1948), 854–59. For a discussion of some of the senses of "*potentia*" in scholastic philosophy, see Dennis Des Chene, *Physiologia: Natural Philosophy in Late Aristotelian and Cartesian Thought* (Ithaca, NY: Cornell University Press, 1996), §2.2–4.

35 DM 43, Prologue.

36 DM 42.3.10.

37 "Tribuitur etiam hoc nomen [i.e., *potentia*] habitibus, qui sunt principia operandi; sic enim Aristoteles, 9 Metaph., c. 5, artes et virtutes inter potentias numerat; qualitates etiam tertiae speciei, ut calor et frigus, quae sunt principia proxima agendi, sub hac transcendentali acceptione potentiae comprehenduntur" (DM 43, Prologue).

because they enable their substances to perform certain kinds of actions.³⁸ However, Suárez also acknowledges a narrower sense of "power," which includes only items that fall in quality's species of power. For this reason, he often refers to this kind of power as "categorical" (*praedicamentalis*). Among the categorical powers are the faculties of will (*voluntas*) and intellect (*intellectus*), which enable their subjects to act and to be acted on in a variety of ways.

Now, it is perhaps clear already how categorical powers differ from active principles that fall outside the category of quality. Such principles will be either substantial forms, which Suárez locates in the category of substance, or God himself, whom Suárez thinks falls outside the Aristotelian categories altogether. However, it is less clear how the species of power is supposed to differ from those of habit and disposition, on the one hand, and sensible quality, on the other—each of which is also supposed to contain active principles. Suárez addresses this issue in DM 42.5, where he offers his account of the so-called "sufficiency" (*sufficiencia*) of the Aristotelian division of quality, and also in DM 43, which he devotes entirely to categorical power and its manifestation.³⁹ In both of these texts, he argues that categorical power and sensible quality can be distinguished on the basis of their distinctive functions (*munus*) or ends (*fines*). He notes that while categorical power is ordered "*per se* primarily" to its subject's operation, sensible quality is ordered only to its subject's "ornamentation" or formal perfection. That is to say, while the primary metaphysical role of a categorical power is to enable its subject to act or to be acted on in a certain way, the primary role of a sensible quality is simply to characterize its subject. For example, Suárez thinks it is clear that the primary function of the intellect is to enable the various

38 "[E]t sic [potentia] tribuitur principio substantiali, ut [...] formae substantiali, quatenus est principium principale agendi, et Deo ipsi, quatenus est omnipotens" (DM 43, Prologue).

39 From Suárez's discussion of this topic in DM 42.7, it appears to have been extremely controversial; he considers four separate accounts. Pasnau remarks that the distinctions among the four species of quality "were the subject of a vast scholastic commentary tradition, which defies summary." See Pasnau, *Metaphysical Themes*, 537.

operations that are characteristic of rational beings. On the other hand, he thinks that the primary function of the qualities of heat and cold is simply to render their subjects hot and cold, respectively. Although he acknowledges that heat and cold are able to serve as active powers, he insists that they do so only "concomitantly," as a kind of by-product of performing their primary function.

Suárez thinks that qualities in the species of habit and disposition are also ordered *per se* primarily to their subject's operation. However, he thinks that habits and dispositions contribute to this operation in a way very different from categorical powers. Because Suárez's treatment of dispositions introduces some complications that would take us too far afield, here I shall focus exclusively on his account of the distinction between habits and categorical powers. He emphasizes two differences between these kinds of qualities. First, categorical powers belong to their subjects by nature, whereas habits must be acquired. For example, although the faculty of intellect is natural to a human being, her knowledge of grammar—which Aristotelians construe as a habit—must be learned. Second, although both categorical powers and habits account for an agent's ability to perform a certain sort of action (and so qualify as active powers in the broad sense), categorical powers account for this ability in a more fundamental way. For this reason, Suárez often describes the role of habits in efficient causation as subordinate to that of categorical powers. For example, in DM 42.7, he writes:

[A habit] is a principle superadded to a [categorical] power, determining or assisting it, or giving it a readiness (*facilitatem*) in operating.⁴⁰

40 DM 42.7.

Suárez is here appealing to the intuitive idea that naturally occurring powers can be developed so that their subjects are able to perform certain sorts of actions more readily, or more reliably, or more skillfully. For example, although there is some sense in which any human being naturally has the capacity to perform thoracic surgery, we think that there is an important difference between the capacity of an ordinary person to do this, and that of a trained surgeon. According to Suárez and other Aristotelians, this difference is to be spelled out in terms of the various habits that a surgeon has acquired in the course of her medical education. Such habits plausibly can be understood as ways in which the intellect and other naturally occurring powers can be refined or perfected.

Now that we have examined Suárez's views about the active powers in paradigmatic cases of accidental change, it will be helpful to make a few brief remarks about the significance of our conclusions so far. One point that bears emphasizing is that Suarez acknowledges several very different kinds of entities that can function as active powers. As we have seen, some of these entities are qualities, some are substantial forms, and one is God himself. One way of framing Suárez's account is to say that he takes the concept of an active power to be *functional* rather than *categorial*. That is to say, he thinks that by identifying something as an active power, we identify it as performing a certain functional or metaphysical role, without also identifying the ontological kind or category of the entity that performs this role.⁴¹ This is what Suárez has in mind when he says that real power, in the broad sense, "is said of *any* principle of acting."⁴² In other words, anything whatever can correctly be called an active power, so long as it enables a subject to perform an action.

41 For a more detailed discussion of the distinction between functional and categorial concepts, see Jeffrey Brower, *Aquinas's Ontology of the Material World: Change, Hylomorphism, & Material Objects* (Oxford: Oxford University Press, 2014), 66–9.

42 DM 43, Prologue. The italics are mine.

The full range of entities that, on Suárez's account, can function as active powers has never been recognized explicitly in the literature. Moreover, the full significance of Suárez's view that substantial forms serve as active powers has not been appreciated. A number of scholars have noted the prominent role that substantial forms play in Suárez's treatment of immanent efficient causation, especially in his treatment of the soul and its powers.⁴³ However, as we shall see in the remainder of the paper, Suárez also thinks that substantial forms function as active powers in substantial change, which he takes to be an instance of transeunt efficient causation. Because Suárez regards some instances of substantial change as paradigmatic examples of efficient causation, and moreover because his views about the role of substantial forms in substantial change are not well understood, the remainder of the paper focuses on this issue.

