

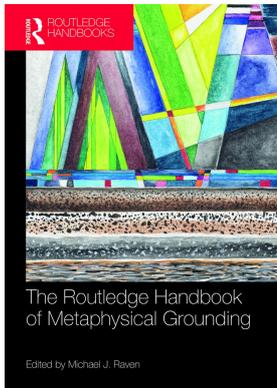
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## **The Routledge Handbook of Metaphysical Grounding**

Michael J. Raven

### **Medieval and Early Modern**

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### 3

# MEDIEVAL AND EARLY MODERN

*Margaret Cameron*

In his 2015 survey article, “Ground”, Raven notes the following about ground:

Indeed, one of ground’s distinctive hallmarks is how it links metaphysics to explanation. Somehow, ground is *metaphysical* because it concerns the phenomena in the world itself, but also *explanatory* because it concerns how some phenomena hold in virtue of others.

*(Raven 2015)*

However, Raven immediately points to what he describes as a “tension” and a “struggle”:

But these metaphysical and explanatory aspects seem to be in tension. On the one hand, it is supposed that metaphysics concerns phenomena in the world itself independently of the explanatory interests and goals of inquirers like us. On the other hand, it is supposed that explanations are sensitive to the explanatory interests and goals of inquirers like us. In light of this tension, how is the link supposed to be understood?

*(Raven 2015)*

Raven identifies two camps in the contemporary literature on ground: separatists, who separate ground from explanation, and unionists, who “link ground to metaphysical explanation by taking ground *to be* (a kind of) metaphysical explanation”. To be sure, medieval, Renaissance, and early modern philosophers did not have at their disposal the theoretical terminology afforded by the recent grounding literature, including the very term “ground” as it is currently used. It is, however, well known that ground has its roots in, broadly speaking, the Aristotelian metaphysical tradition. Given the fact that Aristotle’s philosophy, and specifically his metaphysics, provided the foundation for the subject during most of this time, it should come as no surprise that we find philosophers engaging in many of the same debates and discussions regarding questions of fundamentality, ontological priority, metaphysical explanation, and dependence relations. Raven himself was not unaware of this long tradition: “The debate [about whether ground is both metaphysical or explanatory or both] . . . appears to be entangled with profound questions concerning the link between metaphysics and explanation (more generally, epistemology). These questions have a long history” (Raven 2015). For many thinkers during the medieval and early

modern periods, too, discussions of dependence relations within the context of studying metaphysics often assumed this metaphysical/explanatory double life.

It is perhaps less than clear, however, that philosophers in the medieval and early modern periods recognized a “tension” or a “struggle” between metaphysics and epistemology, although they did certainly find themselves in multiple entanglements when trying to set things straight, especially when it came to the question of the subject matter of metaphysics. There are myriad ways to showcase this topic, but here we will focus on one particularly apt site of discussion and debate, namely, the various answers to the question, “What is the subject matter of metaphysics?”

John Duns Scotus (c. 1266–1308) opens the first question of his commentary on Aristotle’s *Metaphysics* in this way:

Concerning the object of this science [i.e., metaphysics], it has been shown above that this science deals with transcendentals.<sup>1</sup> However, it has likewise been shown that it deals with the highest causes. There are various opinions as to which of these ought to be its proper object.

Therefore our first question: Is the proper subject [matter] of metaphysics being qua being as Avicenna claims or God and the Intelligences as the Commentator Averroes assumes?

(John Duns Scotus 1997)

The expression “subject matter” translates the Latin “*genus subiectum*”, which in turn is a translation of the ancient Greek “*tò genos tò hypokeímenon*”: the underlying kind. To inquiry into the subject matter of metaphysics, which was characterized as First Philosophy, is to ask the question: “What grounds what, in the most fundamental sense?”

By this stage in the medieval tradition, it had become customary to start one’s commentary on the *Metaphysics*, which consisted in a close reading of the text usually organized around a series of questions, with this very question. Scotus summarizes two of the main answers debated amongst medieval and scholastic philosophers regarding the subject matter of the science of metaphysics. He traces these answers, correctly, to the Arabic-speaking philosophers Avicenna (Ibn-Sīnā, ca. 970–1037) and Averroes (Ibn Rushd, 1126–1198), the latter also known simply as “the Commentator” (while Aristotle was “the Philosopher”). That this question was a matter of debate is unsurprising: Aristotle himself gives multiple and varied answers in his *Metaphysics*. But what turns on answering this question? Simply put, the answer to the question of the subject matter of metaphysics establishes what is taken to be the foundation of all being. This is one answer to the question, namely, the ontological answer, i.e., the subject matter of metaphysics is being qua being. But there were two others: the explanatory, i.e., the subject matter of metaphysics is knowledge of the fundamental structure of being and its properties; and the theological, i.e., the subject matter of metaphysics is the sphere of the divine.

Before turning to the rival positions held by Avicenna and Averroes mentioned earlier, let us first take a look at what Aristotle said on the issue.<sup>2</sup> In *Metaphysics*, Aristotle holds both that the subject matter of metaphysics is being qua being as well as the sphere of the divine. First, metaphysics as being qua being:

There is a science which investigates being as being and the attributes which belong to this in virtue of its own nature. Now this is not the same as any of the so-called special sciences; for none of these others deals generally with being as being.

(Aristotle, *Metaphysics* 1003a)

This is the ontological characterization of the subject of metaphysics. Its remit—being qua being—is distinct from the special sciences, for example, from biology, which studies being qua *living* being.

