

Background and Overview of Aquinas's Theories

It is helpful for the reader to encounter a general overview of Aquinas's theories before delving into its particular details and complications in subsequent chapters. This chapter provides an introduction to Aquinas's views on efficient causation and causal powers, as well as some background and context necessary for appreciating his views. The chapter first introduces Aquinas's views on the nature of the relationship between an efficient cause and its effect and the various elements involved in paradigm cases of efficient causation. After presenting an overview of Aquinas's theories, the chapter next contrasts Aquinas's views with competing historical theories of causation. Comparison with these other theories helps to highlight what is philosophically significant in Aquinas's theories. The chapter also discusses Aquinas's sources and situates his views relative to medieval debates about causation. This background provides some context for appreciating what is original or controversial in Aquinas's theories. Finally, the chapter includes an introduction to the technical terminology in which Aquinas expresses his views on efficient causation and causal powers. Aquinas uses a variety of Latin terms to refer to the various conceptual elements in efficient causal situations. To aid the reader, these terms are introduced here at the beginning of the study.

I.1 Overview of Aquinas's Views on Efficient Causation and Causal Powers

As noted in the introduction, Aquinas understands the concept of causation in a much broader way than modern and contemporary philosophers. Since the early modern period, philosophers, for the most part, have conceived of causes as those things that are responsible for bringing about changes. Aquinas, by contrast, thinks of the causes which bring about changes, namely efficient causes, as only one type of cause alongside other species of causes. We can best understand Aquinas's views on efficient

causation by first examining the nature of causation in general and then what is proper to the class of efficient causes.

Causation in General and Defining Features of Efficient Causation

Aquinas conceives of the notion of a “cause” as a species of a wider category called “principle.” A principle is a beginning or that from which anything else follows. For example, one thing can follow from another according to number, as six follows from seven, or according to time, as one thing happens after another. The lower number and the earlier times are considered principles since there is an order of numbers or times in which they precede another term which follows them. Causes are a specific type of principle and what is proper to causes is that existence follows from them.¹ In Aquinas's view, the relationship between causes and their effects is one of existential dependence. He writes regarding causes in general: “[T]he name cause implies a certain influence on the being of the thing caused.”² Elsewhere he writes: “Indeed it is necessary for an effect to depend on its cause. For this is part of the notion of effect and cause.”³ In Aquinas's view, causation is a two-way ontological relationship: Effects depend on their causes for their existence; and causes give rise to the existence of their effects. Causes need not bring their effects into being *simpliciter*. A cause may be responsible for something which already exists coming to exist in a new way. For example, the sun might cause an already existing apple to exist as ripened or reddened. While all causes influence being, some causes only influence how something exists.

Aquinas's conception of the cause–effect relationship is noteworthy because alternative theories of causation, as will be explained below, deny that the causal relationship is an ontological one and instead see it as a logical relationship, such as counterfactual dependence or logical entailment. From Aquinas's perspective, it is the real dependence of an effect

¹ *De prin. nat.* c. 3 (ed. Leon., vol. 43, 42–43): “Sed tamen causa videtur addere supra principium communiter dictum, quia id quod est primum, sive consequatur esse posterius sive non, potest dici principium . . . Sed causa solum dicitur de illo primo ex quo consequitur esse posterioris: unde dicitur quod causa est ex cuius esse sequitur aliud.” Meehan claims that unlike Aquinas, Aristotle did not distinguish between “principles” and “causes.” See Meehan, *Efficient Causality in Aristotle and St. Thomas*, 170–71.

² *In V Meta.* lec. 1 (ed. Marietti, 208, n. 751): “nomen causa, importat influxum quemdam ad esse causati.” All translations from Latin to English are my own unless otherwise noted.

³ *De pot.* q. 5, a. 1 (ed. Pession, 35): “Effectum enim a sua causa dependere oportet. Hoc enim est de ratione effectus et causae . . .”

upon its cause, rather than a logical or conceptual relationship, that unifies the multitude of different instances of causation as instances of causation.

Following Aristotle, Aquinas acknowledged four different species of causation: formal, material, efficient and final.⁴ The different species of causes are distinguished from one another according to the different way each cause influences the being of its effect. As is well known, Aquinas followed Aristotle in conceiving of material objects as composed of matter and form.⁵ The matter of a substance causes the being of the substance by composing it, as clay composes a statue. The form causes the being of the substance by actualizing matter in a specific way. The form of a cat, for example, actualizes matter in such a way that the form and matter together compose a cat, rather than a dog or some other type of substance. Material substances depend on both their matter and their form to exist, but they depend on each in a different way. Matter causes the being of a substance by composing it, while form causes the being of a substance by actualizing the matter out of which it is composed. Thus, the material and formal cause are two distinct species of cause since they influence the being of that which they cause differently.

The efficient cause is the cause that is responsible for uniting form with matter. Aquinas writes: “For the efficient cause is the cause of a thing insofar as it induces form or disposes matter.”⁶ Aquinas recognized that matter cannot actualize itself, and so, another cause must be responsible for actualizing a form in matter. This is the role of the efficient cause.⁷ For example, the sculptor who induces the shape of the statue in clay is the efficient cause of the statue. The male parent of the cat is its efficient cause since, according to Aristotelian biology, it induces the form of the cat in the female parent’s menstrual blood. By uniting form with matter, efficient causes are responsible for changes in the material world.

The last of the four causes, the final cause, is the end or goal that explains why an efficient cause acts. The final cause causes an effect by being desired or sought after. If, for example, a person walks for the sake of maintaining her health, then health is the final cause which explains why

⁴ *ST II-II* q. 27, a. 3 (ed. Leon., vol. 8, 226): “Est autem quadruplex genus causae: scilicet finalis, formalis, efficiens et materialis . . .”

⁵ On Aquinas’s hylomorphism see Jeffrey E. Brower, *Aquinas’s Ontology of the Material World: Change, Hylomorphism, and Material Objects* (Oxford: Oxford University Press, 2014).

⁶ *De pot.* q. 5, a. 1 (ed. Pession, 35): “Nam efficiens est causa rei secundum quod formam inducit, vel materiam disponit.”

⁷ *De prin. nat.* c. 3 (ed. Leon., vol. 43, 42): “Oportet ergo praeter materiam et formam esse aliquod principium quod agat, et hoc dicitur esse efficiens, vel movens, vel agens . . .”

she is walking. Health causes her walking to exist because her seeking of health is what caused her to begin to walk. Aquinas thought that final causality was operative in natural efficient causation as well. Though natural causes cannot cognize the goals for which they act, they have inclinations toward certain goals built within them. These end-directed inclinations are causes of the actions of natural efficient causes. This will be discussed in greater detail in Chapter 4. With this general background in place, we can look now at the distinctive way in which efficient causes cause their effects.

Regarding efficient causes, Aquinas writes: "For that which causes something through its operation causes it as an efficient cause."⁸ Elsewhere he states: "An efficient cause is a cause insofar as it acts."⁹ Action, also called operation, is the unique way in which efficient causes influence the being of their effects. While all causes influence the being of their effects, efficient causes are the only causes that produce their effects *by acting*. In Aquinas's view, actions are exercises of active power. He writes: "Action is properly the actuality of a power . . ."¹⁰ Elsewhere he states: "[N]othing is able to act except through an active potentiality existing in it . . ."¹¹ Accordingly, efficient causes are set apart from the other types of causes insofar as they cause by exercising powers. Above, I described efficient causes as those causes which are responsible for uniting form with matter. It should be noted that though Aquinas thinks that natural causes exercise efficient causation by inducing a form in a preexisting subject which functions as matter, he denies that efficient causation as such essentially involves inducing a form in matter or causing a change in some preexisting subject. Aquinas views God's creation of the universe from nothing, as well as his conservation of created substances, as types of efficient causation.¹² Yet, creation and conservation do not involve causing

⁸ *De ver.* q. 28, a. 8 (ed. Leon., vol. 23, 3/1, 843): "Nam quod causat aliquid per operationem, causat per modum causae efficientis . . ."

⁹ *In V Meta.* lec. 2 (ed. Marietti, 213, n. 775): "Nam efficiens est causa in quantum agit." See also *De ver.* q. 22, a. 2.

¹⁰ *ST I* q. 54, a. 1 (ed. Leon., vol. 5, 39): "Actio enim est proprie actualitas virtutis . . ."

¹¹ *ScG II* c. 60 (ed. Marietti, 191, n. 1375): "[N]ihil est potens agere nisi per potentiam activam in ipso existentem . . ."

¹² There has been some debate in the literature about whether Aquinas thinks creation and conservation are types of efficient causation. For an overview of the debate and defense of the view that he regards these divine acts as types of efficient causation, see Julie Swanstrom, "Creation as Efficient Causation in Aquinas," *American Catholic Philosophical Quarterly* 93:1 (2019): 1–27. Meehan also defends this view in *Efficient Causality in Aristotle and St. Thomas*, 184–85. For a passage in which Aquinas lists creation, conservation and natural change as types of efficient

a change in something preexisting. What these types of efficient causation have in common with the efficient causation that is exercised by created natural substances is that all involve causing an effect through action, namely through an exercise of active power. Action is what is essential to efficient causation as such. With this general background in place, we can now turn to the specific elements involved in paradigm instances of natural efficient causation.

*Per se Efficient Causation: The Paradigm Instance of Efficient Causation
in the Natural World and Its Elements*

Aquinas thinks that certain instances of efficient causation which occur between material substances are the most fundamental and proper instances of causation in the material world. Other instances of natural efficient causation happen in virtue of these cases. The most proper and fundamental cases of natural efficient causation are called *per se* instances of efficient causation, and they involve several key elements which the subsequent chapters examine in greater detail. Aquinas thinks that instances of *per se* efficient causation include each of the following: (1) an *efficient cause*, which also called *an agent*, (2) an *action* which the agent performs by its (3) *active power* due to (4) a *natural inclination* for an end or goal. In addition to the four features just listed, all of which pertain to the agent, instances of efficient causation also include: (5) something upon which the agent acts, namely a *patient*, with an appropriate (6) *passive power* and (7) a *motion* or change which the agent causes and the patient undergoes as its (8) *passion*. In what follows, Aquinas's views about each element will be briefly explained. The subsequent chapters will expand on these explanations and provide the textual support for the views which I attribute to Aquinas here.