IV

Active Powers in Substantial Change: Background to the Controversy. Let us turn now to Suárez's views about the active powers in substantial change. His most detailed treatment of this topic is found in DM 18.2, where he explains and defends his position in a scholastic controversy about the roles of substantial and accidental forms in substantial change.⁴⁴ Because Suárez's own

⁴³ For example, see Dominik Perler, "Suárez on the Metaphysics of Habits," in Nicolas Faucher and Magali Roques (eds.) *The Ontology, Psychology and Axiology of Habits (Habitus) in Medieval Philosophy*, Historical-Analytical Studies on Nature, Mind and Action, vol. 7 (Cham, Switzerland: Springer 2018), 365–84; Dominik Perler, "Faculties in Medieval Philosophy," in Dominik Perler (ed.) *The Faculties: A History*, Oxford Philosophical Concepts (New York: Oxford University Press, 2015), 97–139; Christopher Shields, "Virtual Presence: Psychic Mereology in Francisco Suárez," in Klaus Corcilius and Dominik Perler (eds.) *Partitioning the Soul: Ancient Medieval, and Early Modern Debates*, Topoi: Berlin Studies of the Ancient World, vol. 22 (Berlin and Boston: de Gruyter, 2014), 199–219; and Simo Knuuttila, "The Connexions between Vital Acts in Suárez's Psychology," in Lukáš Novák (ed.) *Suárez's Metaphysics in its Historical and Systematic Context* (Berlin and Boston: de Gruyter, 2014), 259–74. See also the sources cited in note 6.

⁴⁴ The most detailed existing treatment of this controversy is Richardson, "Metaphysics of Agency," 147–180. See

account is best appreciated in the context of this controversy, my strategy is to outline what he takes to be the main dialectical alternatives to this account, as well as his reasons for rejecting them. Once this is done, Suárez's own account will emerge naturally. However, before turning to this task, it is important to make a few background remarks that help to explain the question that the controversy deals with.

It will be helpful to begin by recalling one of Suárez's standard examples of substantial change, the generation of fire from flax (*stupa*). Imagine that a bundle of dry flax is brought near a hearth, where a fire is burning, and that shortly thereafter the flax bursts into flames. Suárez thinks we should analyze this kind of change in terms of the production of a new substantial form in a pre-existing subject. Thus, the fire in the hearth is said to generate a new fire because it produces the substantial form of fire in some prime matter.

Now, it is natural to assume that what enables the one fire to generate the other is that it, the first fire, possesses the quality of heat. Suárez shares this intuition, and for this reason he thinks that the quality of heat functions as an active power in the generation of fire. However, he also argues that this power is not by itself sufficient to enable the fire in the hearth to produce a new fire from the flax. In arguing for this position, Suárez appeals to the scholastic principle that nothing gives what it does not have.⁴⁵ In order to produce an effect with a certain degree of perfection, an agent must exercise a power of equal or greater perfection. In what follows, I shall refer to this as the "Causal Adequacy Principle." Applying this principle to substantial change, Suárez infers that because an accident is less perfect than a substance, it cannot by itself account for an agent's ability to generate a substance. Commenting on our example of the generation of

also Richardson, "Formal Causality;" and Hattab, "Suárez's Last Stand," 115–117.

45 "[N]emo det quod non habet [...]" (DM 18.2.2).

fire from flax, he writes:

[I]f in a certain case...an [accidental] form is not actually assisted by a superior form, then it only instills [being] through what it has in virtue of itself. Therefore, because it is something imperfect, it cannot produce something more perfect by itself alone. In just this way it is repugnant (*repugnat*) for heat to produce a substantial form by means of its own proper power alone.⁴⁶

Of course, to the extent that an agent really is able to produce an effect of a certain kind, Suárez thinks that there must be something that is sufficient to account for this ability. There must be what he refers to in the above passage as a "superior form" to assist the accidental form in the generation of a substance. And as it turns out, he claims that in typical cases of substantial change, the agent's substantial form is suited to this role. Thus, in our standard example of substantial change, the fire in the hearth produces a new fire from the flax not only in virtue of its heat, but also in virtue of its substantial form. More generally, Suárez's view is that in ordinary cases of substantial change, it is not only an agent's qualities that function as active powers, but also its substantial form.

At this point, it is worth pausing to address a potential source of misunderstanding. As we have seen, Suárez explicitly identifies substantial forms as active powers, and I have argued that he thinks substantial forms are one among several types of entities that can function as active powers. However, he sometimes also talks as if substantial forms are *themselves* efficient causes, rather than active powers that are manifested by complete substances. For example, in the

⁴⁶ DM 18.2.22.

passage quoted immediately above, Suárez emphasizes that accidental forms cannot by themselves produce or effect (*efficere*) substantial forms, and he thereby appears to imply that substantial forms do themselves produce or effect other substantial forms. Likewise, in other passages in DM 18.2, he describes substantial forms as "educing" (*educere*) forms from matter, and as "instilling" (*influerere*) being in effects. Indeed, because of these passages, and other similar passages in his treatment of immanent efficient causation, scholars sometimes claim that Suárez understands substantial forms as "internal efficient causes" or "internal agents."⁴⁷

However, describing substantial forms as efficient causes or agents can be misleading, because it overlooks a technical distinction that would have been well-known to Suárez's scholastic audience—namely, the distinction between efficient causes *quod* and efficient causes *quo*. As the Latin suggests, an efficient cause *quod* is an efficient cause which actually makes or produces an effect, and accordingly it is in this sense that something is most properly said to be an efficient cause. On the other hand, an efficient cause *quo* is an efficient cause only in the sense that it is *that by which* an agent makes or produces its effect.⁴⁸ In fact, Suárez regularly describes active powers, whether they are substantial or accidental forms, as efficient causes *quo*, or as principles *quo*. (Indeed, he takes these expressions to be synonymous with the term "active power.") Thus, in our example of fire heating water, he would say that the fire is the agent or efficient cause in the strict sense—that is, the efficient cause *quod*. However, he would be happy to say that the fire's quality of heat is, in an attenuated sense, an efficient cause—namely, an efficient cause *quo*. Similarly, when Suárez characterizes substantial forms as efficient causes or as principles of action, he means them to be understood as causes or principles *quo*. That is to

