

Substance and Independence in Descartes

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Less celebrated than Descartes's contributions to epistemology, but no less significant, are Descartes's ventures in metaphysics—in particular, his innovative conception of substance, which marks a decisive break between the modern period and the previous two thousand years in which hylomorphism reigned.¹ It is therefore perplexing that Descartes provides not one but two characterizations of substance—which, moreover, are seemingly incompatible. On the one hand, substance is said to be the subject in which properties inhere, and that does not itself inhere in anything. On the other hand, substance is said to be an independent entity. These two characterizations have appeared to many to diverge on

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1. Arguably, it is likewise Descartes's conception of substance—no less than his method of doubt, the cogito, or “the way of ideas”—that helped pave the way for the next 150 years of metaphysical and epistemological (including anti-metaphysical and skeptical) developments, in Spinoza, Leibniz, Locke, and Hume, among others. See Watson 1987 for an influential discussion of the centrality of Descartes's metaphysical views for subsequent Cartesianism and its “breakdown.” See also Moore 2013 for a recent schematic portrayal of the impact of Descartes's conception of substance on subsequent philosophy.

the definition as well as the scope, or extension, of the notion of substance. For it is often thought that what is the ultimate subject of inherence need not—and, in some cases, cannot—be independent. There is, it seems, a tension at the core of Descartes's metaphysics, afflicting one of its fundamental notions.

Readers of Descartes have tended to respond to this tension by prioritizing one of these characterizations of substance at the expense of the other. As a result, they tend to treat passages in which Descartes voices the characterization they disfavor as somehow not expressive of Descartes's considered view—on such occasions, it is sometimes claimed, Descartes “speaks lightly.”² Other interpreters simply suggest that Descartes's theory of substance is confused or inconsistent. Existing interpretations thus tend to handle the tension by avoiding or denying rather than resolving it.

My aim in this essay is to develop an interpretation of Descartes's notions of substance and independence that reconciles his two characterizations. If the proposed interpretation is correct, it will allow us to move beyond the apparent tension in Descartes's metaphysics. It may also point the way to interpretations of other central elements of that metaphysics that are linked to substance and independence, including (but not limited to) the distinction between mind and body and their union, as well as the notions of infinity and perfection, and lead to a better understanding of the relationship between Cartesian metaphysics and substance monism. The latter position is sometimes said to follow more or less directly from Descartes's second characterization of substance, as an independent entity. While I will not have the space to examine this contention here, it is worth remarking that if my interpretation is correct, there is no straightforward route from the independence of substance to monism.³

What I shall say about the notions of substance and independence in Descartes might also be of interest to contemporary debates in metaphysics concerning relations of grounding and ontological dependence. Much of this debate takes certain historical data-points for granted; for example, that the targeted relation is the same as the one invoked by historical figures like Aristotle or Descartes in characterizing the relation between a substance and its properties. This assumes, of course, that we already know what relations such figures were invoking. But do we?

2. The quoted expression is from Stuart 1999, 100.

3. I discuss this point in detail in Schechtman n.d.

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It seems to me that, at least in the case of Descartes, we have yet to achieve a full understanding on this point. For example, if the continuing debate among scholars is any guide, we cannot simply assume that Descartes invokes *ontological*—as opposed to, say, causal—*independence* in characterizing substance. At least, we cannot do so without further debate—a debate that is undertaken here.

I will spell out several problems with existing interpretations before turning to my positive proposal. Stated briefly, the proposal is that in characterizing substance, Descartes invokes a type of independence that obtains when, and only when, there is no relation to another entity that holds by the nature of the entity in question. Even though the ultimate subject of inherence is sometimes not independent in other respects (for example, modally or causally), it nevertheless satisfies this condition. Consequently, the proposal reconciles Descartes's two characterizations by giving an account of the general notion of independence featured in the second characterization, and of the specific relation of inherence featured in the first characterization as its instance.

The main argument on behalf of this proposal arises in response to a suite of historical, textual, and philosophical considerations. Section 1 discusses three important scholastic theses regarding substance, including the thesis that a substance is the ultimate subject of properties, and provides reasons to think that Descartes endorsed them all. Section 2 turns to the characterization of substance as an independent entity and explores a popular interpretation of it that invokes causal independence. Sections 3 and 4 discuss two other interpretations, which focus instead on absence of inherence and modal independence. Clarifying the difficulties confronting these three interpretations will help us to identify desiderata for a more promising alternative, which sections 5 and 6 then seek to develop and defend.⁴