Agents, Patients and Motions

Let us begin by understanding the most obvious elements which are involved in efficient causation. According to Aquinas, efficient causation always involves an efficient cause, namely an agent. Aquinas clarifies that

causation see his *In Div. nom.* c. 4, lec. 5 (ed. Marietti, 115, n. 352): “[H]aec enim tria videntur ad rationem causae efficientis pertinere: ut det esse, moveat et conservet.”

the entity that acts as an agent or efficient cause is always a complete substance, rather than one of its metaphysical or integral parts.¹³ For example, the entire fire that is on a stove is the efficient cause which heats water. The agent of heating is not the fire's form of heat, nor a particular material part of it. Aquinas acknowledges that certain metaphysical features, namely active powers, explain why substances can act, but he emphasizes that the entire substance is the agent that acts in virtue of these features.

Aquinas thinks that natural efficient causes cause their effects in a particular way, namely by initiating a motion in another substance, called a patient. Motion is the process by which a persisting material substance gains one specific form, while losing a contrary form.¹⁴ It is important for the reader to understand that Aquinas's conception of motion is much broader than our contemporary understanding. Today we tend to equate motion with locomotion, namely movement from one place to another. For Aquinas, however, in addition to locomotion, there are also quantitative and qualitative motions. For example, when a pot of water goes from being cold to being hot, it undergoes the motion of heating. The motion of heating is the process by which the water acquires the form of heat and loses the form of coldness. Because Aquinas understands motion to encompass more than locomotion, I will at times refer to motions as "changes." In Aquinas's view, motions occur gradually and they take time.¹⁵ They terminate in a new form which is acquired by the patient substance. For example, heating water takes time and during it

¹³ *ST II-II* q. 58, a. 2 (ed. Leon., vol. 9, 10): "Actiones autem sunt suppositorum et totorum, non autem, proprie loquendo, partium et formarum, seu potentiarum: non enim proprie dicitur quod manus percutiat, sed homo per manum; neque proprie dicitur quod calor calefaciat, sed ignis per calorem." See also *ST I* q. 75, a. 2 ad 2; *ST I* q. 77, a. 1 ad 3 and *Q.D. de anima* 12. On the definition of a substance or supposit see *ST I* q. 29, a. 2. On the principle "actions are of suppositis" see Alain de Libera, "Les actions appartiennent aux sujets: petite archéologie d'un principe leibnizien," in *Ad ingenii acuitionem: Studies in Honor of Alfonso Maierù*, ed. Stefano Caroti et al. (Louvain-La-Neuve, BE: Fédération Internationale des Instituts d'Etudes Médiévales, 2007), 199–219, and Richard Cross, "Accidents, Substantial Forms, and Causal Powers in the Late Thirteenth Century: Some Reflections on the Axiom 'actiones sunt suppositorum,'" in *Compléments de substance: études sur les propriétés accidentelles offertes à Alain de Libera*, ed. Christophe Erismann and Alexandrine Schniewind (Paris: Vrin, 2008), 133–46. For a recent discussion of the principle in relation to Aquinas's theory of the human person and its acts of cognition see Brian Carl, "Action, Supposit, Subject: Interpreting *Actiones Sunt Suppositorum*," *Nova et Vetera* 17:2 (2019): 545–65.

¹⁴ *In V Phys.* lec. 3 (ed. Leon., vol. 2, 238): "Omnis enim motus est mutatio ab una specie determinata in aliam speciem determinatam."

¹⁵ See for instance *ScG II* c. 19.

the water gradually becomes hotter. Through the motion of heating, the water acquires the form of heat which it previously lacked.¹⁶ In some passages, Aquinas describes efficient causes as the causes which “induce form.”¹⁷ Yet, in other passages, he describes efficient causes as “principles of motion.”¹⁸ Since natural efficient causes induce forms in their patients by way of motion, the effect of a natural efficient cause can be considered in a twofold manner. The effect of a natural efficient cause is both the motion which it initiates in its patient and the form which is the terminus of that motion.¹⁹ Since natural efficient causes cause forms to be in their patients by way of motion, Aquinas also refers to them as “movers.”²⁰

Motion is not the only type of change for Aquinas. Generation and corruption are changes in which substances come into and go out of being.²¹ Unlike changes which are motions, they do not involve a persisting subject which loses one accidental form and acquires a new one. Aquinas recognizes that natural efficient causes can cause generation and corruption. For example, dogs can generate other dogs and fires can cause trees to go out of existence by burning them. However, natural efficient causes only cause generation and corruption by causing prior qualitative motions in a patient.²² For example, the fire causes the tree to be corrupted into ash in virtue of heating and blackening it.

¹⁶ While motions in general involve gaining and losing forms, there are exceptions. According to Aquinas’s views on intension and remission, changes of qualitative increase and decrease do not result in a substance acquiring a new form, but rather acquiring a new degree of participation in a form. For example, when already hot water becomes hotter, it does not gain a new form, but rather participates more perfectly in the form of heat which it already possesses. I discuss Aquinas’s views on this topic in my paper “Aquinas on the Intension and Remission of Accidental Forms,” *Oxford Studies in Medieval Philosophy* 7 (2019): 116–46.

¹⁷ See fn. 6.

¹⁸ *In I Meta.* lec. 4 (ed. Marietti, 23, n. 70): “causa est efficiens, quae est unde principium motus.”

¹⁹ For a passage in which Aquinas claims the form is the effect of the agent, see *De malo*, q. 5 a. 5 ad 16.

²⁰ See, for example, the text in fn. 7.

²¹ *In I Phys.* lec. 13 (ed. Leon., vol. 2, 46):

tres sunt species mutationis, scilicet generatio et corruptio et motus. Quorum haec est differentia, quia motus est de uno affirmato in aliud affirmatum, sicut de albo in nigrum; generatio autem est de negato in affirmatum, sicut de non albo in album, vel de non homine in hominem; corruptio autem est de affirmato in negatum, sicut de albo in non album, vel de homine in non hominem.

²² *In I Gen. et Cor.* c. 10, lec. 24 (ed. Leon., vol. 3, 20): “Praeterea quaelibet forma substantialis propriam dispositionem requirit in materia, sine qua esse non potest: unde altera est via ad alterationem et altera ad corruptionem.”

Aquinas's Physics

To fully appreciate Aquinas's views about the motions that natural efficient causes cause in their patients, as well as the examples he uses in discussing efficient causation, it is necessary to understand something of his views about the makeup of the physical universe. Aquinas's conception of the physical world was far different from the perspective of our contemporary science. Unlike many contemporary scientists, Aquinas sees qualitative forms as irreducible to quantitative features of substances. For instance, while today's scientists would reduce heat to the motion of molecules, Aquinas saw heat as an irreducible quality of substances. Aquinas, following Aristotle, held that there were four types of elemental substance: fire, air, water and earth. Every other terrestrial substance was generated by mixing these four elements together in various proportions. Each element was distinguished from the others in virtue of having a distinct combination of four basic qualities: hot, cold, wet and dry. Fire, for example, is hot and dry, while water is cold and wet. Other sensible qualities, such as textures and colors, were seen as "secondary" qualities which arose in virtue of the primary qualities.²³ Though substances possessed secondary qualities in virtue of possessing certain degrees and combinations of primary qualities, Aquinas thinks that secondary qualities are irreducible to primary ones. For example, redness and sweetness and real accidental forms that inhere in sweet and red substances over and above the primary qualities which give rise to them. The primary qualities were regarded as that through which material substances acted to cause changes in one another's primary qualities.²⁴ Changes in secondary qualities followed upon the more basic changes to primary qualities. For example, changes of texture or health or sickness were seen as caused in virtue of causing changes to a

²³ On medieval theories of primary and secondary qualities see Anneliese Maier, "The Theory of the Elements and the Problem of Their Presence in Compounds," in *On the Threshold of Exact Science*, trans. Steven Sargent (Philadelphia: University of Pennsylvania Press, 1982), 124–42; and Robert Pasnau, "Scholastic Qualities, Primary and Secondary," in *Primary and Secondary Qualities: The Historical and Ongoing Debate*, ed. Lawrence Nolan (New York: Oxford University Press, 2011), 41–61.

²⁴ *In II De anima* lec. 24, n. 11 (ed. Leon., vol. 45/1, 171): "[T]angibilia sunt qualitates activae et passivae elementorum, secundum quas accidit universaliter alteratio in corporibus." See also *ST I q. 78, a. 3* (ed. Leon., vol. 5, 254): "non omnia accidentia habent vim immutativam secundum se; sed solae qualitates tertiae speciei, secundum quas contingit alteratio." See also *Sententia Super Meteora I, c. 2*. Note that "tangible qualities" and "qualities of the third species" are other ways of referring to the "primary qualities."

substance's wetness and dryness or heat and coldness.²⁵ Within this physical theory, paradigm instances of natural efficient causation involve an agent causing its patient to acquire a form of one of the primary qualities. Such an example, which I will refer to often in the book, is the case of fire which causes heat in water. On Aquinas's view, this example involves the agent fire and the patient water and a motion of heating which terminates in the form of heat. The motion of heating and the form of heat are irreducible to any quantitative features of the water.

So far we have seen Aquinas's view that paradigm instances of natural efficient causation involve an agent, a patient and a motion or change that the agent causes in the patient. Aquinas thinks that we must posit some further elements within the agent and the patient to explain how it is that each is able to respectively cause and undergo the specific type of motion in question. Since not all substances can heat other things or be heated, there must be something within fire that explains how it is able to cause heating and something within water which explains how it is able to undergo heating.

Active Power, Passive Power and Natural Inclination

Active power is that which explains how an agent is able to cause a specific type of change. Aquinas identifies the active powers of material substances with their inherent forms. More specifically, Aquinas maintains that a material substance is able to induce a certain form in another substance by virtue of having that same form in itself. For example, fire is able to induce the form of heat in water through its own form of heat. In *per se* instances of efficient causation, the agent actualizes a new form of the same species as its own in its patient. According to Aquinas, forms are by their nature communicable. They enable their bearers to actualize forms of the same species in other substances which are suitable recipients for the form. However, not every type of form is an active power for affecting material change. Aquinas thinks that the elemental qualities of hot, cold, wet and dry are the only forms that can immediately affect material change. For example, through its form of heat, a fire can make other things hot, but it cannot make other material objects red through its form of redness. Forms that are not active powers for causing material change, nevertheless, are active powers for causing changes in the perceptual and intellectual faculties of cognitive beings. For instance, though redness is not a form through

²⁵ *In I Gen. et Cor.* c. 4, lec. 10.

which an apple can make another substance turn red, it is nevertheless a form through which an apple acts on an animal's power of sight, thereby enabling an act of seeing red.²⁶

Passive power is the aspect of the patient that allows it to undergo a specific type of change. A passive power is a capability to receive a certain type of form. For example, the passive power for undergoing heating is a capacity to take on the form of heat. Material substances have receptivity for form in virtue of both their matter and the other forms that actualize them. Matter as such is a principle of receptivity. However, to receive any specific type of form, it must be actualized by other forms that prepare it to receive the further form in question. Not just any substance can be burned. The substance must have an oily or fatty quality to be combustible. This illustrates that to be burned, material substances must have certain qualitative forms that make them susceptible to receiving the further forms involved in a change of burning.