47 See especially Pasnau, "Form, Substance, and Mechanism," and Hattab, "Suárez's Last Stand."

48 "Haec enim causa principalis, ut ratio facta declarat, alia est quae operatur, alia quae est principium principale operandi, quae solent dici causa principalis ut quod et ut quo [...]" (DM 17.2.7).

say, he takes them to be causes or principles by which their complete substances produce an effect. So, although Suárez sometimes sounds as if he thinks substantial forms are themselves efficient causes, these passages are always—or almost always—just alternative ways of referring to substantial forms' role as active powers.⁴⁹

Let us turn now to the problem that Suárez sets out to solve in DM 18.2. Although he and other scholastics thought that they had good *prima facie* reasons to accept that both accidental and substantial forms function as active powers in substantial change, it is not immediately clear what this view amounts to. More specifically, it is not clear how we are to understand the contributions that these two kinds of active powers are supposed to make toward the generation of a substance.

Scholastics sometimes tried to characterize the difference between these contributions by referring to accidental forms as "instrumental principles" (*principia instrumentalia*) of acting, and to substantial forms as "principal principles" (*principia principalia*) of acting. Because this terminology is somewhat awkward, from now on I shall refer to the former as *instrumental active powers*, and to the latter as *principal active powers*. The concept of an instrumental active power is taken from an analogy with the instruments of a craft, such as a sculptor's chisel. Accordingly, referring to an accidental form in this way suggests that it occupies a role that is in some sense subordinate to that of the substantial form, whose role is more like that of the sculptor himself, and hence "principal" or primary. However, because the precise signification of

49 For one especially clear example of this in the *Metaphysical Disputations*, see DM 18.5, where Suárez focuses on the role of substantial forms in vital action. Whether Suárez would acknowledge any cases in which substantial forms function as efficient causes *quod* is, to my knowledge, not something that has been explicitly addressed in the literature. But the human soul, which he takes to be subsistent, might be one case in which he would have a principled reason to claim that a substantial form is an efficient cause, in the most proper sense. For discussion of the human soul's subsistent character, see Suárez, *De anima*, Disputation 2, Question 3. For an English translation, see Kronen and Reedy, *Selections from De Anima*.

these terms was itself a matter of controversy, Suárez evidently does not think that applying them to accidental and substantial forms helps to clarify their distinctive contributions to substantial change. And in fact, he characterizes the main project of DM 18.2 as that of clarifying exactly what it means to say that an accidental form functions as an instrumental active power, and that a substantial form functions as a principal active power. He writes:

Now that these [initial points] have been supposed, two things remain to be explained. The first is in what way an accident is an instrument for producing a substance. The second is in what way a substantial form is a principal principle for educating a similar [substantial] form.⁵⁰

In what follows, I shall examine how Suárez develops his own solution to this problem in response to two alternatives.

V

The Scotus-Ockham Position. According to the first position that Suárez considers, which he reports was endorsed by Scotus and Ockham, only an agent's substantial form makes a direct contribution to the generation of a substance. However, an agent's accidents can be said to be instruments in the generation of a substance because of their role in disposing matter to receive a new substantial form. Characterizing this position, Suárez writes:

⁵⁰ DM 18.2.4.

[An accident] is called an instrument only because it works dispositively (*dispositive*) toward the introduction of the substantial form that is the effect primarily aimed at by the principal agent.⁵¹

In order to appreciate what this means, it will be helpful to revisit our analysis of substantial change. As we have seen, Suárez analyzes substantial change in terms of the production of a new substantial form in a subject. Thus, in our paradigmatic example of substantial change, the fire in the hearth is said to generate a new fire in virtue of producing a new substantial form of fire in some prime matter. Now, one aspect of this situation that we have not focused on so far is that the flax must undergo certain accidental changes before a new fire can be produced from it. For example, before it catches fire, the flax must first change from being cool to being hot. Medieval Aristotelians described such changes as preparing or disposing matter to receive the relevant substantial form. As Suárez sometimes puts the point, such changes are required in order to make the matter "proximately fit" (*proxime capax*) for the new substantial form.

The Scotus-Ockham position analyzes the process of substantial change into two phases, which are marked off by distinct actions. In the first phase, the agent prepares the matter for a new substantial form by producing certain accidents in it. Because the action in this phase is just an ordinary instance of accidental change, we can understand what the agent's accidents contribute to this change in terms of the account that I defended in sections II and III. For example, the fire in the hearth heats the flax in virtue of its own quality of heat. In the second phase, the agent produces the new substantial form itself. According to the Scotus-Ockham

51 DM 18.2.4.

position, only the agent's substantial form functions as an active power in this action. Thus, the fire in the hearth produces a new fire solely in virtue of its substantial form. On this view, then, the agent's accidents are called instruments for substantial change not because they directly contribute to the generation of a substance itself, but only because the accidental changes to which they do directly contribute pave the way for the generation of a substance.

Suárez considers three arguments in favor of the Scotus-Ockham position, two of which are important for my purposes here. According to the first, it is not possible for an accident to contribute directly to the generation of a substance, because an accident is not "proportioned" (*proportionatum*) to the generation of a substance. Describing this argument, which he characterizes as "the main argument" for this position, Suárez writes:

[S]ince an accident is less perfect than a substantial form, it cannot in any way produce [a substantial form].⁵²

As this passage suggests, proponents of the Scotus-Ockham position understand the lack of proportionality between an accident and a substantial form in terms of their relative perfection. And for this reason, it might appear that this argument is a straightforward appeal to the Causal Adequacy Principle. Recall that according to this principle, whenever an agent produces an effect with a certain degree of perfection, it does so by exercising a power of equal or greater perfection. Scholars have so far interpreted the argument as just this kind of appeal.⁵³ However, it is important to notice that on this interpretation, the argument plainly fails to secure

52 DM 18.2.5.

53 See Richardson, "Metaphysics of Agency," 156. See also Helen Hattab, "Suárez's Last Stand," 115–116.

its conclusion. At most, the Causal Adequacy Principle shows that in every substantial change, there is an agent whose substantial form functions as an active power. But it does not establish the stronger conclusion that the argument needs—namely, that accidental forms cannot *also* function as active powers in the production of a substantial form itself.