The subject matter of metaphysics is, at the same time, according to Aristotle, explanatory, or epistemic. Specifically, Aristotle describes the “fundamental duty of the philosopher”, which is “to gain possession of the principles and causes of substance” (Aristotle, *Metaphysics* 1003b). Thus, the obligation of the philosopher is explanatory. Aristotle’s remarks characterize metaphysics as a branch of epistemology, that is, as having to do with the *knowledge* of what grounds what. Indeed, we will see that several of his commentators followed him on this point and identified the subject matter of metaphysics as being *knowledge* of the fundamental.

In another part of the text, Aristotle gives yet another opinion on the subject matter of metaphysics, describing it as “theology”:

Now all causes must be eternal, but especially these [i.e., the separable and immovable things]; for they are the causes of so much of the divine as appears to us. There must, then, be three theoretical philosophies, mathematics, natural science, and theology, since it is obvious that if the divine is present anywhere, it is present in things of this sort.

(Aristotle, *Metaphysics* 1026a)

This is the theological characterization of the subject of metaphysics. Aristotle argues that if there is an unchanging substance in the universe, i.e., the divine, then “the science of this must be prior and must be First Philosophy, and universal in this way, because it is first”.

Accordingly, for Aristotle, metaphysics is First Philosophy in three senses. It is most fundamental because what metaphysics studies, namely being, is what is most fundamental. It is most fundamental because the study of metaphysics is what is epistemically fundamental. And it is most fundamental because its subject matter is the first cause, namely, God.

These three opinions on the subject matter of metaphysics—namely, that the subject matter of metaphysics is both ontological, explanatory, and also theological—are found scattered throughout the *Metaphysics*, a treatise that was, famously, only posthumously assembled and so-named. However, Aristotle himself did not treat the question of the subject matter of metaphysics in an especially systematic fashion.<sup>3</sup> It was Avicenna who first provided systematicity to the question, and he did so by applying the epistemological method suggested in Aristotle’s *Posterior Analytics* to his reading of the *Metaphysics*.<sup>4</sup> The *Posterior Analytics* belongs to the collection of so-called “logical” treatises known collectively as “the organon”. It is a notoriously difficult but fundamentally important work in which Aristotle sets out in systematic fashion the structure of science and the ways of ascertaining proofs via syllogistic logic in its support. In a word, it is a treatise on how to acquire scientific knowledge, the characteristics of which were formulated by a demonstration whose premises are true, primary, immediate, better known, prior to the conclusion, and causes of the conclusion.<sup>5</sup>

Avicenna’s *The Metaphysics of the Healing* is not a commentary on Aristotle’s work, although it is deeply informed by it. It is a masterful work in its own right that advances a distinctive and highly influential theory of existence and divine causation.<sup>6</sup> Avicenna’s application of the methods and principles drawn from the *Posterior Analytics* to the study of metaphysics was momentous: he at once argued that the study of metaphysics has a systematic grounding in an epistemological method, and by doing so, he fused or (as some might say) explicitly confused metaphysics and epistemology. Avicenna used Aristotle’s lessons to index a science to its subject matter: “It has also become known that for each science there is a subject matter proper to it”

(Avicenna 2005, 1.1(10)). The lesson drawn from *Posterior Analytics* A 10 (76b) is this: “Every science deals with a subject matter whose existence it takes for granted.” The subject matter of a science is made clear, according to Aristotle in *Posterior Analytics* A 7 (75a), in the act of providing a demonstration:

There are three things involved in demonstrations: one, what is being demonstrated, or the conclusion (this is what holds of some kind in itself); two, the axioms (axioms are the items from which the demonstrations proceed); third, the underlying kind [*genus subiectum*, i.e., subject matter] whose attributes—i.e., the items incidental to it in itself—the demonstrations make plain.

Since every science “takes for granted” the existence of its subject matter, it consequently does not have to provide a *proof* of its existence. Accordingly, Avicenna famously excludes God as the subject matter of metaphysics:

The existence of God—exalted by His greatness—cannot be admitted as the subject matter of this science; rather, it is [something] sought in it. This is because, if this were not the case, then [God’s existence] would have to be either admitted in this science but searched for in another, or else admitted in this science but not searched for in another.

(Avicenna 2005)

Avicenna rejects both of these alternatives, since none of the other sciences is capable of proving God’s existence, and neither is God’s existence self-evident. Avicenna concludes that “If, then, the inquiry concerning [God’s] existence is in this science, it cannot be the subject matter of this science. For it is not for any science to establish its own subject matter”, which is a lesson drawn straight from Aristotle’s *Posterior Analytics*.

Avicenna then considers whether the subject matter of metaphysics could be the four Aristotelian causes, glossed as “the ultimate causes for all existents”. These four causes are introduced by Aristotle in his work *Physics* and became known by the labels affixed by medieval authors, namely, the formal, material, efficient, and final causes.

Some of these (parts, for instance) are causes in the sense that they underlie a thing [the material cause]; others are causes in the sense that they constitute what a thing is (for instance, the whole, the compound, and the form) [the formal cause]. Then consider a seed, a doctor, a planner, and any other kind of agent: they are all causes in the sense that they initiate change or stability [the efficient cause]. Then there are things which are causes in the sense that they are the ends of other things, and are the good for which they are done [the final cause].