4. Unless otherwise noted, translations of Descartes's works are taken from Descartes 1985–1992. The original texts in Latin or French may be found in Descartes 1996. References to Descartes's work in the main text and notes cite the volume and page number in Descartes 1996 (abbreviated 'AT'), followed (after a semicolon) by the volume and page number in Descartes 1985–1992, vols. 1 and 2 (abbreviated 'CSM'), or by the page number in vol. 3 (abbreviated 'CSMK'). I use the following abbreviations for specific works by Descartes: 'Rules' for *Rules for the Direction of the Mind*, 'Discourse' for *Discourse on Method*, 'Meditations' for *Meditations on First Philosophy*, 'Principles' for *Principles of Philosophy*, 'Passions' for *Passions of the Soul*, and 'Comments' for *Comments on a Certain Broadsheet*.

1. Three Scholastic Theses

It is fair to say that many central themes in Descartes's philosophy can be better understood against the background of his scholastic predecessors, who provided him with both a source of influence and a target for criticism. In particular, despite obvious differences, Descartes's notion of substance owes a significant debt to the scholastic tradition.⁵ This section will highlight three scholastic theses about substance and independence and provide reasons to think that Descartes adopted them as well.

First, scholastic authors commonly endorse a conception of substance as the ultimate subject of properties, or accidents. On this conception, which has two components, a substance is that to which accidents belong—or in scholastic terminology, that in which accidents exist or inhere—without belonging to (existing or inhering in) anything in turn.⁶ This conception originates in Aristotle's *Categories*, where substance is said to be “that which is neither said of a subject nor is in a subject” (Aristotle 1984, 2a11–19), and appears in later authors, such as Avicenna, who characterizes substance as “that which is not in another as in a subject,” and accident as “that which exists in a subject” (Avicenna 2005, *Metaphysics* 2.1). While this comment does not make the identification of substance with subject transparent, the following passage by Suárez does, as it explicitly invokes both components of the conception in question:

There are two notions or properties indicated by the verb ‘standing under’ [*substando*] and the name ‘substance’: one is absolute, namely, to exist in itself and by itself [*per se*] . . . ; the other is relative, it has to do with supporting the accidents. (*Metaphysical Disputations* 33.1.1; quoted in Gracia 1982, 267)

Others scholastic authors endorse this conception as well, characterizing substance as the subject in which accidents inhere without itself inhering

5. Of course, I do not wish to deny the heterogeneity of views among the scholastics, or to suggest that the particular theses I go on to mention were held by each and every scholastic figure. The intention is only to trace a very general and, I think, plausible line of influence. The links between Descartes's notion of substance and the views of his scholastic predecessors are explored in, for example, Lennon 1974; Garber 1992, chap. 3; Carriero 1995; Rozemond 1998, chap. 1; Des Chene 2008; Pasnau 2011, chap. 8; and Schmaltz, forthcoming.

6. The Latin expressions translated as ‘inhere in’ are ‘*in . . . esse*’ and more rarely ‘*inhaerere*’.

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in any subject.⁷ Let us call this first scholastic thesis *the subject conception of substance*.⁸

Scholastic authors also held that inherence is a type of dependence. It was standard to conceive of substance as existing *per se*, that is, by or through itself, in its own right, and hence independently of any other entity. Accidents, on the other hand, do not exist *per se*, but rather by or through, in a manner that depends on, substances. This view, too, has its origins in Aristotle, who claims that “if the primary substances did not exist it would be impossible for any of the other things to exist” (*Categories* 2a34–b7). In the same vein, Aquinas says that accidents “do not have existence on their own apart from a subject” (*On Being and Essence*, chap. 6, sec. 1). Both ideas—the independence of substance, or that it exists *per se*, and the dependence of accident, or that it does not exist *per se*—were closely linked to the notion of inherence. Consider, for example, the following remarks by Eustachius of St. Paul: “To subsist, or to exist by itself [*per se*], is nothing but not to exist in another thing as in a subject of inherence. Substance differs in this respect from accident, which cannot exist by itself [*per se*], but only in another thing, in which it inheres” (*Summa* 1:96; quoted in Broackes 2006, 138). As this passage and others like it make clear, scholastic authors view inherence as a type of dependence: an accident depends on a substance, and cannot naturally exist without it, insofar as it inheres in a substance.⁹ Yet a substance, which exists *per se*, or by itself, does not—indeed, *could* not—inhere in anything, including its accidents, and in this respect at least a substance is an

7. For example, Eustachius of St. Paul writes, “Substance is defined as a being in and of itself; an accident though is a being in another. . . . Moreover the subject of an accident is a substance” (*Summa* 4:52; quoted in Garber 1992, 68); and “It is proper to substance both to stretch out or exist beneath accidents, which is to substand, and to exist *per se* or not in another, which is to subsist” (*Summa* 1:51; quoted in Pasnau 2011, 103).