In order to secure this stronger conclusion, the proponents of this position need to show that it is impossible for an active power that is disproportionate to a given effect to directly contribute to the production of that effect, even if assisted by a more perfect power. They need to show, for example, that it is impossible for heat to contribute directly to the production of fire, even if that heat is assisted by a substantial form of fire. And in fact, this is exactly how Suárez portrays the argument when he returns to it later in DM 18.2. Although his treatment of the argument is compressed, the thought seems to be that it would have been inappropriate or unfitting for nature to bestow on an agent a less perfect instrumental active power for the sake of performing a more perfect action. Crucially, this is supposed to be the case even if this less perfect instrumental active power is accompanied by a principal active power that is proportioned to the sort of action in question. In order to illustrate this point, Suárez compares substantial change to the spiritual action of understanding (*intellectio*), which he thinks is more perfect than any material active power. He writes:

For example, because understanding is a spiritual action, nature would not have bestowed a fitting principle for it if it had conferred a material instrument, even though the soul, which is a principal principle [of understanding], is spiritual. Therefore, in the same way an accident will not be an appropriate instrument for a substantial action, even if the

[principal] form is substantial.⁵⁴

Considerations about proportionality also underlie another argument that Suárez presents on behalf of the Scotus-Ockham position. Recall that the original reason for supposing that substantial forms function as active powers in substantial change is that accidents are not perfect enough to account for an agent's ability to produce a substance. However, once it is acknowledged that substantial forms are perfect enough to account for this ability, it is no longer clear why we should think that accidents make any direct contribution to substantial change. Suárez defends this claim by drawing an analogy with the ordinary cases of accidental change that we analyzed in sections II and III. He writes:

For if heat is sufficient by itself alone...for effecting a similar [quality of] heat, why should the form of fire not be sufficient for educating a similar [substantial] form, since we are already supposing that it can immediately instill [being] in that [substantial form]? But if it is sufficient, then any other [active] principle is superfluous (*supervacaneum*).⁵⁵

Thus, even if we are willing to grant that accidents are somehow capable of making such a contribution, there does not appear to be any theoretical benefit in supposing that they do. Of course, as we have seen, it is natural to think that the first fire's heat does play some role in its generation of the new fire. However, we can account for this intuition by pointing out that the first fire's heat contributes indirectly to the generation of the new fire, because it enables the first

54 DM 18.2.16.

55 DM 18.2.26.

fire to heat the flax, which must take place before the new fire can be produced from it.

VI

The Thomist Position. Suárez also considers a second view, which he attributes primarily to Aquinas and several of his followers, including Hervaeus Natalis, Giles of Rome, Cajetan, and Capreolus. In what follows, I shall refer to this as the "Thomist position." According to this position, accidents function as active powers not only in the accidental changes that prepare matter for a new substantial form, but also in the production of the substantial form itself. That is to say, accidents directly contribute to substantial change. In contrast, the agent's substantial form does not directly contribute to the generation of a substance. Accordingly, the thought seems to be that accidental forms are instrumental powers because they serve as intermediaries for agents' substantial forms, analogously to the way in which the instruments of a craft serve as intermediaries for the action of the craftsman.

Although Suárez considers several arguments for the Thomist position, the one that he thinks is strongest appeals to observed cases of substantial change in which there is evidently no substantial form that could serve as an active power. He writes:

This opinion is confirmed...chiefly on the basis of experiences. For substances are often generated by means of accidents, when there is no substantial form from which the action could exist, either because [that form] is far away, or because it does not exist at all.⁵⁶

⁵⁶ DM 18.2.13.

Now, it is perhaps initially surprising that there should be any such cases. After all, in Suárez's example of the generation of one fire by another, the quality of heat and the substantial form of fire exist at the same time and in the same agent. Accordingly, in this case there does not appear to be any reason for thinking that the generating fire's substantial form is incapable of functioning as an active power. Indeed, in light of the Causal Adequacy Principle, it would appear that this form *must* function as an active power, lest there be no cause sufficient for the generation of the new fire.

However, as it turns out, medievals acknowledged a variety of more complicated cases of substantial change. Although it would take us too far afield to survey all of these cases, it is worth pausing to discuss briefly the generation of higher or "brute" animals, such as mammals. According to the standard medieval account of the reproduction of higher animals, the adult male efficiently causes the offspring by means of its semen, which operates as the male's instrument.⁵⁷ This case is complicated by the fact that the offspring's soul, or substantial form, is not produced until long after its parents have mated. For this reason, by the time the offspring is generated in the female's uterus, its male parent will be separated from the female. Indeed, as Suárez emphasizes, the male may well be dead by the time its offspring comes into being.⁵⁸ Thus, it is not clear how the male's substantial form could function as an active power in the generation of its offspring.

Medievals disagreed sharply about how to interpret this case, as well as similar cases in which a purported agent is separated from its instrument. However, proponents of the Thomist position take such cases to show that only accidents make a direct contribution to the generation

⁵⁷ See Aristotle, *On the Generation of Animals*, Book 1, chapter 22, 730b9–31.

⁵⁸ "[C]ontingit enim semen efficere generationem, quando generans jam non existit" (DM 18.2.32).

of substances, because only they are present at the time and place of every substantial change. In the generation of higher animals, it was commonly thought that the semen's accidents prepare the matter provided by the female to receive the soul of the new animal. However, the Thomists argue, because only these accidents are present when the animal's soul itself is produced, it must be these accidents alone that function as active powers in the generation of the animal. It is worth emphasizing that this conclusion is supposed to extend not only to the complicated cases in which an agent is separated from its instrument, but also to those cases in which the agent is present at the time and place of the generation. After all, if accidents are able to serve as the sole active powers in the generation of higher animals, then there does not appear to be any reason to think that they cannot do so in the generation of one fire by another.

As one might well expect, the main liability of the Thomist position is that it appears to run afoul of the Causal Adequacy Principle. If the argument outlined above succeeds, what it shows is that accidents are able to function as the sole active powers in substantial change. But because these accidents are less perfect than the substances whose generation they supposedly account for, it looks as if there will be no cause that is sufficient for this generation.