(Aristotle, *Physics* II.3, 195a)

Aristotle is concerned with the phenomenon of cause and identifies four different types (even when one and the same thing turns out to be multiply causal, e.g., in the case of biological reproduction). Avicenna, however, rejects the idea that Aristotle’s four causes can be the subject matter of metaphysics and presents a host of arguments to make this point, one of which has to do with the priority of what is investigated by metaphysics, which is knowledge of the absolute causes. According to Avicenna, “knowledge of the absolute causes comes about after the existence of causes for those things that *have* causes”. What underlies the causes is that which can be

subject to causation, and this is being. The science of being is subsequently perfected or completed by the discovery of the ultimate causes. In the end, by process of elimination, Avicenna concludes that metaphysics is the study of being *qua* being.

In chapters two and three of Book 1 of *The Metaphysics of The Healing*, Avicenna advances his positive case. Distinguishing metaphysics from the other theoretical sciences (natural science, mathematics, and logic), Avicenna states that metaphysics is about “investigating the state of substance inasmuch as it is an existence and a substance” (Avicenna 2005). It also investigates both material and immaterial bodies insofar as they are substances, as well as measure and number. Clearly, the focus of metaphysics is on substance and its accidents (e.g., quality, quantity, relation, and so on) as well as what are “akin to the proper accidents”, namely, the one and the many, the potential and the actual, the universal and the particular, and the possible and the necessary.

For Avicenna, metaphysics is First Philosophy because “it is the knowledge of the first thing in existence (namely, the First Cause) and the first thing in generality (namely, existence and unity)”. Knowledge of this is superior because it bears the mark of absolute certainty. What is known in First Philosophy is prior to everything else that can be known. Accordingly, First Philosophy is to the other sciences as a master to its servants, to use Avicenna’s own analogy. What does he mean by characterizing First Philosophy in this way? Avicenna embraces the double life of metaphysics as both ontological and explanatory. It is ontologically prior: it is ontologically prior to everything that is enmattered and in no way depends on the existence of material things for its own existence. And it is explanatorily prior: it is by knowing the principles of First Philosophy that one is able to validate knowledge of the other sciences. However, although First Philosophy has this foundational ontological and epistemic character, it is not the first subject to be studied. In fact, according to Avicenna, the study of metaphysics should be taken up only after a grounding in the study of natural science and mathematics is achieved.

As we have just seen, Avicenna rejects the idea that God (and the separate substances) can be the subject matter of metaphysics; in other words, the fact of God’s existence cannot be assumed as a principle with which metaphysical investigations can be undertaken. Rather, for Avicenna, one of the tasks of metaphysics is to prove the existence of God, which he assigns to the study of being (which can, within the purview of metaphysics as the study of being *qua* being, be assumed as a principle). Writing in response to Avicenna’s views on the subject matter of metaphysics, Averroes outright rejects the idea that God’s existence is what is to be proven by metaphysics. Consequently, Averroes rejects Avicenna’s claim that God cannot be the subject matter of metaphysics. To do so, Averroes relies on arguments drawn from Aristotle’s *Physics*, and especially arguments based on the theory of motion given there, to mount his arguments against Avicenna. Briefly, Averroes appeals to proofs given by physics in which causes can be inferred from effects, for example, that from the existence of movement can be inferred the existence of God as first cause.<sup>7</sup> Moreover, it is within the subject matter of physics that the existence of the separate (divine) substances can be demonstrated, thereby permitting the subject of metaphysics to assume them as its subject matter:

What has become plain in physics with respect to the existence of separate principles is not superfluous in this science [of metaphysics], as Ibn-Sīnā maintains, but rather necessary, because it is employed in this science as a supposition.

(Averroes 2010)<sup>8</sup>

Given that Averroes’ views on this topic do not seem to have traction in the other authors surveyed here, let this brief mention of his view that the subject matter of metaphysics is God and the separate substances suffice.

Thomas Aquinas (1225–1274) also takes up the question of the subject matter of metaphysics and returns to the question on several occasions. It is explicitly addressed in the prologue to his commentary on Aristotle's *Metaphysics*. But of great value too is his answer to Question 9 in his commentary on Boethius' *On the Trinity*.<sup>9</sup> Boethius' tractate was a subject of commentary for many reasons, not least of which is the fact that he characterizes and defends First Philosophy as theology, or the science of the immaterial, unmoved divine being.

Following Aristotle's own view that, in any investigation, we ought to proceed from "what is more intelligible and clear to us and move from there to what is clearer and more intelligible in itself" (Aristotle, *Physics* I.1, 184a), Aquinas too cites this methodological lesson in his preliminary discussion of the question of the division of the sciences and, ultimately, of the subject of metaphysics. In response to Boethius' protreptic opening remarks ("Therefore, come, let us delve in and examine each subject as far as it can be grasped and understood; for . . . it is a scholar's duty to try to formulate his opinion about each thing as it actually is"), Aquinas explains in his commentary on *On the Trinity*:

He uses these two words ["grasped" and "understood"] because the method of investigating anything should conform both to things and to us. If it did not conform to things, they could not be understood; if it did not conform to us, we could not grasp them.

(Aquinas 1986)

Thus, on Aquinas' view, there is a double conformation: our explanation of things must conform to the *things understood*, and it must conform to the way in which *we understand* things.