To explain why an agent acts on its patient, Aquinas thinks that a further feature of the agent must be invoked beyond its active power. Something else must be posited to explain why the agent does in fact exercise its power, as well as why the agent exercises its power to the fullest extent possible. This is the role of natural inclination. A natural inclination is an impetus within a natural agent that drives it to exercise its proper powers whenever an appropriate circumstance obtains. For example, when fire comes into contact with water it is not indeterminate whether fire will heat the water or not. Fire always exercises its power to heat, unless something impedes it. Aquinas thinks that fire's natural inclination toward heating is what explains why it exercises its power whenever it is able. Furthermore, fire does not stop heating until it makes the water as hot as it possibly can. Natural inclination is what drives natural agents to exercise their powers as much as possible. Natural inclinations are always inclinations for some determinate type of action or effect. Natural inclination impels a natural agent toward an action or effect in a way analogous to how a human agent's will inclines it toward reaching a certain goal. The action or effect which a natural agent's inclination regards is known as the agent's end or final cause. Ends or final causes cause natural agents to act insofar as natural agents have natural inclinations for them. For instance, heat causes fire to heat insofar as fire acts on account of its natural inclination toward heating.

²⁶ On Aquinas's account of perception, see Lisska, *Aquinas's Theory of Perception*.

Action and Passion

There are two elements which are left to discuss, namely action and passion. Action is the realization or manifestation of the agent's active power and passion is the realization or manifestation of the patient's passive potentiality. The action of heating for example is the realization of the fire's active power to heat and the passion of being heated is the realization of the patient's passive potentiality to undergo heating. But what are actions and passions ontologically? Aquinas thinks that the motion which the agent causes and the patient undergoes constitutes both the agent's action and the patient's passion. For example, the motion of heating which water undergoes constitutes the agent's action of heating and patient's passion of being heated. Yet, correlative actions, passions and motions are not simply identical with each other. An action is a motion taken together with its ontological dependence on an agent. Motions ontologically depend on an agent insofar as they arise from them as their origin. Likewise, a passion is a motion taken together with its ontological dependence on a patient. Motions depend on a patient insofar as they exist in them as their subject. For example, when fire heats water, the fire's action of heating is not merely the change occurring in the water, but rather it is that change considered precisely insofar as it is arising from the fire's active power. Similarly, the water's passion of being heated is not merely the change of heating, but that change considered precisely insofar as it is happening to the water as its subject.

Relational Conditions for Efficient Causation

In addition to the ontological elements involved in *per se* efficient causation, Aquinas thinks that there are some relational conditions which must be met between the agent and the patient. First, the agent and the patient must be distinct from each other. The agent and the patient must be other since an agent causes a form through possessing the same type of form in actuality and a patient receives a form through having that form potentially. Since the same subject cannot have the same form actually and potentially, the agent and the patient must be other. They need not be distinct substances, however. One part of a substance can be that through which the substance acts on another part. This is because one part of a substance can have a form in actuality, while another has it in potentiality. For example, if one of my hands is hot, I can touch my other hand and make it hot. The second relational condition which must be met between

the agent and the patient is that the agent must be in contact with the patient. Aquinas thinks that an agent can only act where its power is present. A fire in my backyard cannot burn a tree across the street since the power of the fire is not located where the tree is. Aquinas does think that an agent's power can be put into contact with a patient in a different location through a medium. For example, the fire can warm my hands even when I am not touching it since the fire's power to heat can extend to my hands through the medium of the air. This is to say that the fire heats my hands in virtue of heating the air which is in contact with both the fire and my hands.

There are many questions which arise about each element involved in *per se* efficient causation. The next five chapters take up each of the elements described above, explaining each in detail and examining the conceptual questions which arise. It is likely that many readers are already thinking of counterexamples to Aquinas's basic model of *per se* efficient causation. It is not hard to come up with examples of cases of efficient causation which involve an agent producing an effect for which it has no corresponding active power or inclination toward that effect. Aquinas himself recognizes that there are examples of efficient causation in nature which do not involve the elements involved in the paradigm case of *per se* efficient causation. For example, he acknowledges efficient causes which "accidentally" produce effects for which they have no corresponding power or inclination. He writes about the case of a fire which cools a substance in virtue of opening its pores.²⁷ Fire has no active power to cool and no inclination toward this effect, yet Aquinas thinks that fire is a genuine efficient cause of the change of cooling in this case. The study will also examine the details of Aquinas's thinking on these non-paradigm cases, as well as more complicated cases involving many cooperating agents. For now, however, I focus only on Aquinas's analysis of the most proper or paradigm instances of efficient causation since this is the core of his theory. Within the core of Aquinas's theory there are already several ideas which are quite striking, especially when they are situated relative to other theories of causation.

1.2 Competing Models of Causation: Humeanism and Nomicism

The conceptual significance of Aquinas's views on efficient causation and causal powers can be brought out by considering two competing

²⁷ *In IX Meta.* lec. 2, n. 1789.

understandings of causation from the history of philosophy, Humeanism and Nomicism. These alternative theories continue to shape the assumptions operating in contemporary discussions of causation. Accordingly, it may benefit the contemporary reader to see Aquinas's views contrasted with them.

The British empiricist David Hume (1711–76) is perhaps the historical philosopher who has most influenced the manner in which contemporary philosophers think about causation. As is the case for any historical figure, the proper interpretations of Hume's views on causation are subject to debate.²⁸ My goal here is not to defend a particular interpretation of Hume, but rather to introduce some key theses about causation which are often attributed to him. I will refer to those theses as comprising the "Humean" model of causation, even though some scholars might deny that Hume himself truly defended all of them. The key theses of the Humean model of causation are these: First, there is no real power or production in the natural world. We cannot see, feel, or intuit one object producing another. All we experience through our senses is one event happening in conjunction with another. Empiricists claim that it follows from our lack of experience of powers and production that we have no license to posit them as real features of the world. Likewise, there is no justification for maintaining that causes are necessarily connected to their effects. Hume argues that all we experience is a cause's conjunction with its effect. We assume that the same causes will be conjoined with the same effects in the future because they were in the past. However, just as we have no sense impression of power and production, we likewise have no sense impression of a necessary connection between cause and effect. Rather, this necessary link is a projection of our minds. This is significant because what gives causation its predictive value is the assumption that causes necessitate their effects. If causes necessitate their effects, then when a cause is present, we can infer that its effect will follow. However, if causes do not necessitate their effects there is no justification for assuming that an effect will follow when its cause is posited.

The second thesis of the Humean model has to do with how we should understand claims about causation given that there is no real power or production in the world. According to the Humean model, causation is a logical relationship between events which regularly happen in conjunction

²⁸ For a summary of the various aspects of Hume's views on causation, as well as a very useful annotated bibliography of secondary literature, see C. M. Lorkowski, "Hume, David: Causation," in *The Internet Encyclopedia of Philosophy*, www.iep.utm.edu/, accessed April 1, 2021.

with one another. There is no real, metaphysical connection between causes and effects. We refer to one event as the cause of another event if the second event regularly follows the first. However, on the metaphysical level the world is a collection of loose and separate events unfolding in temporal succession.

The contrast between Aquinas's model of causation and the Humean model should be apparent. On Aquinas's view, efficient causation is a real, irreducible metaphysical phenomenon. Efficient causes produce their effects and their effects really depend on their causes for their being. In the next chapter, we will see that Aquinas himself recognized that we have no sense experience of production or power, and yet, by intellectual reasoning we can know that there must be real efficient causation in nature and that powers are necessary to explain how this efficient causation happens. Furthermore, also in contrast with Humean assumptions, Aquinas maintains that the fact that efficient causes do not logically necessitate their effects does not undercut the metaphysical reality of causation. Since efficient causes can always be impeded in their production of their effects, it is possible for a natural cause to exist without its effect. Though causes, taken only in themselves, do not necessitate their effects, they nevertheless are productive of the being of their effects in the situations in which they do cause them.

Much contemporary work on causation has assumed that Hume was correct in his rejection of causation as involving exercises of power and genuine production. Many contemporary philosophers believe that claims about causal dependence are reducible to claims about other non-causal relationships between events. Much contemporary literature on causation focuses on developing the right non-causal relationship between events to which causal statements can be reduced. For instance, according to David Lewis's counterfactual analysis of causation, one event e causally depends on another event c if and only if, if c were not to occur e would not occur.²⁹ Though the Humean approach to causation continues to be predominant, in recent decades a number of contemporary philosophers have argued against it. In its place, they have advocated for a return to the pre-modern view that objects have real causal powers.³⁰ Many of the philosophers pursuing this growing research agenda have explicitly described their project as a revival of the Aristotelian perspective.

²⁹ David Lewis, "Causation," *Journal of Philosophy* 70:17 (1973): 556–67.

³⁰ For an overview of contemporary work on causal powers, see Jonathan Jacobs (ed.), *Causal Powers* (Oxford: Oxford University Press, 2017).

A second model of causation that has also been prominent in both the history of philosophy and contemporary philosophy is the “nomic” model. According to nomicism, laws of nature are central to understanding causation in the natural world. On the Humean model, statements about what universally happens in the world, e.g. “Salt dissolves in water,” are nothing more than statements about what regularly happens. There is no explanation for why these regularities are true and no necessary connection exists between the events which the statements are about. The nomic model, by contrast, claims that statements about what universally happens in the world express necessary laws that govern the universe. On this model, laws about necessary relationships between events are part of the very fabric of reality, and these laws are instantiated in particular instances of causation. For example, there is a certain necessary relationship between salt’s being dropped in water and its dissolving. This law is what determines that a particular grain of salt dissolves when dropped into a particular cup of water. Laws of nature, on the nomic model, do not merely report the regularities that happen in the world. Rather, they necessitate or produce the regularities. A law of nature is what accounts for why two particulars are related to each other as cause and effect. In the early modern period, laws of nature were expressly associated with theism and were thought to have been established by God.³¹ In contemporary philosophy, laws of nature are seen as brute features of the universe and they are not traced to any divine lawgiver.³²

Aquinas’s model of causation also differs in crucial ways from the nomic model. As we will see, this difference has not always been adequately recognized.³³ Aquinas denies that terrestrial natural causes, considered in themselves, necessitate their effects. This is because such causes are always able to be impeded. Nevertheless, Aquinas thinks that we can formulate universal, generalizations about what effects will follow from causes on the assumption that the causes are not impeded. Aquinas agrees with the nomic model that there is a deeper metaphysical explanation for the regularities in nature. Yet, he disagrees about what that explanation is. On the nomic model, laws of nature are extrinsically imposed on objects and these extrinsic laws determine that entities of the same universal types

³¹ For an overview of Descartes’s view of laws of nature as established by the divine will, see Ott, *Causation and Laws of Nature in Early Modern Philosophy*, 51–60.