Proponents of the Thomist position attempt to blunt the force of this objection by noting that accidents attain to the generation of substances "in the power of" (*in virtute*) the substantial forms whose instruments they are.⁵⁹ The thought is that even though an accident is not perfect enough to account for the generation of a substance in and of itself, its capacity to contribute to substantial change is enhanced by the fact that it is serving as the instrument of a more perfect agent. Suárez explains what this is supposed to amount to in terms of the standard medieval view

⁵⁹ "Secunda sententia affirmat accidentia ita esse instrumenta substantiae ad substantiam producendam, ut proxime et per se attingat productionem substantialis formae in virtute aliarum formarum, quarum sunt instrumenta" (DM 18.2.9).

that a substance's proper accidents (*propria*) flow or emanate from its substantial form. For example, the quality of heat naturally emanates from the substantial form of fire. To put the point somewhat differently, fire efficiently causes the quality of heat in itself, by means of its substantial form.⁶⁰ The Thomist response, then, is that an accident's capacity to contribute to substantial change is elevated in virtue of the fact that it is produced and conserved by its subject, by means of that subject's more perfect substantial form. So even though the agent's substantial form does not directly contribute to substantial change, it does contribute indirectly to the extent that it functions as an active power in the production of its agent's instrument.

VII

Suárez's Position. Suárez ultimately rejects both of the accounts outlined above. Because his reasons for rejecting these accounts turn out to be important for the way he develops his own view, I want to consider these reasons in some detail here. I shall begin with his criticism of the Thomist position. As noted already, the main objection to this position is that it seems to violate the Causal Adequacy Principle. Although the Thomists attempt to defend themselves against this charge by claiming that accidents operate "in the power of" the substantial forms whose instruments they are, Suárez concludes that this defense is inadequate. In the first place, it is difficult to see how the Thomist response makes any difference in cases in which the relevant substantial form is absent or even non-existent at the time and place of the generation. Suárez writes:

⁶⁰ Suárez's view that "natural emanation" or "natural resulting" is to be understood in terms of efficient causation appears to have been controversial. This is suggested by Suárez's own discussion of the topic in DM 18.3.3–14. For discussion of this topic in the context of Suárez's arguments for the existence of substantial forms, see Shields, "The Reality of Substantial Form," 54–56; and Hattab, "Suárez's Last Stand," 106–110.

It is not clear how a substantial form can as it were transmit (*transfundere*) its whole power of acting to an accidental form, so that once the substantial form has been destroyed (if that should happen), and the accidental form alone is conserved, this accidental form can on its own produce a substantial form more perfect than itself, when it is not actually...assisted by a superior form.⁶¹

In order to illustrate this point, imagine that a bull mates with a cow, and is then immediately taken to slaughter. In this case, it strains credulity to say that, when a calf is later generated in the cow's uterus, the semen's accidents are elevated to this generation by the bull's non-existent substantial form.

Suárez does not think that the Thomist response is any more effective in simple cases of substantial change, in which the relevant substantial and accidental forms exist in the same agent at the time and place of the change. He emphasizes that, if the Thomist account is correct, then accidental forms will be the only *per se* principles of substantial change. That is to say, when an agent produces a new substance, the only active power that it exercises will be an accident. But if this is right, then it is still not clear how the Thomist position is supposed to deflect the charge that it violates the Causal Adequacy Principle. The core of the objection is that an active power's degree of perfection is determined by the sort of entity that it is. An accident can only have the perfection of an accident, regardless of whether it is produced or conserved through a more perfect substantial form. As Suárez puts the point, the fact that some quality of heat receives its

61 DM 18.2.14.

being from a substantial form of fire "only adds certain relations or denominations to the heat."⁶² Accordingly, this fact does not affect the heat's intrinsic nature or essence, and thus cannot elevate it to attain to a more perfect effect without the aid of a higher form.

In light of Suárez's criticisms of the Thomist opinion, one might well expect him to endorse the Scotus-Ockham position, and claim that only substantial forms directly contribute to substantial change. Indeed, as we have seen, once it is established that substantial forms must function as active powers in substantial change, it appears that any direct contribution by an agent's accidents will be superfluous. Nevertheless, Suárez insists that in substantial change, an agent's accidents must also function as active powers. In defense of this view, he notes that it is "the common opinion of all the philosophers," and that for this reason it should not be "casually rejected."⁶³ Moreover, he argues that this opinion is also confirmed by experience. Although he does not develop this argument in detail, he appears to be making a point about our intuitions about paradigmatic examples of substantial change, such as our case of the fire in the hearth producing a new fire from flax. In this case, it is natural to assume that part of the explanation for the one fire's producing the other is that the first fire is hot.

Another argument concerns the complicated cases of substantial change, in which there does not appear to be any substantial form that could serve as an active power. Before turning to the details of this argument, I need to make a few remarks about Suárez's own analysis of the generation of higher animals.⁶⁴ As we have seen, he denies that the male parent's substantial form is able to function as an active power in such cases. Accordingly, he must identify some other

62 DM 18.2.22.

63 "Probatur primo ex communi sententia tot philosophorum, quae non est facile rejicienda, ubi evidens ratio in contrarium non occurrit" (DM 18.2.15).

64 Suárez analyzes several problematic kinds of substantial change, including the generation of higher animals, at length in DM 18.2.28–42.

active power that is sufficient to account for the generation of the parents' offspring. He considers several candidates. One of these is the substantial form of the semen itself, which he describes as being "in the spirits included in the denser portion of the semen."⁶⁵ However, he rejects this proposal because he thinks that it is obvious that the semen and its substantial form are less perfect than the soul of the animal that is generated.⁶⁶ For the same reason, he rejects the proposal that the substantial forms of celestial bodies, such as the sun, account for the production of higher animals. He argues that even if it can be explained how the substantial forms of these bodies are able to contribute to animal reproduction at such a great distance, because celestial bodies are inanimate, they must be less perfect than the souls of animals.⁶⁷ A third option, which Suárez rejects without argument, is that the female parent's substantial form accounts for the production of its offspring.⁶⁸

Suárez ultimately concludes that only God is able to account for the generation of higher animals. It is worth emphasizing that, in drawing this conclusion, he does not take himself to be violating the methodological principle that he employs against the occasionalists. Recall that according to this principle, if there is a natural causal explanation for a given phenomenon, we ought to prefer this explanation to a supernatural one. Suárez thinks that his analysis of the generation of higher animals does not violate this principle, because he takes himself to have

65 DM 18.2.32.

66 "Quamvis enim hoc sit probabile, non tamen sufficit, quia tota illa substantia, et ejus forma est multo minus perfecta quam anima, quae per ejus actionem introducitur..." (DM 18.2.32).