Addressing the question of the subject matter of metaphysics, Aquinas notes that the discipline is known by three names: metaphysics, divine science, and First Philosophy. In the commentary on *On the Trinity*, he focuses on the divine nature of the subject and, accordingly, explains why it is characterized in this way. It is divine because it does not deal with motion and it is abstracted from matter—not in thought but in existence. In the prologue to his commentary on Aristotle's *Metaphysics*, Aquinas elaborates on the priority of the subject more broadly. In providing a characterization of the metaphysician, i.e., the person with wisdom, Aquinas explains that the metaphysician is one who knows all things, knows difficult things, and knows them with greater certainty. The metaphysician chooses to know the subject for its own sake, and not for some other purpose. Finally, what the metaphysician knows must be "rather the more basic, i.e., nobler, than a subordinate science" (Lesson 2). As First Philosophy, metaphysics is the study of "the first causes of things" (Lesson 1), and "the more any sciences are prior by nature, the more certain they are" (Lesson 2). Thus, epistemic or explanatory certainty tracks, and is explained by, ontological priority.

Since it is well known now that Aquinas closely follows Avicenna's views with regard to the subject matter of metaphysics,<sup>10</sup> here the focus will be on Aquinas' solution to an apparent paradox, which was also recognized by Avicenna. The paradox emerges with regard to metaphysics considered according to the order of nature and metaphysics considered according to the order of learning. The point is first raised in an objection to the question of whether speculative science should in fact be divided into the three parts: natural, mathematical, and divine. In his commentary on *On the Trinity*, Aquinas raises this objection:

That science on which others depend must be prior to them. Now all the other sciences depend on divine science because it is its business to prove their principles.

Therefore, Boethius should have placed divine science before the others [i.e., before natural science and mathematics].

(Aquinas 1986)

Like Avicenna, Aquinas explains that metaphysics is so called because it is to be learned after the study of physics, which is concerned with the study of material objects in motion. This establishes the pedagogical order. Moreover, according to Aquinas (explicitly following Avicenna again), the natural sciences “explain many things used by metaphysics, such as generation, corruption, motion, and the like” (Aquinas 1986). Yet Aquinas notes that metaphysics is characterized as First Philosophy because “all the other sciences, receiving their principles from it, come after it”. This establishes the natural or ontological order. The principles to which Aquinas refers are the most universal and have both ontological and explanatory priority (so in addition to generation, corruption, and motion, we can add place, time, and other universal axioms, such as whatever is moved is moved by another). The question is, then, does the subject matter of metaphysics, given that it is characterized as metaphysics both in the sense of being beyond physics and in the sense of being First Philosophy, contain a contradiction or a vicious circularity?<sup>11</sup>

Aquinas’ resolution to the apparent paradox leans heavily on the distinction between priority with respect to us as knowers or inquirers (*quoad nos*) and priority with respect to the natural or ontological order (*naturaliter*). With regard to us, that is, to the order of learning, the natural sciences are prior, since it is by them and in them that many of the principles used by us when we engage in metaphysical speculation are proven. Aquinas adds that mathematics, too, should be studied before we study metaphysics because knowledge of mathematics is presupposed when studying astronomy, which must be learned before metaphysics in order to be able to understand separate substances.

So much for the order of learning. But how can it be the case that the subject of metaphysics is not viciously circular since, as First Philosophy, it both proves the very principles used by the natural sciences *and* presupposes the conclusions of proofs given by the natural sciences? Herein lies the heart of the paradox, and it does not seem that a mere appeal to the order of learning will help. Aquinas’ answer is both (unhappily) brief and dense:

The principles that another science (such as natural philosophy) takes from First Philosophy do not prove the points which the first philosopher takes from the natural philosopher, but they are proved by other self-evident principles. Similarly, the first philosopher does not prove the principles he gives the natural philosopher by principles he receives from him, but by other self-evident principles. So there is no vicious circle in their definitions.

(Aquinas 1986)

Let us unpack this explanation. In the order of learning, the natural philosopher provides the metaphysician with principles he has learned in the course of studying natural philosophy. When engaging in the study of natural philosophy, it is the job of the natural philosopher to use other, self-evident principles—that is, principles that within the scope of natural philosophy (and not metaphysics) are self-evident—to prove the principles that are given as ontologically prior to natural science. In the same way, when the metaphysician uses the principles acquired (according to the order of learning) from the natural scientist, the metaphysician does not use the proofs of those principles that were provided by the natural philosopher, proofs which, considered within the purview of natural science, were self-evident. Rather, it is up to the metaphysician to seek

proofs for the principles (acquired in the order of learning) that are self-evident within the ambit of the subject of metaphysics. Since natural science has as its subject matter material being in motion, proofs that are self-evident in this subject are not going to be self-evident within the scope of the science that studies separate being, i.e., immaterial being.

This is a resolution to the paradox, if one accepts that the self-evidence of proofs is indexed to the scope and subject matter of the different sciences. To accept this resolution demands that we recognize that ontological priority and explanatory priority are not just distinct but, in this case, inversely ordered to one another. This is, of course, an elaboration of Aristotle's general lesson mentioned earlier, namely, that we first grasp things as they appear to us and then move to an understanding of how things are in themselves. But what Avicenna and Aquinas explicitly recognize is that, if ontological and explanatory priority are not delineated and distinguished, then the very subject matter of metaphysics appears to be viciously circular.