³² For an important contemporary account of laws of nature, see D. M. Armstrong, *What Is a Law of Nature?* (Cambridge: Cambridge University Press, 1983).

³³ See Section 2.3.

behave according to certain regularities. On Aquinas's model, by contrast, the regular patterns of behavior of material substances have an intrinsic rather than an extrinsic source. Natural substances of the same kind have the same types of intrinsic causal powers and this is why they behave in similar ways. It is the regular behavior of natural entities, which stems from their causal powers, that makes certain laws true. This is the reverse of the nomic model, which prioritizes the laws and appeals to them to explain regularities in the behavior of natural entities. For example, on the nomic model, the law of nature that water dissolves salt is what determines that a particular instance of water dissolves a particular grain of salt. On Aquinas's model, things are reversed. The generalization that water dissolves salt is true because the instances of water that exist in the world have a power to pull sodium chloride ions apart and regularly do so. The nomic model assumes that laws exercise "top down" control over natural events. Aquinas, by contrast, believes that the powers of natural entities determine "from the bottom up" which generalizations obtain.

1.3 Aquinas's Sources

Aristotle

Like much of his natural philosophy, Aquinas's theory of efficient causation draws heavily on Aristotle as a source.³⁴ Aquinas's hylomorphic conception of the material world and the fourfold division of causes are, as is well known, taken from Aristotle. Aquinas's demarcation of the realities involved in efficient causation (e.g. agents, patients, powers, actions and passions) and his understanding of the conditions that must be met for material substances to act upon one another are likewise drawn from Aristotle. The *Physics* and *Metaphysics* are the two Aristotelian works in which causation is discussed most extensively and Aquinas's commentaries on these works, especially the *Physics*, contain many of his most lengthy and detailed discussions of causation. Though some scholars disagree, I think it is reasonable to view Aquinas's Aristotelian commentaries as sources for his own views, rather than mere expositions of Aristotle. However, care must be exercised in interpreting

³⁴ For a brief account of Aquinas's use of Aristotle as a source, see James Doig, "Aquinas and Aristotle," *The Oxford Handbook of Aquinas*, ed. Brian Davies and Eleonore Stump (Oxford: Oxford University Press, 2012), 33–41.

these texts since they also include summaries of positions which are not Aquinas's own.³⁵

While Aristotle is perhaps the source who had the most influence on Aquinas's views on efficient causation and causal powers, Aquinas's theories nevertheless cannot be reduced to Aristotle's.³⁶ At times Aquinas departs from Aristotelian views to accommodate theological doctrines unknown to Aristotle. For example, in defining efficient causation Aquinas, unlike Aristotle, had to make room for creation and conservation as types of efficient causation. Thus, while Aristotle defines efficient causation as a source of motion or change, Aquinas defines it as causation that produces being.³⁷ At other times, Aquinas does not explicitly contradict Aristotle's views, but he goes beyond them. The debates of his period required Aquinas to give accounts of matters that Aristotle did not address in great detail. Examples that will be discussed below include debates about the relationship between the soul and its powers and the nature of the sameness and difference between action, passion and motion.

Averroes (Ibn Rushd) and Avicenna (Ibn Sina)

Aquinas, and his medieval Christian contemporaries, did not read Aristotle in a vacuum. The commentaries of Averroes and Avicenna shaped their understanding of Aristotle's views and highlighted where the interpretive difficulties lie.³⁸ At times the Islamic commentators point out apparent inconsistencies within Aristotle's texts, and they disagree with each other on how to interpret Aristotle's positions. The Islamic commentators shaped Aquinas's views on many topics and his views on efficient causation are no exception.

Aquinas's views about how efficient causes act for the sake of an end is one example of how his understanding of Aristotelian concepts was heavily shaped by these Islamic sources. One of the main arguments Aquinas puts forth to establish that efficient causes act for the sake of an end rests on the counterfactual claim that if agents did not act for a goal, then they would

³⁵ For an overview of the scholarly positions on the significance of Aquinas's Aristotelian commentaries and citations to relevant literature, see John Wippel, *The Metaphysical Thought of Thomas Aquinas* (Washington, DC: The Catholic University of America Press, 2005), xix–xx.

³⁶ For a summary of differences between Aristotle's and Aquinas's views on efficient causation, see Meehan, *Efficient Causality in Aristotle and St. Thomas*, 399–405.

³⁷ See Meehan, *Efficient Causality in Aristotle and St. Thomas*, 185–88.

³⁸ For a brief overview of Aquinas's interaction with these sources, see David Burrell, "Aquinas and Jewish and Islamic authors," in *The Oxford Handbook of Aquinas*, ed. Brian Davies and Eleonore Stump (Oxford: Oxford University Press, 2012), 65–72.

not act at all. He explicitly attributes this argument to Averroes.³⁹ Aquinas also draws on Avicenna's thought to explain how it can be that the end causes an agent's action if the end does not exist until after the action has been completed. Aquinas follows Avicenna's claim, *contra* Averroes, that the end is a final cause insofar as it is in the intention of the agent.⁴⁰ This move to make the end in the intention that which exercises final causality enables these authors to show how the end can be prior to the action which it causes.⁴¹ Aquinas likewise draws on Avicenna when he explains how it can be that natural causes act for the sake of ends even though they lack the ability to deliberate about ends. Aquinas cites Avicenna's example of a harpist who plays chords without deliberating about the notes. This is supposed to show that it is possible for an agent to act for an end without deliberation.⁴²

In addition to shedding light on various interpretive possibilities for Aristotelian texts and positions, the Islamic commentators also passed on to Aquinas concepts and ideas which were their own and not found in Aristotle. For example, in two of Aquinas's most extensive discussions of causation in his commentaries on Aristotle's *Physics* and *Metaphysics*, he explicitly cites and endorses a fourfold division of types of efficient causes, which he attributes to Avicenna.⁴³ As we will see in Chapter 7, Aquinas uses Avicenna's division between perfecting, preparing, assisting and advising causes to identify various ways in which one efficient cause can be involved in the causation of another efficient cause's action and effects.⁴⁴ These more fine-grained notions of different types of causes, which are not found in Aristotle, gave Aquinas the conceptual resources needed to discuss particularly complicated and non-standard cases of efficient causation.

³⁹ See Section 4.1 for discussion of this argument and fn. 6 for the text in which Aquinas attributes this argument to Averroes.

⁴⁰ On the debate between Avicenna and Averroes on final causality and its influence on scholastic figures see Robert Pasnau, "Intentionality and Final Causes," in *Ancient and Medieval Theories of Intentionality*, ed. Dominik Perler (Leiden: Brill, 2001), 301–23 and "Teleology in the Later Middle Ages," in *Teleology: A History*, ed. Jeffrey McDonough (Oxford: Oxford University Press, 2020), 90–115.

⁴¹ See Section 4.2, especially fn. 30. ⁴² See Section 4.2, especially fn. 16.

⁴³ *In V Meta.* lec. 2 and *In II Phys.* lec. 5. The explicit mention of Avicenna occurs only in the *Metaphysics* text. On Avicenna's views on efficient causation see Kara Richardson, "Avicenna's Conception of the Efficient Cause," *British Journal for the History of Philosophy*, 21 (2013): 220–39; and her entry, "Causation in Arabic and Islamic Thought," in Edward N. Zalta (ed.), *The Stanford Encyclopedia of Philosophy* (Winter 2015 Edition), <https://plato.stanford.edu/archives/win2015/entries/arabic-islamic-causation/>, accessed May 31, 2021, especially Section 2.2.2.

⁴⁴ See especially Section 7.1.

In addition to offering interpretations of Aristotle and new non-Aristotelian concepts, Aquinas's Islamic sources also gave him resources for reconciling the Aristotelian philosophical framework with his theistic worldview. One such example relevant to efficient causation regards how efficient causes are defined. Above when discussing Aristotle as a source for Aquinas, it was noted that Aristotle defined efficient causes as those causes which are sources of motion or change. Aquinas, however, defines efficient causes as causes that produce being in order to make room for God's acts of creation and conservation to be conceived of as exercises of efficient causation.⁴⁵ It was from Avicenna's texts that Aquinas encountered the idea that divine activity, though it does not involve motion or change, should nevertheless be conceived of as a type of efficient causation alongside the efficient causation exercised by creatures, rather than something *sui generis*.⁴⁶

Neo-Platonic Sources

In addition to Aristotle and his Islamic commentators, Aquinas's philosophical thought was greatly influenced by neo-Platonic sources.⁴⁷ The neo-Platonic source that was most influential on Aquinas's thinking about causation is the *Liber de Causis*. The *Liber de Causis* is a ninth-century text by an unknown author which was translated into Latin in the twelfth century.⁴⁸ It draws heavily on the Greek neo-Platonist Proclus to present an array of theses about hierarchical ordered causes. Many scholastic figures, including Aquinas, wrote commentaries on this work and it is cited frequently in their other works.⁴⁹ Its theses about primary and secondary causes greatly influenced medieval discussions of ordered causes and particularly the causal relationship between God and creatures. Perhaps most influential was the very first proposition of the work, which

⁴⁵ See also Section 1.1.

⁴⁶ See for example *In II Sent.* d. 1, q. 1, a. 2 ad 1 (ed. Mandonnet-Moos, vol. 2, 18–19): “Ad primum ergo dicendum, quod, secundum Avicennam, 1 Suff., cap. x, et VI Metaph., cap. I, duplex est agens: quoddam naturale, quod est agens per motum, et quoddam divinum, quod est dans esse, ut dictum est.”

⁴⁷ On Aquinas and neo-Platonism, see Wayne Hankey, “Aquinas, Plato, and Neo-Platonism,” in *The Oxford Handbook of Aquinas*, ed. Brian Davies and Eleonore Stump (Oxford: Oxford University Press, 2012), 55–64.