67 "[C]um coelum non sit animatum, etiamsi distantia localis non impediatur quominus per formam suam influere possit, nihilominus imperfectior gradus videtur obstare ne in has formas viventium possit influere" (DM 18.2.38). Suárez discusses the possibility of action at a distance in DM 18.8. For a helpful treatment of Suárez's views on this topic, see Dennis Des Chene, "Suárez on Propinquity and the Efficient Cause," in *The Philosophy of Francisco Suárez*, 89–100.

68 He notes that his reasons for rejecting this opinion "depend a great deal on the science of the soul," and that for this reason he does not want to pursue them in the *Metaphysical Disputations*. In light of this remark, the natural place to look for a detailed discussion of this opinion would be Suárez's commentary on the *De anima*. However, I have not been able to locate such a discussion there.

shown that no natural cause is sufficient to account for the generation.

Now, Suárez observes that this analysis has an important implication for the Scotus-Ockham position. He notes that if we accept this position, then "it will often be necessary to attribute the whole production of a substance to universal causes, or even to the First Cause."⁶⁹ Although the point Suárez makes in this passage is meant to apply to a broad range of what I have been calling "complicated" cases of substantial change, it should be clear from the foregoing discussion how he intends it to apply to the generation of higher animals more specifically. Because proponents of the Scotus-Ockham position deny that accidents have any direct causal influence in substantial change, Suárez thinks they are committed to saying that in the generation of higher animals, no natural active power is ever manifested. That is to say, the generation of higher animals is a wholly supernatural action. Suárez concludes that this result "seems absurd, because it is not in accordance with the nature of things."⁷⁰ Indeed, it looks as if the resulting view is simply a restricted version of occasionalism. If the semen and its accidents play no causal role in animal reproduction, then the parents' reproductive activity is just an occasion for God's producing the animal soul in the matter supplied by the female.

Proponents of the Scotus-Ockham position could respond that the semen's accidents do make a genuine contribution, to the extent that they prepare the matter in the female's uterus to receive the new substantial form. However, because they have insisted all along that the preparation of the matter is a distinct action that precedes the production of the substantial form itself, this response shows at most that certain accidental changes are part of the occasion for God's production of the animal soul. Accordingly, Suárez thinks that in order to preserve the

69 DM 18.2.15.

70 DM 18.2.34.

intuition that the generation of higher animals is a natural action, we must suppose that the semen's accidents do directly contribute to the production of the animal soul.

A more promising reply for proponents of the Scotus-Ockham position would be to point out that Suárez's objection presupposes his own controversial thesis about God's role in the generation of higher animals. However, there's nothing about the Scotus-Ockham position as such that requires its proponents to accept this thesis. After all, presumably it is open to them to offer an alternative analysis of the generation of higher animals, in which some created agent—say, the fetus's mother, or a celestial body—supplies the requisite perfection via its own substantial form. And if they are able to do this, then they will have avoided the limited version of occasionalism to which Suárez wants to commit them. It thus looks as if, with this objection, Suárez has failed to strike a clean blow against proponents of the Scotus-Ockham position. Even so, the objection is still useful for clarifying why Suárez himself is not prepared to accept this position.

We are now able to summarize Suárez's own account of the active powers in substantial change. In developing this account, he borrows from both of the positions outlined above. Like proponents of the Thomist position, he thinks that in substantial change, accidents make a direct contribution to the production of the new substantial form. As in cases of accidental change, the accidents that function as active powers in substantial change will always be from one of the first three species of quality—that is to say, they will be either habits or dispositions, categorical powers, or sensible qualities. For example, when some fire produces a new fire from flax, the first fire's sensible quality of heat functions as an active power.

However, Suárez also borrows an aspect of the Scotus-Ockham position. Like proponents

of this position, he thinks that substantial change presupposes the manifestation of a power that is at least as perfect as the substance that is produced. In what I have been calling the "simple" cases of substantial change, such as the generation of one fire from another, the other active power will be the agent's substantial form. Suárez makes this point explicitly in a passage from DM 18.2, where he contrasts his own account with the Thomist position. He writes:

[W]hen a fire, for example, is generated from nearby flax, we say that the generating fire produces (*influre*) the action not only instrumentally through its heat, but also principally through its substantial form.... It does this not only indirectly and remotely, insofar as it gives being to its own heat..., but also because it produces (*influit*) [the same action] proximately in its own genus simultaneously along with its heat.⁷¹

Suárez goes on to note that this analysis holds in every instance of substantial change, as long as the relevant substantial and accidental forms exist together at the time and place of the change.⁷² On the other hand, in what I have been calling the "complicated" cases of substantial change, in which these forms are separated in time or space, Suárez thinks that there must be some other active power that makes up for the absence of the accident's associated substantial form. In some cases this may be the form of a celestial body such as the sun. However, in many cases, such as the generation of higher animals, he thinks that only God is able to supply the requisite power.⁷³

71 DM 18.2.22.

72 "Et hoc ipsum servari dicimus in omni educatione formae substantialis, si aliunde ex parte agentis non sit impedimentum, vel ob carentiam existentiae, vel ob distantiam loci" (DM 18.2.22).

73 "[Q]uando accidentia a sua forma disjuncta ita efficiunt substantialem formam, ut non possint a propria forma juvari, necesse est ut influxus propriae formae, qui ibi deest, per concursum alicujus superioris causae suppleatur, quae [...] esse debet aliqua causa corporea, ut sol, vel alia similis; vel, si haec etiam desit, aut insufficiens

We can thus understand Suárez's account as a distinctive dialectical option—a kind of hybrid of the Thomist position and the Scotus-Ockham position.⁷⁴ As the foregoing discussion makes clear, Suárez thinks that by endorsing this hybrid theory, he is able to salvage what is worthwhile in his opponents' theories, while still avoiding the most serious defects of those theories. By insisting that both substantial and accidental forms function as active powers in substantial change, Suárez has found a way to satisfy the Causal Adequacy Principle while also preserving a role for secondary causes in the reproduction of higher animals.