Thus far, philosophers addressing the question of the subject matter of metaphysics are faced with embracing either the ontological interpretation, according to which metaphysics is the science of being qua being, or the theological interpretation, according to which metaphysics is the science of divine being. As a general rule, most thinkers throughout the 13th and 14th centuries preferred the ontological interpretation. However, early modern scholastic thinker Francisco Suárez (1548–1617) embraced the view that metaphysics has a triune character that is theological, ontological, and explanatory.

In his note to the reader in the prologue of his *Metaphysical Disputations*, Suárez unequivocally declares that theology is to be built upon a “solid metaphysical foundation”. He characterizes metaphysics as First Philosophy in this way:

Of all the natural sciences, that which holds primacy and has won the name of First Philosophy is most valuable for promoting sacred and supernatural theology. For among them all it approaches most closely to the science of divine things, and also explains and vindicates those natural principles which embrace the universe of being and in one way or other stand at the basis of all learning.

(Suárez online, “To the reader”)<sup>12</sup>

So far, Suárez's characterization is twofold: metaphysics is both theological and explanatory. It is theological in the sense that it “approaches most closely to the science of divine things”. It embraces the study of the divine because it is God who brings everything that is real into existence. But it is also explanatory, since it “explains and vindicates those natural principles which embrace the universe of being” and “in one way or another stand at the basis of all learning”. Accordingly, metaphysics explains the axioms that are shared by both metaphysics and theology.

In addition, in the First Disputation, there is no question that, for Suárez, metaphysics is interpreted as ontology. In answer to the question, “What is the (adequate) object of metaphysics?”, Suárez claims that metaphysics can be defined as the science in which being qua being is contemplated. By “being”, Suárez meant real—as opposed to actual (i.e., actually existent)—being, thereby including also the science of possible being. It is the study of all reality that has or can come about due to God's infinite power. Thus, in the end, Suárez embraces all three available characterizations of metaphysics as First Philosophy: it is theological, ontological, and explanatory. But it is also one single science with one, unified subject matter (following the lesson from Aristotle's *Posterior Analytics*), namely being.

Suárez's ability to embrace at once the ontological *and* the theological interpretations of metaphysics is inherited from, among other sources, lessons from John Duns Scotus. Scotus proposed a radical rethinking of the nature of being, considered as both divine and nondivine

(i.e., created) being. Although it would take us too far afield to enter into the complexity of Scotus' metaphysics here,<sup>13</sup> suffice it to say that Suárez adopted Scotus' doctrine of the univocity of being, according to which being is univocally predicated of God and of the created universe. Previous thinkers had adopted an analogical theory of being according to which God's being, which is perfectly simple and transcendent, is related to created being by analogy. Thus, they could say that nondivine things have being only insofar as they imitate or participate in divine being.<sup>14</sup> Armed with Scotus' radically simple, univocal concept of being, Suárez is able to bifurcate the subject of metaphysics into two, namely, general and special metaphysics, a distinction which holds throughout the early and later modern periods. General metaphysics studies being qua being and its principles, whereas special metaphysics studies God and other particular forms of being. General metaphysics is prior in explanation, since being and its attributes (the one, the true, the good) are prior in being to the beings studied in any of the special sciences.

Ongoing discussion about the subject matter of metaphysics can be found throughout this period, although none approaches Suárez's triune characterization of the science in its complexity. To close out this brief survey, let us look at just two more philosophers and their answers to the question of the subject matter of metaphysics: René Descartes (1596–1650) and Gottfried Wilhelm Leibniz (1646–1716). Neither Descartes nor Leibniz wrote commentaries on Aristotle's *Metaphysics*, and nearly all of their study of Aristotle's metaphysical lessons was gleaned through Scholastic sources and neo-Scholastic textbooks.<sup>15</sup> Nevertheless, the question of the subject matter of metaphysics was very much on their minds, albeit in very different ways.

Most are familiar with this famous quotation from Descartes' *Principles of Philosophy*, published in 1644:

Thus philosophy as a whole is like a tree whose roots are metaphysics, whose trunk is physics, and whose branches, which issue from this trunk, are all the other sciences. These reduce themselves to three principal ones, namely medicine, mechanics, and morals.

(Descartes 2000)

In keeping with the long, Aristotelian tradition before him, Descartes glossed "metaphysics" as "First Philosophy". This arboreal image appeared in other neo-Scholastic textbooks at this time and so was not wholly original to Descartes. Nonetheless, the image of metaphysics as the roots of the tree makes it seem as if, for Descartes, the subject retains its foundational role, such that metaphysics remains the foundation of all knowledge. In a sense this is true, but not in the way we have previously seen.

For Descartes, the principles of metaphysics are not, in fact, ontologically prior, serving to underpin and thereby explain the principles of the special sciences. Rather, metaphysics is First Philosophy because it is *explanatorily* prior to the study of physics, medicine, mechanics, and ethics. In setting out the sequence of learning, after a propaedeutic study of logic and mathematics, the student can turn to philosophy proper. The first subject to be studied in philosophy is metaphysics, which contains

the principles of knowledge, among which is the explication of the principal attributes of God, the immateriality of our souls, and all clear and simple notions that are in us.

(Descartes 2000)

Thus, the study of metaphysics for Descartes grounds the study of physics and the special sciences and is to be learned first in the sequence of the proper subjects of philosophy. It is not ontologically prior.