⁴⁸ The modern edition of this work is Adriaan Pattin (ed.), ‘*Le Liber de causis*: Édition établie à l’aide de 90 manuscrits avec introduction et notes par A. Pattin O.M.L.’, *Tijdschrift voor Filosofie* 28 (1966): 90–203.

⁴⁹ For a list of some of the scholastic commentaries on this work see Pattin, 122–30.

stated that the first cause is *more* of a cause of the effect than the second.⁵⁰ The work advocated for the primacy of causes with higher natures when such causes jointly cause effects with causes of a lower nature.

1.4 Situating Aquinas among His Medieval Contemporaries

It is natural to wonder how Aquinas's views compare with others in the medieval period. Was he somehow original or unique? Or was he merely a representative of a standard view? Medieval views about causation have yet to be extensively researched and there are still many gaps to be filled in about our knowledge of the views of particular thinkers. Yet, some observations can be made about the different approaches to efficient causation that were represented in the period and their predominance. We know from Aquinas's own writings, as well as other research, that there were medieval thinkers who opposed the general model of efficient causation that he defends. As we saw above, Aquinas maintained that natural efficient causes influence the being of their effects and such effects depend on their causes for their being. While this general conception of efficient causation was widespread among scholastic thinkers, there were some medieval figures, primarily in the Islamic tradition, who rejected it and instead defended a view known as occasionalism.⁵¹ According to occasionalism, God is the only active efficient cause and thus particular substances in the material world do not actively produce any effects. Created substances function merely as passive occasions for God to act. For example, when fire comes into contact with cotton, the fire does not truly burn the cotton. Rather, fire's contact with cotton is merely an occasion for God to produce burning in the cotton. Occasionalism is similar to Humeanism insofar as it denies that creatures have active powers and maintains that those entities that we consider to be causes and effects (e.g. as when we claim that fire causes burning) merely exist in conjunction with each other. Aquinas knew of the occasionalist position and argued against it in several places in his works.⁵²

⁵⁰ *Le Liber de causis* (ed. Pattin, 134): "Omnis causa primaria plus est influens super causatum suum quam causa universalis secunda."

⁵¹ On Islamic occasionalism see Dominik Perler and Ulrich Rudolph, *Occasionalismus: Theorien der Kausalität im arabisch-islamischen und im europäischen Denken* (Göttingen: Vandenhoeck & Ruprecht, 2000).

⁵² On Aquinas's critique of occasionalism see M. Fakhry, *Islamic Occasionalism and Its Critique by Averroës and Aquinas* (London: Routledge, 1958).

Occasionalism was not the only competing approach to efficient causation on offer in the medieval period. There were medieval figures who conceptualized efficient causation in a manner which bears some similarity with the nomic view discussed above.⁵³ Many believe that the notion of a law of nature is a post-medieval concept invented by Descartes.⁵⁴ Research has shown, however, that there were medieval figures such as Robert Grosseteste and Roger Bacon who discussed general laws that governed natural causation and prioritized these laws of nature over the immanent features of material substances (e.g. active forms) in causal explanations of natural events.⁵⁵ Aquinas, however, does not engage with these views in his works and currently there is no evidence of major medieval debates about the role of laws of nature in efficient causation.

While there is evidence of some alternative views in the medieval period, the majority of medieval scholastic figures accepted the key features found in Aquinas's conception of efficient causation. More specifically, there was a general consensus among medieval scholastic thinkers that (1) natural efficient causes influence the being of their effects, and (2) efficient causes act through active powers. These central features of Aquinas's model of causation are broadly Aristotelian and, as is well known, Aristotle heavily influenced scholastic figures. Thus, many other Christian medieval thinkers of Aquinas's period view efficient causal situations as involving the same entities included in Aquinas's account. While there was broad consensus among medieval Aristotelians that efficient causal situations involve an agent, a patient, a motion or change, active and passive powers, an action and a passion, there were disagreements about the precise nature of these realities.

It lies outside of the scope of this project to examine the many debates in which scholastic figures engaged about the ontological realities involved in efficient causation. As will become clear, there are many nuances in Aquinas's views on this topic and many interpretive issues to consider. It is simply not possible to examine other figures' positions with the same level of detail and care in a book of this length. What follows is a brief overview of some of the central scholastic debates about causation. This overview is intended to give the reader some perspective about which positions defended by Aquinas were subject to disagreement.

⁵³ See Section 1.2. ⁵⁴ Ott, "Causation and Laws of Nature in Early Modern Philosophy," 51.

⁵⁵ See for example Yael Kedar, "Laying the Foundation for the Nomological Image of Nature: From Corporeity in Robert Grosseteste (c. 1168–1253) to Species in Roger Bacon (1220–1292)," in *Robert Grosseteste and the Pursuit of Religious and Scientific Learning in the Middle-Ages*, ed. J. P. Cunningham (New York: Springer, 2016), 165–85.

Active Causal Powers: What Are Powers? How Are They Individuated?

While scholastic figures agreed that agents acted through active causal powers, there were many debates about what exactly these powers are and how many of them are required to account for the various actions substances perform. Many scholastic writings on these questions about active powers focused specifically on the active powers of living organisms, particularly humans. Yet, some positions and arguments defended in these debates had a wider application to all created active powers.

Regarding the question of what active powers are in themselves, we saw above that Aquinas maintains that active powers are forms. For instance, the power by which fire heats water is the form of heat in the fire by which it is hot. Other figures denied that powers could be identified with forms. Henry of Ghent, for example, claimed that powers by their nature are related to actions. The power to heat, for example, by its nature is related to heating. Thus, Henry reasoned that powers cannot merely be absolute, namely non-relational items, such as forms. Rather, in his view, powers are relationships to actions, which are founded on absolute items. So, fire's power to burn, is not itself the fire's heat, but rather a relatedness that fire has to heating in virtue of its heat.⁵⁶

Another major disagreement among scholastic thinkers focused on the relationship between a substance's active powers and its substantial form. More specifically, the debate centered upon whether the human substantial form was the active power through which human beings engaged in their characteristic activities of knowing, willing and sensing, or whether these human powers were accidental forms distinct from the human substantial form. While this debate focused specifically on the human being and its powers, some of the arguments proceeded from general claims that had implications for how all substantial forms relate to the powers by which substances operate.⁵⁷ As we will see, Aquinas argues that

⁵⁶ On Henry's position See Cross, "Accidents, Substantial Forms, and Causal Powers," 137; J. T. Paasch, *Divine Production in Late Medieval Trinitarian Theology: Henry of Ghent, Duns Scotus, and William Ockham* (Oxford: Oxford University Press, 2012), 117–21; Simona Vucic, "Henry of Ghent and John Duns Scotus on Self-agency and Self-motion: An Inquiry into the Medieval Metaphysics of Causal Powers," PhD diss., University of Toronto, 2018, ProQuest Dissertations Publishing, 10641101, 141–49.

⁵⁷ For discussion of one such argument in Aquinas see Section 3.8. For a discussion of thirteenth century positions on the soul and its powers, see P. Künzle, *Das Verhältnis der Seele zu ihren Potenzen: Problemgeschichtliche Untersuchungen von Augustin bis und mit Thomas Von Aquin* (Freiburg: Universitätsverlag, 1956). For a briefer overview of the debate and discussion of the critique of Aquinas's position, see Adam Wood, "The Faculties of the Soul and Some Medieval

no substance acts immediately through its substantial form. The powers by which substances immediately act are accidental forms distinct from their substantial form. Against this position, other scholastic figures, such as Henry of Ghent and John Buridan, held that powers such as the human intellect and will were identical with the human substantial form, namely the soul.

Another related debate concerned how active powers are individuated. As we will see, Aquinas maintains that powers are individuated by the acts that immediately arise from them. In his view, each action that immediately arises from a substance entails a distinct active power through which the action is performed. For example, the acts of heating and illuminating entail two separate active powers in fire, namely a power to heat and a power to illuminate. Aquinas allows that two different types of action can arise from the same active power if and only if one act happens in virtue of the other, for example, as melting happens in virtue of heating.⁵⁸ John Buridan critiqued the position that powers are individuated by actions. In his view, it is not necessary to posit a distinct power to account for each type of action that a substance can perform. He thought that there are “multi-track” powers which enable various types of actions. He was among those who held that the human soul was identical to its powers. Thus, he saw the soul as an example of a single power from which many different types of actions immediately arose.⁵⁹

Action, Passion and Motion: How Do They Relate to One Another?

As we saw above, Aquinas maintains that natural efficient causation always involves motion. The agent causes motion and the patient undergoes it. For example, in the case of fire heating water, fire causes heating and water undergoes it. But how does the fire’s action of heating and the water’s passion of undergoing heating relate to the motion of heating itself? Medieval scholastic thinkers debated about how to analyze the ontological relationship between action, passion and motion. Aristotle claimed that one and the same motion was both the agent’s action and the patient’s passion.⁶⁰ His scholastic followers, however, developed different accounts

Mind-Body Problems,” *The Thomist* 75(2011): 585–636. For a detailed discussion of Aquinas’s position and arguments, see Wippel, *Metaphysical Thought of Thomas Aquinas*, 275–94.

⁵⁸ See Section 3.2.

⁵⁹ On Buridan’s views see Can Laurens Löwe, “Aristotle and John Buridan on the Individuation of Causal Powers,” *Oxford Studies in Medieval Philosophy* 6 (2018): 189–222.

⁶⁰ See his *Physics*, Bk. III, lec. 3.

of the nature of the sameness and the difference that obtains between these realities. On one end of the spectrum, thinkers such as Ockham argued that action and passion differ only conceptually from the motion involved in efficient causation. Action and passion are merely two different concepts of the same reality.⁶¹ On the other end of the spectrum, thinkers such as Peter Auriol argued that an agent's action must be an entity that exists prior to and is separable from the motion that is caused through it.⁶² Aquinas's own position, which has been subject to interpretive debate, lies somewhere between these two extremes. I will show in Chapter 5 that while he maintains that action and passion are irreducible to motion, correlative actions and passions are nevertheless inseparable from the motion which they involve.

The Conditions for Efficient Causal Interactions: Must the Agent and the Patient be Distinct? Can Some Substances Act at a Distance?