One remaining question about Suárez's theory concerns the distinction between principal and instrumental active powers. In section IV, I noted that Suárez frames the dispute between himself and his opponents as one about how to understand what it means for a substantial form to function as a principal active power, and for an accidental form to function as an instrumental active power. So, in light of the fact that Suárez takes both of these kinds of forms to be active in the generation of a substance, how are we to understand their distinctive contributions to that generation?

In his answer to this question, Suárez argues that the difference between principal and instrumental active powers is best understood in terms of their relative degrees of perfection. Thus, explaining his notion of an instrumental active power, he writes:

[I]n the most proper sense, a cause is called "instrumental" which concurs in or is

inveniatur, per concursum primae causae totus ille defectus supplendus est" (DM 18.2.28).

⁷⁴ Richardson characterizes Suárez's own account as a "compromise position." See Richardson, "Metaphysics of Agency," 171. It is worth noting that, if Aquinas and Scotus really do hold the views that Suárez attributes to them, this compromise between their views provides further confirmation of Sydney Penner's observation that Suárez has the temperament of a harmonist, particularly when it comes to the positions of these two thinkers. See Sydney Penner, "Free and Rational: Suárez on the Will," *Archiv für Geschichte der Philosophie* 95, no. 1 (2013): 1–35.

elevated to an effect more noble than itself, or beyond the measure of its proper perfection and action—as heat, insofar as it concurs in producing flesh, and in general an accident insofar as it concurs in producing a substance.⁷⁵

Suárez's point is that we should understand instrumental active powers as powers that are, by themselves, not perfect enough to explain the production of a given effect. In contrast, principal active powers do have the requisite degree of perfection. As Suárez puts it, a principal active power is "a power more noble than, or at any rate, at least as noble as, its effect."⁷⁶

VIII

Two Objections. Before closing the paper, I would like to consider two objections to Suárez's account of active powers in substantial change—one that I take to be relatively weak, and the other more serious. The weaker objection concerns Suárez's commitment to the Causal Adequacy Principle. Recall that, according to this principle, in order to produce an effect with a certain degree of perfection, an agent must exercise a power of equal or greater perfection. This principle is at the core of Suárez's case for his theory of active powers in substantial change. As we have seen, because Suárez thinks that substantial forms are more perfect than accidental forms, the principle requires him to accept that in every substantial change, some active power more perfect than an accidental form is manifested. He plausibly concludes that, in what we have been calling the "simple" cases of substantial change, such as the generation of one fire by

⁷⁵ DM 17.2.17.

⁷⁶ DM 17.2.18.

another, this more perfect power is a natural agent's substantial form. However, his account of the "complicated" cases of substantial change, in which there does not appear to be a sufficiently perfect agent at the time and place of the change, is difficult to square with his other commitments. In order to explain the generation of brute animals, Suárez is forced to appeal to divine action. To be sure, he has avoided the limited version of occasionalism outlined in section VII, since he has posited a direct causal role for the semen's accidents in the generation of the new animal. Moreover, he takes himself to be abiding by the methodological principle according to which we should prefer natural explanations of phenomena to supernatural ones, because he thinks that in the generation of brute animals, no natural explanation is adequate. Nevertheless, although Suárez has satisfied the letter of this methodological principle, he seems pretty clearly to have violated its spirit. That he must appeal to divine action in order to explain the generation of brute animals is surely a disadvantage of his account. And in fact, the resulting view does not seem much better than the occasionalism that Suárez is at such pains to avoid.

In light of these observations, it is only natural to wonder whether Suárez would have been better off simply rejecting the Causal Adequacy Principle. With this principle jettisoned, he would be free to give roughly the same account of the active powers in substantial change as he gives in accidental change. For example, he could say that in the generation of one fire by another, the new fire is produced solely via the old fire's quality of heat. In fact, the resulting account would look much like the theory that Suárez attributes to the Thomists. As we have seen, it is awkward—if not outright inconsistent—to endorse this theory in conjunction with the Causal Adequacy Principle. However, once freed from the constraints of this principle, the Thomist theory may turn out to be an attractive way of accounting for causal powers within the

framework of an Aristotelian substance-accident ontology. And most importantly for our purposes here, taking this route would allow Suárez to avoid the implausible view that God does the heavy lifting in the reproduction of higher animals.

I do not wish to minimize the significance of this objection against Suárez. After all, Aristotelians' inability to provide satisfying explanations of what I have been calling "complicated" cases of substantial change—such as the generation of higher animals, the spontaneous generation of lower organisms, and the production of fire by red-hot metal—is notorious. Nevertheless, to criticize Suárez for accepting the Causal Adequacy Principle would be hopelessly anachronistic. This principle appears to have been a non-negotiable commitment of scholastic natural philosophy, which was arguably still the best natural science of Suárez's time. As far as I can tell, he never seriously considers rejecting the principle, and this attitude would have been in keeping with that of his contemporaries and medieval predecessors. Indeed, the Causal Adequacy Principle was endorsed even by some critics of Aristotelian natural philosophy during the Scientific Revolution. Perhaps the most well-known example is Descartes, who famously appeals to the principle in an argument for the existence of God in the Third Meditation.⁷⁷ If the objection is simply that Aristotelian natural science is antiquated, then this point is well-taken. But it would be unfair to expect Suárez to anticipate the more compelling science of future generations.

Let us turn now to the second and more serious objection. Suárez's hybrid theory of active powers in substantial change initially looks like a clever solution to the problem he sets out to solve in DM 18.2. As we have seen, by supposing that both substantial and accidental

⁷⁷ René Descartes. *The Philosophical Writings of Descartes*, 3 vols., trans. by John Cottingham, Robert Stoothof, and Dugald Murdoch (Cambridge: Cambridge University Press, 1984), I 27–32.

forms function as active powers in substantial change, Suárez satisfies the Causal Adequacy Principle, while also respecting the commonsense intuition that agents' accidents help to explain substantial change. Moreover, although his treatment of the generation of higher animals is perhaps not totally satisfying, it does at any rate preserve a token role for natural agents, and thereby avoids occasionalism. This may be the best that can be expected within the constraints of scholastic philosophy of nature.