But then how should the following set of claims by Descartes be understood? In *The Principles of Philosophy*, Descartes inquires after what it is and how it is that humans can acquire the “perfect knowledge” that is attainable by human beings (in contrast to God, who has absolutely perfect knowledge of what is). This knowledge is also to be instrumental, leading to knowledge of how to live the best life and how to have knowledge in the arts.

In order for this knowledge to serve these ends, it is essential that it should be derived from first causes; thus, to study to acquire it (what is properly termed philosophizing), we must begin with the investigation of these first causes, that is, the Principles. It is also necessary that these Principles should have two conditions attached to them (Descartes 2000).

The first condition addresses the very well-known criterion that the Principles are “so clear and evident that the mind of man cannot doubt their truth when it attentively applies itself to consider them”. Thus, this criterion addresses the epistemic certitude that provides a stable foundation for knowledge of other, less clearly and distinctly known things. It is strictly epistemic. Let us look at the second criterion in a bit of detail:

Second, it is on them that the knowledge of other things depends, so that the Principles can be known without these last, but the other things cannot be reciprocally known without the Principles.

(Descartes 2000)

This second criterion, which describes the principles which belong to what Descartes calls “First Philosophy” and are characterized as belonging to the study of metaphysics, establish a dependence relationship between them and “knowledge of the things that depend on them” (Descartes 2000). However, despite characterizing these Principles as belonging to the realm of the study of metaphysics, it is clear that their role is exclusively epistemological and that they are meant to service other types of explanation. They are not, in the classical or Aristotelian sense, ontological in nature.

According to Descartes, the subject that usurps the place traditionally reserved for metaphysics—first in the order of ontological explanation and last in the order of learning—is ethics:

By morals, I mean the highest and most perfect moral science which, presupposing a complete knowledge of the other sciences, is the ultimate degree of wisdom.

(Descartes 2000)

So-called First Philosophy for Descartes is entirely recast into the study of the principles of human knowledge. Those principles, which include (among many others) the proof for the existence of God, serve the epistemic role of guaranteeing against radical doubt and global scepticism.

This brief survey of historical answers to the question of whether metaphysics is the ground of all knowledge will come to a close with some of Leibniz’s views on the matter. Proponents of ground with an interest in the history of philosophy would be very well served by a more detailed analysis of Leibniz’s views on the role of metaphysical explanation and relationships of dependence found in his work.<sup>16</sup> Above all else, Leibniz is a champion of, in Raven’s terminology, the unionist position. Since most specialists on the topic of Leibniz’s metaphysics recognize that his metaphysical views evolved, sometimes markedly, throughout his career, here the focus will be on just two of his works, written over a ten-year period. These are the *Discourse on Metaphysics* (1686, unpublished) and the *New System of Nature* (1695). (For reference and context, Leibniz’s culminating treatise on metaphysics, called *The Principles of Philosophy, or, the Monadology*, was written in 1714.)

The complete title of the first work is *A New System of Nature and Communication of Substances, and of the Union of Soul and Body*. Despite being written after the *Discourse on Metaphysics*, it is convenient and informative to begin with it due to its explicitly autobiographical character. It provides valuable insight into the reasons why Leibniz tried to defend the case for the primacy of metaphysics as the ground of all knowledge, in self-conscious opposition to the corpuscularian and Cartesian views that were fashionable at the time.

The self-consciousness of Leibniz's chosen position on the place of metaphysics and metaphysical explanation is admitted up front:

Since some important persons have desired to see my opinions further clarified, I have risked publishing these meditations, even though they are not at all popular, nor can they be appreciated by all sorts of minds.

(Leibniz 1989)

In this short piece, Leibniz makes a case for metaphysical explanation—over purely mathematical, physical, or mechanical explanation—and, accordingly, for the primacy of the subject of metaphysics. Specifically, a complete explanation of a natural scientific fact will be the facts that ground it. The basis for this return was multifold, as will be explained, but certainly Leibniz would have taken direction from the many university textbooks whose order and method were, broadly speaking, Aristotelian in orientation.

Leibniz admits that his own philosophical journey began with the study of the works of the Scholastics, but he subsequently “freed [him]self from the yoke of Aristotle”. Briefly seduced by the mathematical and mechanistic explanations advanced by the “moderns” (primarily the Cartesians), Leibniz registered a serious problem with mechanistic or purely physicalist explanations of phenomena. Recall that, for Descartes, matter turns out to be nothing more than three-dimensional extension. The familiar wax experiment from *Meditations* sets out this position: “Let us take, for example, this piece of wax” (Descartes 1985). Descartes describes the properties it seems to have as they are experienced by the senses. The wax has a particular scent, shape, color, size, and temperature. “In short,” Descartes claims, “it has everything which appears necessary to enable a body to be known as distinctly as possible”. But when this same piece of wax is brought near a fire, all of its perceivable qualities—its particular scent, shape, color, size, and temperature—change completely, although the entity retains its identity as a piece of wax. Descartes' conclusion to this experiment is this:

[T]he wax was not after all the sweetness of the honey, or the fragrance of the flowers, or the whiteness, or the shape, or the sound, but was rather a body which presented itself to me in these various forms a little while ago, but which now exhibits different ones. But what exactly is it that I am now imagining? Let us concentrate, take away everything which does not belong to the wax, and see what is left: merely something extended, flexible, and changeable.