In addition to debates about the precise nature of the entities involved in efficient causal interactions, there were disagreements among medieval scholastics about the conditions which needed to be met for efficient causation to occur. As already mentioned, Aquinas held that the agent and the patient must be other in order for the agent to communicate a form to the patient in action. By contrast, other medieval figures believed that self-motion was possible. It is well known that many medieval thinkers thought that the human will could move itself to act. Yet, there were also medieval figures, such as John Duns Scotus, who believed that even natural agents, namely those lacking intellect and will, could engage in self-motion. Scotus thinks that growth is an example of self-motion in which a substance acts through one of its qualitative forms, e.g. heat, to induce a new quantitative form in itself.⁶³

⁶¹ On Ockham's view see Susan Brower-Toland, "Causation and Mental Content: Against the Externalist Reading of Ockham," in *The Language of Thought in Late Medieval Philosophy: Essays in Honour of Claude Panaccio*, ed. J. Pelletier and M. Roques (Cham: Springer, 2017), 59–80, particularly section 3.

⁶² On Auriol's critique of Aquinas's views on action, see Gloria Frost, "What is an Action? Peter Auriol vs. Thomas Aquinas on the Metaphysics of Causality," *Ergo* 6:43 (2020): 1259–85. See also Can Laurens Löwe, "Peter Auriol on the Metaphysics of Efficient Causation," *Vivarium* 55:4 (2017): 239–72. On Scotus's views in comparison with Aquinas's see Can Laurens Löwe, "John Duns Scotus versus Thomas Aquinas on Action–Passion Identity," *British Journal for the History of Philosophy* 26:6 (2018): 1027–44.

⁶³ On Scotus's views on self-motion, see Peter King, "Duns Scotus on the Reality of Self-Change," in *Self-Motion from Aristotle to Newton*, ed. Mary Louise Gill and James Lennox (Princeton: Princeton University Press, 1994), 227–90 and Yul Kim, "Why Does the Wood Not Ignite Itself? Duns

Another condition for efficient causal interactions that was debated was the “contact” condition. Aquinas held fast to the Aristotelian view that the agent must be in physical contact with the patient in order to act upon it. Contact with the patient could be immediate, as in cases where the agent and the patient were touching one another, or contact could be mediated by an intermediary, known as a “medium,” which touches both the agent and the patient. Aquinas supported the contact condition with a claim that an agent can only act where its power is physically present. Thus, an agent must be in physical contact with something in order to act upon it. However, other scholastic figures rejected the contact condition and maintained that action at a distance does occur in the physical world.⁶⁴ Thinkers such as William of Ockham supported this view by educing cases in which an agent appears to act at distance, such as magnetism and the action of a sensible object on the power of vision.⁶⁵

Debates about Natural Inclination and Final Causality: Are Natural Inclinations Necessary? Are There Final Causes in Nature?

In Aquinas’s view, part of the explanation for why natural causes exercise their powers in action is that they have a natural inclination toward their proper activities. Natural inclinations are tendencies within natural causes which impel them toward certain goals, which can be either an action or a product. Aquinas views natural inclinations as explaining why natural causes exercise their active powers whenever they are in contact with appropriate patients. This position was challenged by later figures. Ockham, for example, claims that the explanation for why fire goes from not acting to acting is the removal of an impediment or its coming into contact with a suitable patient.⁶⁶ He sees natural inclinations as unnecessary to explain why natural causes act when in appropriate circumstances. Ockham likewise attacked the view that natural causes act for the sake of ends or goals that function as final causes of natural actions. Ockham

Scotus’s Defense of the Will’s Self-Motion,” *American Catholic Philosophical Quarterly* 95:1 (2021): 49–68.

⁶⁴ Francis J. Kovach provides an overview of the medieval positions on the possibility of action at distance in his “Aquinas’s Theory of Action at a Distance: A Critical Analysis,” in *Scholastic Challenges to Mediaeval and Modern Ideas* (Stillwater, OK: Western Publications, 1987), 147–78, at 149–51.

⁶⁵ On Ockham’s arguments for action at a distance see André Goddu, “William of Ockham’s Arguments for Action at a Distance,” *Franciscan Studies* 44 (1984): 227–44.

⁶⁶ See Henrik Lagerlund, “The Unity of Efficient and Final Causality: The Mind/Body Problem Reconsidered,” *British Journal for the History of Philosophy* 19:4 (2011): 587–603, at 593.

relegates final causality to the realm of voluntary activity since only voluntary agents can know and choose to act for the sake of goals. He sees natural agents as determined to act in the same way by their natures, and thus, finds no need for ends or goals to explain why natural agents perform the same determinate actions.⁶⁷ Ockham was not alone in banishing final causes from the natural realm. Others such as, John Buridan, likewise saw final causes as playing no role in natural efficient causation.⁶⁸

In light of the many debates that occurred about efficient causation and causal powers in the medieval period, Aquinas's views are best portrayed as a particular way of developing a general approach to causation that was widespread among scholastic thinkers. What the general approach agrees on is that efficient causes produce the existence of their effects and they do so by exercising powers. Yet, among those who shared these two commitments, there were disagreements about the nature of powers and actions and the conditions which must be met for an exercise of active power.

1.5 Aquinas's Terminology

Aquinas relies on several technical concepts and terms to express his views on efficient causation and causal powers. The purpose of this section is to offer the reader a brief introduction to those concepts and terms and to note the English terms I have chosen to translate Aquinas's Latin.

Terminology for Causes: causa, causa efficiens, causa agens

As mentioned above, for Aquinas, *causa*, namely cause, is a broad term which encompasses all four Aristotelian causes. Aquinas uses the term *causa efficiens*, namely efficient cause, to refer to the type of cause which causes its effect by action. Given that efficient causes cause by acting, Aquinas also refers to the efficient cause as the *causa agens*, namely agent cause. *Agens* can be literally translated as "acting one"; however, I will follow the standard practice of translating *agens* as "agent." It is clear that

⁶⁷ For an overview of Ockham's views which situate them relative to Aquinas and other earlier thinkers, see Jordan Watts, "Natural Final Causality at the University of Paris from 1250–1360," PhD diss., The Catholic University of America, 2015, ProQuest Dissertations Publishing, 3705758.

⁶⁸ For discussion of Buridan's views see Lagerlund, "The Unity of Efficient and Final Causality" and Watts, "Natural Final Causality at the University of Paris from 1250–1360," 279–322. On another medieval critique of final causality, see Kamil Majcherek, "Walter Chatton's Rejection of Final Causality," *Oxford Studies in Medieval Philosophy* 7 (2019): 212–42.

Aquinas thought that the terms “efficient cause” and “agent cause” were interchangeable because sometimes when he lists the four causes, he replaces the “efficient cause” with “agent cause.”⁶⁹ At points in this study, when the context makes clear that it is the efficient or agent cause that is being discussed, I may drop the qualifier of “efficient” or “agent” and simply refer to this cause as “cause” and this form of causation simply as “causation.”

As already noted above, Aquinas at times refers to natural efficient causes as “movers” since they act on their patients through motion.⁷⁰ The term “mover,” however, is not interchangeable with “agent” and “efficient” cause since there are other efficient causes and agents, such as God, which cause effects without motion.

*Terminology for Powers and Action: potentia ad esse vs.
potentia ad agere, potentia activa, potentia passiva, immanent vs.
transeunt, actio and passio*

Aquinas uses the term *potentia* to refer to powers in general and he uses the term *actio* to refer to the activity which arises from a power.⁷¹ As we will see below, he does use some other terms to refer to specific types of powers and actions, yet *potentia* and *actio* are the terms he uses to refer to these realities taken generally. This terminology is significant insofar as it reveals that Aquinas conceptualizes powers and actions through the lens of the Aristotelian distinction between potentiality and actuality. Potentiality and actuality are basic notions which cannot be defined in terms of prior concepts. Aquinas thinks that we can best understand potentiality and actuality in terms of how they relate to each other. Potentiality relates to actuality as what is imperfect, incomplete or unfulfilled relates to its perfection, completion, fulfillment or manifestation. This relationship is further grasped by considering analogies. An actuality relates to its corresponding potentiality just as one who is awake relates to one who is sleeping or just as one who is seeing relates to one with his eyes closed.⁷²

Aquinas maintains that there are two types of potentialities: potentialities for being (*potentia ad esse*) and active potentialities

⁶⁹ *ScG* III c. 10 (ed. Marietti, 12, n. 1938): “Omnis causa vel est materia, vel forma, vel agens, vel finis.”

⁷⁰ See text in fn. 7.

⁷¹ *ST I* q. 25, a. 1 (ed. Leon., vol. 4, 290): “potentia activa est principium agendi in aliud”; see also *De operat. occult.* (ed. Leon., 43, 184): “dicimus potentiam principium intrinsecum quo agens agit, vel patiens patitur.” *ST I* q. 54, a. 1.

⁷² *In IX Meta.* lec. 5.

(*potentia ad agere*).⁷³ Form is the actuality which fulfills or completes a potentiality for being and action is that which fulfills, manifests or completes a potentiality for acting.⁷⁴ For example, Socrates's potential to be tan is fulfilled by the form of tan-ness, and his potential to run is fulfilled by the action of running. Aquinas claims that there are two types of active potentialities: one whose action passes outside of itself into another, just as the act of building terminates in a house, and another whose action remains in the agent, as the act of seeing.⁷⁵ The former are often referred to as "transeunt" and the latter as "immanent."

Aquinas uses the term *potentia passiva*, namely passive potentiality, to refer to that through which substances undergo actions.⁷⁶ For example, Socrates is able to be tanned by the sun through a passive potentiality in him to be tanned. Though not all commentators agree, I will argue that "potentiality for being" and "passive potentiality" refer to one and the same type of potentiality, which is contrasted with active potentiality.⁷⁷

Just as Aquinas uses the term *actio* to signify the actuality of an active potentiality, he likewise uses *passio*, namely passion, to signify the act of a passive potentiality.⁷⁸ In addition to signifying the acts of potentialities, *actio* and *passio* are numbered among the ten Aristotelian categories.⁷⁹ The categories delineate the types of beings that are found in the created world. In Chapter 6, I will discuss the differences between action as an accident in the category of action and action as the completion of a potentiality.⁸⁰

I will translate Aquinas's term *potentia* as "potentiality" in order to preserve his conceptualization of substances' causal features through the lens of the potentiality vs. actuality distinction. Yet, often when I am writing about Aquinas's views, I will refer to active potentialities as "active powers" or "causal powers" since this is how the active features of

⁷³ *STI-II* q. 55, a. 2 (ed. Leon., vol. 6, 351): "Unde, cum duplex sit potentia, scilicet potentia ad esse et potentia ad agere . . ." See also *De pot.* q. 1, a. 1 (ed. Pession, 9): "Unde et similiter duplex est potentia"; *De Malo* q. 1, a. 5; *STI* q. 48, a. 5; and *STI*, q. 105, a. 5.