However, upon further examination, one might worry that Suárez still has not adequately distinguished the contributions of substantial and accidental forms in substantial change. One version of this objection is raised by Kara Richardson, who argues that Suárez does not offer a clear enough account of what substantial forms contribute to substantial generation. She claims that, because of the difficulty of grasping the precise nature of substantial forms, any contributions they might be thought to make inevitably will be too obscure to confer any real explanatory benefit. This is because, without knowing what substantial forms are in themselves, we cannot appreciate *how* they contribute to an agent's action. For this reason, she says that appealing to substantial forms in this context "frustrates the explanatory aim of efficient causal analysis."⁷⁸

As Richardson observes, this sort of objection was raised by early modern critics of Aristotelianism, including Descartes.⁷⁹ And in fact, the objection makes the most sense within a mechanistic explanatory framework. If one has antecedent reasons for thinking that any illuminating efficient-causal explanation must be offered in terms of properties such as shape, mass, and momentum, then Suárez's appeal to substantial forms will no doubt be unsatisfying.

⁷⁸ Richardson, "Metaphysics of Agency," 164–6.

⁷⁹ For example, see Descartes, *Philosophical Writings*, III 208–9.

But Suárez does not take himself to have such antecedent reasons, and it would be tendentious to demand that his theory of active powers satisfy the constraints of early modern mechanist theories. Indeed, part of the point of insisting that the notion of an active power is functional rather than categorical, is to emphasize that an active power's explanatory role can be understood independently of the nature or intrinsic character of the entity that performs this role. To be sure, by appealing to substantial forms in his treatment of powers, Suárez incurs an obligation to give some account of what they are, lest positing them appear to be *ad hoc*. But, to my mind, Suárez more than adequately satisfies this obligation in Metaphysical Disputation 15, in which he offers a detailed and sophisticated account of substantial forms in terms of their role as formal causes of substances.

In light of Suárez's assent to the Causal Adequacy Principle, the contribution of substantial forms is both straightforward and well-motivated: they contribute the perfection or nobility that is required for the generation of a new substance, and it is for this reason that Suárez identifies them as principal active powers. The problematic aspect of Suárez's account is actually his treatment of the role of accidental forms, which he thinks are not perfect enough to account for substantial generation on their own. As we saw in Suárez's discussion of the Scotus-Ockham position, once a sufficiently perfect active power is posited, it is difficult to see what motivates positing another active power that is *insufficiently* perfect. One reason for this is that it is not immediately clear how we are to conceive of the contributions that an insufficiently perfect power would make toward substantial generation. What, exactly, does an insufficiently perfect power enable its subject to do, that it could not otherwise do? What's unsatisfying about this is that it looks as if the causal role of accidental forms has been tacked on to Suárez's theory in

order to spare him the embarrassing consequences that he attributes to the Scotus-Ockham position. But without a more specific account of the contributions of accidental forms, this move looks unprincipled.

Suárez anticipates this worry in his reply to the arguments for the Scotus-Ockham position. In his most promising response to the objection, he tentatively suggests that "perhaps" (*fortasse*) an agent always requires an instrumental active power in order to generate a substance. As a potential explanation for why an agent might need an insufficiently perfect power, he mentions that substantial form "is from itself an indifferent and, as it were, general principle of action."⁸⁰ Suárez does not develop this claim in this passage, but it is clearly an allusion to other passages in which he describes accidental forms as "determining" (*determinare*) substantial forms toward specific types of actions. He offers his fullest treatment of this in his discussion of vital action in DM 18.5.⁸¹ Because the soul, which Suárez identifies as the substantial form of an organism, confers upon the organism powers to perform a broad array of different actions, there is a sense in which the organism's actions are underdetermined by its soul. Also in the context of vital action, he makes a similar point by describing the substantial form as "as it were, a universal principle" of acting, which is in need of a "particular principle."⁸² For example, the human soul enables a human being both to speak and to metabolize food. On Suárez's account, at least part of what explains the difference between these two actions is that they manifest different active powers. In both cases, the soul functions as an active power, but what determines it toward speaking rather than metabolizing is an accident that aids and directs the soul. Accordingly, in his tentative response to the objection, Suárez apparently wants to say that instrumental active

⁸⁰ DM 18.2.26.

⁸¹ See especially DM 18.5.3–4. For further discussion of vital action, see DM 18.3.

⁸² DM 18.5.3.

powers are required to direct or determine principal active powers in substantial generation, along the lines of the model he defends for vital action.

Suárez's apparent reluctance to fully commit to this account may simply reflect his tendency toward modesty in questions about modal epistemology. But it may also be explained by an awareness that, uncharacteristically, he has not fully developed the details of his own view. The suggestion that accidents direct or determine substantial forms makes good sense in the context of vital action, since Suárez thinks that an organism's soul confers such a broad range of capacities upon it. However, it is much less clear how this model is supposed to fit with cases of substantial change, because Suárez says very little about the range of potential substances that any single substance could produce. To be sure, he regards some substances, such as the celestial bodies, as universal causes, because they seem to have a causal influence on the whole of the natural world. However, he does not offer any explanation of how accidents might direct or determine substantial forms in the context of universal causes of substantial change. Moreover, he also has nothing to say about how such a model might be applied to paradigmatic cases of substantial change, such as the production of one fire by another. Perhaps a compelling answer to the objection could be developed along these lines on Suárez's behalf, but as things stand, the contributions of instrumental active powers to substantial change remain obscure.⁸³

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⁸³ I presented early versions of this paper at the Midwest Seminar in Ancient and Medieval Philosophy, the Cornell Summer Colloquium in Medieval Philosophy, and the School of Philosophy at the Catholic University of America. I wish to thank the audiences at each of these venues for their feedback. I would also like to thank Michael Bergmann, Susan Brower-Toland, Jan Cover, Travis Dumsday, John Kronen, Sydney Penner, Simona Vucu, and especially Jeffrey Brower, for comments on the paper. Finally, I am grateful to the Purdue Research Foundation, which provided two years of financial support for my dissertation, from which an early draft of this paper was taken.