(Descartes 2000)

Upon reflecting on this view, Leibniz came to realize that the study of extended mass cannot just operate at the level of a physicalist framework but must also “make use of the notion of force, which is very intelligible, despite the fact that it belongs in the domain of metaphysics” (Leibniz 1989, emphasis added). The role of force in Leibniz's metaphysics is disputed by scholars, but at the very least it is clear that it plays a foundational role in explaining the unity of entities and specifically of substances.<sup>17</sup> Without consideration of force, the study of matter does not produce

the principles of a “true unity”. It only proves the existence of some kind of aggregate. This realization, Leibniz admits, led him to “rehabilitate” (his term) the theory of substantial forms.

In *Discourse on Metaphysics*, Leibniz is explicit about this rehabilitation effort:

I know that I am advancing a great paradox by attempting to rehabilitate the old philosophy in some fashion and to restore the almost banished substantial forms to their former place.

(Leibniz 1989)

The doctrine of substantial form plays a role not in any physicalist explanation; indeed, Leibniz claims that this is where the Scholastics failed, since substantial form plays no role in explanation at that level. Rather, the explanation for the unity of phenomena is robustly metaphysical and requires appeal not only to substantial form but, ultimately, to force (or power, as he sometimes calls it). To account for the unity of identity of entities through change, Leibniz maintains that an appeal to forces—which are both passive and active—is required. The details of Leibniz’s ontology of force are complex and deserve fuller treatment than can be given here.<sup>18</sup> Suffice it to say for the purposes here, Leibniz’s recognition of the fundamentality of metaphysics and the appeal to the ontology of force to explain everything else restores (for a time) the primacy of metaphysics as the epistemic basis of knowledge.

## Related Topics

Causation, explanation, priority, principle of sufficient reason, Aristotle, Leibniz.

## Notes

- 1 Transcendentals were those things that had been identified as being the most common, or supracategorical, notions such as the one, the true, and the good, as well as thing (*res*) and something (*aliquid*). These were regarded as the properties of being and were, by and large, treated as co-extensional with being. For a general overview of the theories of transcendentals, see Aertsen 1996; Pich 2007; Aertsen 2012.
- 2 See Corkum [Chapter 1] in this volume.
- 3 The literature on *Metaphysics* is vast, but a good starting place for bibliographical information can be found in Cohen 2016.
- 4 For a detailed explanation of this application, see Bertolacci 2007.
- 5 This is not, it should be noted, a science of discovery. As Barnes 1993, xii explains, “Aristotle does not pretend to be offering guidance to the scientist—or, for that matter, to the historian or philosopher—on how best to pursue his researches or how most efficiently to uncover new truths. . . . In short, the primary purpose of [the method of] demonstration is to expound and render intelligible what is already discovered, not to discover what is still unknown.” According to Aristotle, “the cause why the thing is, that it is the cause of this, and that this cannot be otherwise” (*Posterior Analytics* I.2). For a different interpretation, however, that construes the treatise as primarily about learning, see Bronstein 2016. Also, see Malink [Chapter 2] in this volume for more on Aristotelian demonstration and ground.
- 6 On Avicenna’s metaphysics, see Wisnovsky 2003; Bertolacci 2006; Bertolacci 2007; Gutas 2014.
- 7 This summary of Averroes’ position relies upon the analyses of this thought given by Di Giovanni 2013; Bertolacci 2006.
- 8 Di Giovanni 2013, 71, explains that “supposition” “is used here as a technical term of logic . . . to indicate the position of a subject matter that is liable to scientific explanation”.
- 9 Anicius Manlius Severinus Boethius (c. 477–524), Neoplatonic commentator on Aristotle’s philosophy and a Christian theologian. *On the Trinity*, which belongs to Boethius’ five *Theological Treatises*, but which is rich in ontological theory, treats the apparently paradoxical question of how God can be said to be both three and one at the same time.

- 10 See Wippel 1984; Bertolacci 2006; Gutas 2014.
- 11 See Wippel 1984 for an extensive analysis of this issue as treated by both Avicenna and Aquinas.
- 12 All translations are taken from Sydney Penner's online resource "Suárez in translation": [www.sydneypenner.ca/SuarTr.shtml](http://www.sydneypenner.ca/SuarTr.shtml).
- 13 See Frank and Wolter 1995; King 2002.
- 14 On medieval theories of analogy, see Ashworth 2017 and bibliography there.
- 15 See Gilson 1979; Ariew 2011.
- 16 See Amijee [Chapter 4] in this volume.
- 17 Whereas Garber 2009 holds the view that Leibniz's metaphysics take substances to be foundational (and modes of substances to be grounded in them), others have recognized the foundational role played by force. See Bolton 2008, 119; Whipple 2010, and more recently Jorati 2019.
- 18 See especially Jorati 2019 for a detailed analysis that pays close attention to the extent to which Leibniz's metaphysics of force can be compared to Scholastic doctrine.