⁷⁴ *STI* q. 48, a. 5 (ed. Leon., vol. 4, 496): "Actus autem est duplex: primus, et secundus. Actus quidem primus est forma et integritas rei: actus autem secundus est operatio."

⁷⁵ *De ver.* q. 14, a. 3 (ed. Leon., vol. 22 2/2, 446): "Activa autem potentia duplex est: quaedam quidem cuius actio terminatur ad aliquid actum extra, sicut aedificativae actio terminatur ad aedificatum; quaedam vero est cuius actio non terminatur ad extra, sed consistit in ipso agente ut visio in vidente . . ."

⁷⁶ *STI* q. 25, a. 1 (ed. Leon., vol. 4, 290): "potentia activa est principium agendi in aliud: potentia vero passiva est principium patendi ab alio . . ."

⁷⁷ See Section 5.4.

⁷⁸ *In III Phys.* lec. 5 (ed. Leon., vol. 2, 112): "Et actus quidem activi vocatur actio; actus vero passivi vocatur passio."

⁷⁹ See Section 6.4. ⁸⁰ See Section 6.4.

substances are often referred to today both in the secondary literature on medieval philosophy and in contemporary philosophical discussions. I will similarly use "passive power" to refer to passive potentialities.

Other Power Terms: virtus, vis, virtualiter

In addition to *potentia*, Aquinas uses two other Latin terms which can be translated into English as "power." They are *vis* and *virtus*. *Potentia* is the most general of these terms insofar as Aquinas uses it to refer to every kind of potentiality or power. *Vis* and *virtus* are narrower terms used to refer to particular classes of powers. The term *virtus* is associated with perfection or excellence. Aquinas says that the term *virtus* refers to a perfected potentiality.⁸¹ To understand what Aquinas means by this it is necessary to grasp a distinction between two types of powers. There are some powers which can be exercised without the agent acquiring any further perfection, while other powers require the acquisition of a further form in order to be exercised. An example of the second sort of power is a human being's power to play music. Human beings as such are capable of playing music. However, in order for a human being to actually play music, it is necessary to first learn how to play an instrument. A human being's potential to play music must be perfected by some musical habit, e.g. habitual knowledge of how to play the violin, before it can be exercised in actually playing music. The term *virtus*, which I will translate as "power," refers to those potentialities which have been perfected in such a way that they can be exercised in a determinate act. The term *habitus*, namely "habit," refers to the form that perfects a potentiality by ordering it to a determinate act.⁸² Aquinas thinks that active natural powers, such as fire's power to heat, are of themselves *virtutes* (plural of *virtus*) since they do not require a further perfection to be exercised. Fire, for example, does not need to acquire a habit to exercise its power of heating. Natural active powers are of themselves ordered to a determinate act.⁸³ Since this study focuses

⁸¹ *ST* I-II, q. 55, a. 2 (ed. Leon., vol. 6, 351): "Unde, cum duplex sit potentia, scilicet potentia ad esse et potentia ad agere, utriusque potentiae perfectio virtus vocatur."

⁸² *ST* I-II q. 54, a. 1 (ed. Leon., vol. 6, 341): "Habitus autem sunt quaedam qualitates aut formae inhaerentes potentiae, quibus inclinatur potentia ad determinatos actus secundum speciem."

⁸³ *ST* I-II q. 55, a. 1 (ed. Leon., vol. 6, 349): "potentia dicitur esse perfecta, secundum quod determinatur ad suum actum. Sunt autem quaedam potentiae quae secundum seipsas sunt determinatae ad suos actus; sicut potentiae naturales activae. Et ideo huiusmodi potentiae naturales secundum seipsas dicuntur virtutes."

primarily on natural powers, it omits discussion of habits and unperfected powers (i.e. those which are not *virtutes*).

The term *vis*, which I will also translate as “power,” refers to a certain type of perfected power (*virtus*).⁸⁴ Aquinas uses the term *vis* to refer to the higher powers of living beings by which they are able to change themselves.⁸⁵ Examples of such operations include nutrition and growth. The living being is both the agent of these operations and that which is transformed by the operation. These operations are contrasted with operations, such as heating, in which the agent acts upon something outside of itself, as when fire heats water. Aquinas sees the operation which arises from a *vis* as a more perfect form of action because the thing which is changed by the action is itself the agent of the action. It is not subordinated to another which operates upon it. A specific *vis* is typically named by Aquinas by the operation which it enables. For example, Aquinas refers to the power by which plants and animals nourish themselves as the *vis nutritiva*.⁸⁶

One other technical term of Aquinas's which merits some explanation is the adverb *virtualiter*, namely virtually, which is derived from *virtus*. Aquinas almost exclusively uses this adverb to modify the verb “to exist.” A reader can be easily misled when Aquinas writes of things “existing virtually.”⁸⁷ In English the term “virtual” means “almost” or “nearly.” Thus, it may seem that something which exists virtually would be something that has a strange, shadowy state between non-existence and existence. For Aquinas, however, the linguistic connection between *virtualiter* and *virtus* is very important. To say that something exists virtually is to say that a power exists which can produce it. Aquinas speaks of effects as preexisting virtually in their causes.⁸⁸ This is not to say that the effect exists in some shadowy way in the cause, but rather to say that the power to produce the effect exists in its cause. The effect is the fulfillment or

⁸⁴ On the meaning of *vis*, see for instance *In III Sent.* d. 23, q. 1, a. 3, p. 1 ad 3 (ed. Mandonnet-Moos, vol. 3, 707): “vis accipitur pro omni eo quod est principium operationis perfectae, quod importat nomen virtutis . . .”

⁸⁵ *De virt.* q. 1, a. 1 (ed. Odetto, 708): “vis dicitur, secundum quod res aliqua per potestatem completam quam habet, potest sequi suum impetum vel motum.” On how the various grades of living beings engage in self-motion see David Cory, “Thomas Aquinas on How the Soul Moves the Body,” *Oxford Studies in Medieval Philosophy*, 8 (2020): 146–87.

⁸⁶ See, for instance, *ST I* q. 78, a. 2.

⁸⁷ *De pot.* q. 3, a. 11 ad 12 (ed. Pession, 75): “effectus in causa activa virtualiter praeexistit.”

⁸⁸ *In Div. nom.* c. 9, lec. 4 (ed. Marietti, 318, n. 846): “[O]mnes enim effectus praeexistunt virtualiter in sua causa, secundum eius virtutem.”

completion of the cause's power, so the effect can be said to exist virtually when the active potentiality for it exists.

*Other Terms for Efficient Causal Activity: actio vs. operatio,
agere vs. facere, influere*

In describing what efficient causes do, Aquinas often uses the verb *agere*, namely to act, which is the verb form of *actio*. He explains that "to act is to exercise some action."⁸⁹ Elsewhere though he explains the verb *agere* in terms of the agent communicating that by which it is actual (i.e. its form), he writes: "To act indeed is nothing other than to communicate that by which the agent is actual, insofar as it is possible."⁹⁰ As explained above, Aquinas thinks that material substances act through that by which they are actual, namely their forms, to cause actualities of the same kind in their patients. Thus, the meaning of "action" can be described in terms of communicating actuality.

Aquinas uses the verb *agere* in both a general way to refer to any efficient causal activity that arises from a power and in a narrow way to refer to only the causal activity that remains in an agent, e.g. knowing and willing.⁹¹ When he uses *agere* in the more narrow way to refer to immanent causal activity, he uses the term *facere* and *factio* to refer to another sort of efficient causal activity, namely transeunt causality, which passes over into another outside of the agent.⁹² I will translate *facere* as "to do" or "to make" depending on the context and *factio* as "a doing" or "a making."

Operare and its noun form *operatio* are another pair of terms that Aquinas uses to describe efficient causal activity. These terms are synonyms for *agere* and *actio*. Like *agere* and *actio*, *operare* and *operatio* are used at times in a general way to refer to all efficient causal activity, namely both

⁸⁹ *De ver.* q. 5, a. 9, ad 4 (ed. Leon., vol. 22 1/2, 165): "agere est aliquam actionem exercere." There is a discussion of Aquinas's use of action related terminology in Marianne T. Miller, "The Problem of Action in the Commentary of St. Thomas Aquinas on the *Physics* of Aristotle," *Modern Schoolman* 23:3-4 (1946): 135-67; 200-26.

⁹⁰ *De pot.* q. 2, a. 1 (ed. Pession, 24): "Agere vero nihil aliud est quam communicare illud per quod agens est actu, secundum quod est possibile."

⁹¹ *ST I-II* q. 57, a. 4 (ed. Leon., vol. 6, 367): "Differt autem facere et agere quia, ut dicitur in IX Metaphys. factio est actus transiens in exteriorem materiam, sicut aedificare, secare, et huiusmodi; agere autem est actus permanens in ipso agente, sicut videre, velle, et huiusmodi."

⁹² *Ibid.*

immanent and transeunt, and also at times in a narrow way to refer only to immanent causality.⁹³

In addition to the terms Aquinas uses to refer exclusively to efficient causality, there are some verbs which Aquinas uses to refer to the causation exercised by all four species of cause (e.g. final, material, formal, efficient). These terms are *diffundere*, namely “to diffuse,” and *influere*, “to influence.” Aquinas writes “it belongs to a cause to influence the effect, and not the reverse.”⁹⁴ “To diffuse” and “to influence” signify the causality exercised by every species of cause on its effect. Each type of cause influences its effect and diffuses being to its effect. As we have seen, each does so in a different way. Aquinas notes that in addition to being used in a broad sense that applies to each of the four causes, *diffundere* and *influere* are also used in a narrow way to apply specifically to efficient causal activity.⁹⁵

*Terminology Associated with Natural Inclination: inclinatio naturalis,
appetitus naturalis, tendere, finis*

As we saw above, Aquinas thinks that natural substances have an *inclinatio naturalis*, namely “natural inclination,” which determines them toward exercising their powers to produce determinate types of effects. Aquinas also refers to natural inclination as *naturalis appetitus*, namely “natural appetite,” and as an *impetus*.⁹⁶ Natural inclinations are always directed at some action or effect, which is called an “end” (*finis*). For example, Aquinas writes, “[W]e call the end that toward which the impetus of the agent tends.”⁹⁷ Elsewhere he writes: “The end is that in which the appetite

⁹³ For an example of the general usage, see *ScG II*, c. 1 (ed. Marietti, 114, n. 853): “Est autem duplex rei operatio, ut philosophus tradit, in IX *metaphysicae*: una quidem quae in ipso operante manet et est ipsius operantis perfectio, ut sentire, intelligere et velle; alia vero quae in exteriorem rem transit, quae est perfectio facti quod per ipsam constituitur, ut calefacere, secare et aedificare.” For an example of the narrow usage, see *In I Sent.* d. 40, q. 1, a. 1 ad 1 (ed. Mandonnet-Moos, vol. 1, 942): “et tales actiones, quae proprie operationes dicuntur, in ipsis operantibus tantum sunt.”

⁹⁴ *In III Sent.* d. 29, q. 1, a. 7 ad 1 (ed. Mandonnet-Moos, vol. 3, 942): “causae autem est influere in causatum, et non e converso.” For a text in which *influere* is used to describe the cause–effect relationship across different species of causes, see *De ver.* q. 22, a. 2 (ed. Leon., vol. 22 3/1, 616): “Sicut autem influere causae efficientis est agere, ita influere causae finalis est appeti et desiderari.”

⁹⁵ *De ver.* q. 21, a. 1 ad 4 (ed. Leon., vol. 22 3/1, 594): “Ad quartum dicendum, quod diffundere, licet secundum proprietatem vocabuli videatur importare operationem causae efficientis, tamen largo modo potest importare habitudinem cuiuscumque causae sicut influere et facere, et alia huiusmodi.”

⁹⁶ *In V Meta.* lec. 6 (ed. Marietti, 226, n. 829): “In naturalibus quidem est impetus, sive inclinatio ad aliquem finem, cui respondet voluntas in natura rationali; unde et ipsa naturalis inclinatio appetitus dicitur.”

⁹⁷ *ScG III* c. 2 (ed. Marietti, 3, n. 1869): “hoc dicimus esse finem in quod tendit impetus agentis . . .”

of the agent or mover rests . . .”⁹⁸ Aquinas uses the verb *tendere*, namely to tend, to describe the efficient cause's movement toward its end.⁹⁹ Aquinas also uses the noun *intentio*, namely intention, which is derived from *tendere*, to describe a natural agent's intrinsic directedness toward an end. For example, he writes: “In natural things, the intention of the end belongs to an agent according to its form through which the end is fitting to it . . .”¹⁰⁰ Through its form, a natural substance has a natural inclination toward a certain end. This inclination which the agent has toward an end is described by Aquinas as an intention in the agent. In English the term “intention” is typically reserved only for cognitive activity. Thus, it may seem that when Aquinas writes of the “intention of the end” in natural things, he is suggesting that they somehow cognize the ends to which they tend. However, Aquinas writes that “‘intention,’ just as its name sounds, signifies ‘to tend toward something.’”¹⁰¹ For him, to say that a natural cause has an “intention of the end” merely signifies that it has an inclination toward that end.¹⁰² For instance, to attribute to fire an intention of heating is merely to say that it has a natural inclination toward heating.

Relational Terms: ordo vs. relatio, dispositio

The realities in Aquinas's material world, especially those involved in efficient causation, are in many ways interconnected. Aquinas uses the technical term *ordo*, namely “order,” to discuss the interconnectedness between various realities. Aquinas describes order as a “proportion.”¹⁰³ More specifically, he explains that order refers to the proportion between a principle and that which follows from it.¹⁰⁴ Above we saw that a principle is a beginning from which anything else follows.¹⁰⁵ As we saw, causes are a certain type of principle from which existence follows. Thus, the term “order” is used to capture the connection between causes and effects. In addition to causes and effects, there are many other realities involved in

⁹⁸ *ScG* III c. 3 (ed. Marietti, 5, n. 1880): “Finis est in quo quiescit appetitus agentis vel moventis . . .”

⁹⁹ See, for example, the text in fn. 88.

¹⁰⁰ *ScG* II c. 20 (ed. Marietti, 144, n. 1079): “In rebus enim naturalibus, intentio finis competit agenti secundum suam formam, per quam finis est sibi conveniens . . .”

¹⁰¹ *ST* I-II q. 12, a. 1 (ed. Leon., vol. 6, 94): “intentio, sicut ipsum nomen sonat, significat in aliquid tendere.”

¹⁰² *De prin. nat.* c. 3 (ed. Leon., vol. 43, 42): “et hoc intendere nichil aliud erat quam habere naturalem inclinationem ad aliquid.”

¹⁰³ *In VIII Phys.* lec. 3 (ed. Leon., vol. 2, 374): “omnis autem ordo proportio quaedam est.”

¹⁰⁴ *ST* I q. 42, a. 3 (ed. Leon., vol. 4, 439): “[O]rdo semper dicitur per comparisonem ad aliquod principium.”

¹⁰⁵ See Section 1.1.

efficient causation which are said to be “ordered” to each other. Aquinas describes potentiality as “ordered” to actuality.¹⁰⁶ Thus, powers, as potentialities, are ordered to the actions that are their corresponding actualities. At times, Aquinas also uses the term “order” to refer to the interconnection between multiple causes which cooperate toward a joint effect.¹⁰⁷

It is important to note that the term *ordo* is not interchangeable with the term *relatio*, namely relation. Order is a broader category than relation. Relations, for Aquinas, are one specific type of order, namely an order which obtains between two substances.¹⁰⁸ A relation obtains between two entities in virtue of an accident each has.¹⁰⁹ For example, two white substances, in virtue of their accidental forms of whiteness, also bear a relation to one another. Since only substances can be the bearers of accidents, relations only obtain between substances. Non-substances can be ordered to one another. But they cannot be related to one other because they do not have accidents upon which a relation can be founded. For example, while Aquinas thinks that it is true to say that powers are ordered to actions, he does think that they bear a relation to one another, when “relation” is understood in its technical sense because powers and actions do not have any accidents by which they can be related.

Another relational term which Aquinas frequently uses when discussing aspects of efficient causality is *dispositio*, namely “disposition.” In English, the term “disposition” is often used to signify a person’s qualities of mind or character, so it may not be apparent that this is a relational term. However, in Aquinas’s terminology, the meaning of “disposition” is closely connected to the notion of “order.” He writes: “[D]isposition implies a certain order, as was said. Therefore, someone is not said to be disposed through a quality except with reference to something else.”¹¹⁰ For Aquinas, a disposition is a qualitative form in a substance by which it is referred to something else. He maintains that both agents and patients have dispositions that order them toward specific actions and passions. Regarding patients, Aquinas writes: “It is necessary that that which is able

¹⁰⁶ *STI* q. 77, a. 3 (ed. Leon., vol. 5, 251): “potentia, secundum illud quod est potentia, ordinatur ad actum. Unde oportet rationem potentiae accipi ex actu ad quem ordinatur. . .”

¹⁰⁷ *STI* q. 116, a. 2 ad 1 (ed. Leon., vol. 5, 554): “Essentialiter vero fatum est ipsa dispositio seu series, idest ordo, causarum secundarum.”

¹⁰⁸ *De pot.* q. 7, a. 9 ad 7 (ed. Pession, 208): “relatio . . . nihil est aliud, quam ordo unius creaturae ad aliam . . .”

¹⁰⁹ *In III Phys.* lec. 1 (ed. Leon., vol. 2, 102): “cum relatio habeat debilissimum esse, quia consistit tantum in hoc quod est ad aliud se habere, oportet quod super aliquod aliud accidens fundetur . . .”

¹¹⁰ *STI-II* q. 49, a. 2, ad 1 (ed. Leon., vol. 6, 311): “dispositio ordinem quendam importat, ut dictum est. Unde non dicitur aliquis disponi per qualitatem, nisi in ordine ad aliquid.”

to undergo something have within itself some disposition which is the cause and principle of such an undergoing and this principle is called passive potentiality.”¹¹¹ Dispositions in a patient are qualities of it which make it susceptible to receiving the form which the agent causes in it by its action.¹¹² For instance, dryness disposes a substance toward undergoing burning. As the passage just quoted suggests, Aquinas equates the dispositions of a patient, which order it toward undergoing specific actions, with its passive potentialities. In the case of the agent, dispositions are qualities which order the agent toward actions. However, dispositions of the agent cannot be merely equated with the active potentialities by which they perform actions. Dispositions of an agent are qualities which impact how the agent performs actions through its active potentialities. Dispositions of an agent account for whether the agent acts well or poorly or with difficulty or ease.¹¹³ Quickness, for example, is a disposition which enables an agent to run well.¹¹⁴ Quickness cannot be equated with the power to run. Rather, it is a further quality that impacts how the agent acts through its power to run.

Many technical terms were introduced in this section. This terminology was introduced at the beginning of the study so that the reader would be familiar with technical terms as they arise and so that it would not be necessary to interrupt discussions of concepts throughout the study to introduce terminology. However, individual readers may wish to refer back to this section as they progress through the study.

1.6 Conclusion

This chapter introduced the key theses of Aquinas’s theory of efficient causation and causal powers. We have seen that for Aquinas, efficient causation is a distinctive type of ontological dependence. All causes influence the being of their effects and all effects depend on their causes. The distinctive way in which the efficient cause influences the being of its effect

¹¹¹ *In V Meta.* lec. 14 (ed. Marietti, 257, n. 963): “Oportet autem illud, quod est possibile ad aliquid patiendum, habere in se quamdam dispositionem, quae sit causa et principium talis passionis; et illud principium vocatur potentia passiva.”

¹¹² *In IV Sent.* d. 4, q. 2, a. 3, qc. 2 (ed. Mandonnet-Moos, vol. 4, 178): “Ad secundam quaestionem dicendum, quod actus activorum recipiuntur in passivis secundum suam dispositionem . . .”

¹¹³ *ST I-II*, q. 49, a. 2

¹¹⁴ *De virt.* q. 1, a. 1 ad 9 (ed. Odetto, 710): “dispositio dicitur tribus modis . . . *Alio modo* per quam aliquod agens disponitur ad agendum, sicut velocitas est dispositio ad cursum.” The quality of the patient that disposes it to receive a form is one of the other types of disposition discussed in this passage.

is through action. Actions, as we have seen, are exercises of active powers. Aquinas maintained that the most proper exercises of natural efficient causation, namely *per se* efficient causation, involved a number of elements which were introduced in this chapter. The goal of this chapter was to introduce the “big picture” of Aquinas’s views and to provide some pertinent conceptual and historical context for his views. It is likely that the reader has many questions about the material in this chapter. The goal of the subsequent chapters is to examine each of the individual elements of Aquinas’s views in more depth.