## Bibliography

- Aertsen, J. (1996). *Medieval Philosophy and the Transcendentals: The Case of Thomas Aquinas* (Leiden: Brill).
- Aertsen, J. (2012). *Medieval Philosophy and Transcendental Thought: From Philip the Chancellor (ca. 1225) to Francesco Suárez* (Leiden: Brill).
- Ariew, R. (2011). *Descartes Among the Scholastics* (Leiden: Brill).
- Aristotle (1924). *Metaphysics*, trans. W. D. Ross (Oxford: Clarendon Press).
- Aristotle (1996). *Physics*, trans. R. Waterfield (Oxford: Oxford University Press).
- Ashworth, E. J. (2017). "Medieval Theories of Analogy", in E. N. Zalta (ed.) *The Stanford Encyclopedia of Philosophy*, Fall 2017 edition. <https://plato.stanford.edu/archives/fall2017/entries/analogy-medieval/>.
- Averroes (2010). *Averroes On Aristotle's 'Metaphysics': An Annotated Translation of the So-Called 'Epitome'*, ed. R. Arnzen (Berlin: De Gruyter).
- Avicenna (Ibn Sina) (2005). *The Metaphysics of "The Healing": A Parallel English-Arabic Text Translated, Introduced, and Annotated by M.E. Marmura* (Provo, Utah: Brigham Young University Press).
- Bakker, P. (2013). "Fifteenth-Century Parisian Commentaries on Aristotle's *Metaphysics*", in G. Galluzzo and F. Amerini (2013), 575–629.
- Barnes, J. (1993). *Aristotle Posterior Analytics*, trans. J. Barnes with a commentary, second edition (Oxford: Clarendon Press).
- Bertolacci, A. (2006). *The Reception of Aristotle's "Metaphysics" in Avicenna's "Kitāb al-Šifā": A Milestone of Western Metaphysical Thought* (Leiden and Boston: Brill).
- Bertolacci, A. (2007). "Avicenna and Averroes on the Proof of God's Existence and the Subject Matter of *Metaphysics*", *Medioevo* 32, 61–97.
- Bolton, M. (2008). "Locke and Leibniz on the Structure of Substance and Powers: The *Metaphysics* of Moral Subjects", in S. Hutton and P. Schuurmann (eds.) *Studies on Locke: Sources, Contemporaries, and Legacy* (Dordrecht: Springer), 107–126.
- Bronstein, D. (2016). *Aristotle on Knowledge and Learning: The Posterior Analytics* (New York and Oxford: Oxford University Press).
- Cohen, S. M. (2016). "Aristotle's *Metaphysics*", in E. N. Zalta (ed.), *The Stanford Encyclopedia of Philosophy*, Winter 2016 edition. <https://plato.stanford.edu/archives/win2016/entries/aristotle-metaphysics/>.
- Descartes, R. (1985). "Meditations on First Philosophy", in J. Cottingham, R. Stoothoff, and D. Murdoch (trans.) *The Philosophical Writings of Descartes*, volume 2 (Cambridge: Cambridge University Press).
- Descartes, R. (2000). "Principles of Philosophy", in R. Ariew (ed.), *René Descartes: Philosophical Essays and Correspondence* (Indianapolis and Cambridge: Hackett Publishing), 222–272.
- Di Giovanni, M. (2013). "The Commentator: Averroes's Reading of the *Metaphysics*", in *A Companion to the Latin Medieval Commentaries on Aristotle's Metaphysics* (Leiden: Brill), 59–94.
- Frank, W. A. and Wolter, A. B. (1995). *Duns Scotus: Metaphysician* (Lafayette, IN: Purdue University Press).
- Galluzzo, G. and Amerini, F. (2013). *A Companion to the Latin Medieval Commentaries on Aristotle's Metaphysics* (Leiden: Brill).
- Garber, D. (2009). *Leibniz: Body, Substance, Monad* (New York: Oxford University Press).
- Gilson, E. (1979). *Index Scholastico-Cartésien*, second edition (Paris: Vrin).
- Gutas, D. (2014). *Avicenna and the Aristotelian Tradition: Introduction to Reading Avicenna's Philosophical Works*, second revised and enlarged edition, including an Inventory of Avicenna's Authentic Works (Brill: Leiden–Boston).

- Jorati, J. (2019). "Leibniz's Ontology of Force", *Oxford Studies in Early Modern Philosophy* 8, 189–224.
- King, P. (2002). "Scotus on Metaphysics," in T. Williams (ed.) *The Cambridge Companion to Duns Scotus* (New York: Cambridge University Press), 15–68.
- Leibniz, G. W. (1989). "A New System of Nature and Communication of Substances, and of the Union of Soul and Body", in R. Ariew and D. Garber (trans.) *Philosophical Essays: G. W. Leibniz* (Indianapolis: Hackett Publishing Company), 138–144.
- Pich, R. H. (ed.) (2007). *New Essays on Metaphysics as 'Scientia Transcendens': Proceedings of the Second International Conference of Medieval Philosophy* (Louvain-la-Neuve: F.I.D.E.M.).
- Raven, M. (2015). "Ground," *Philosophy Compass* 10/5, 322–333.
- Scotus, J. D. (1997). *Questions on the Metaphysics of Aristotle*, Book I, trans. G. J. Etzkorn and A. B. Wolter (St. Bonaventure, New York: Franciscan Institute Publications).
- Thomas Aquinas. (1986). *The Division and Methods of the Sciences: Questions v and vi of His Commentary on the De Trinitate of Boethius*, translated with Introduction and Notes, fourth revised edition, trans. A. Maurer (Toronto: Pontifical Institute of Mediaeval Studies).
- Whipple, J. (2010). "The Structure of Leibnizian Simple Substances", *British Journal for the History of Philosophy* 18/3, 379–410.
- Wippel (1984). *Metaphysical Themes in Thomas Aquinas* (Washington, DC: The Catholic University of America Press).
- Wisnovsky, R. (2003). *Avicenna's Metaphysics in Context* (Ithaca: Cornell University Press).