8. The subject conception by itself need not imply—and usually was not taken to imply—that substance is a bare substratum, devoid of any characteristics (a view famously associated with Locke; see Locke 1975, 2.xxiii; hereafter Locke 1975 abbreviated as ‘*Essay*’). For the claim that this is not the standard scholastic view, see Gracia 1982, 267–78.

9. The qualification “naturally” leaves room for the possibility that an accident can exist without its substance supernaturally or miraculously, when separated from it by God—a possibility that scholastic authors allowed as a way to reconcile the theory of accidents with the doctrine of the Eucharist. To make room for this possibility, it was usually held that accidents have only an “aptitude” or a tendency to inhere in a substance, rather than that they always or essentially inhere in it. For further discussion of the significance of the Eucharist for scholastic views of accidents and inherence, see, for example, Bakker 2001; Pini 2004; Amerini 2006; and Pasnau 2011, sec. 10.3.

independent entity. This prompts the second thesis that I wish to highlight, which I will call *the minimal independence thesis*: a substance is independent because, or at least insofar as, it does not inhere in anything.¹⁰

The third and final scholastic thesis that I will mention is that ordinary objects are substances—in short, the *ordinary conception of substance*. This thesis concerns the extension of the notion of substance, rather than any particular philosophical account of its nature or character. The basic idea is simple: ordinary objects such as human beings, animals, plants, and inanimate bodies are all substances. This thesis, too, can be traced to Aristotle's *Categories*, where the paradigmatic examples of substance are a man and a horse (*Categories* 2a11–19).¹¹ Scholastic authors give similar examples: an individual man (such as Socrates), a horse, a stone, silver, ice, and water.¹² This is not to preclude the existence of extra-ordinary substances: for example, the human soul, angels, and for some scholastic authors (for example, Suárez), God, were all considered substances. It is simply to say that ordinary objects are substances, whatever other substances there may be.¹³

It should be clear that there is a close connection between the first and second theses, insofar as the noninherence of substance cited by the subject conception gives rise, as it were, to the independence of substance

10. Some formulations of this thesis by scholastic authors (see, for example, the quotation from Eustachius in the main text and Aquinas's *Summa contra gentile* 1.25.236, quoted in Pasnau 2011, 104) suggest that they might have held a stronger thesis, on which a substance is independent *only* in the sense of not inhering in anything. For our purposes, it will be useful to focus on the weaker thesis. As we will see below, it is uncontroversial among Descartes scholars that he held this weaker thesis; whether he held the stronger thesis is a matter of debate.

11. See also *Physics* 1.7, 190a33–b5.

12. Socrates: the Coimbrans (in *Physicorum* 1.9.5.2; Pasnau 2011, 691); an Ethiopian: Aquinas (*De Ente et essentia*, chap. 6, lines 54–57; Pasnau 2011, 561); horses, stones, and human beings: John Buridan (*In De anima* 3.11; Pasnau 2011, 663); ice and water: Peter Auriol (*Sententiarum* 2.12.1.6; Pasnau 2011, 110), Robert Sanderson (*Logica artis compendium*; Broackes 2006, 136), and Ockham (*Quodlibetal* 3.6; Pasnau 2011, 561); silver: Albert the Great (*De mineralibus* 3.1.7; Pasnau 2011, 561). Likewise, Locke's famous attack on the notion of substance in *Essay* 2.23 uses examples of a man, a horse, gold, and water. Artifacts, on the other hand, were generally considered aggregate of substances rather than substances in their own right.

13. For simplicity's sake, I am putting aside here the scholastic debate, going back to Aristotle's *Metaphysics*, about whether the hylomorphic compound that is the ordinary object is most properly said to be a substance, or rather one of its components—particularly, the substantial form. It seems that even for those authors who subscribe to the latter view, there is still an important sense in which ordinary objects are properly viewed as substances.

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cited by the minimal independence thesis. It is worth noting that there is also a close connection between the first and third theses: if one endorses the ordinary conception of substance, it seems natural to endorse the subject conception of substance as well. For what seems to underlie the classification of human beings, horses, and stones as substances is that they are subjects in which accidents inhere and that they do not themselves inhere in anything else. It follows that if one denies the subject conception of substance, it is not straightforward to maintain the ordinary conception of substance as well, given that one has thereby removed the grounds that seem to underlie the classification of ordinary objects as substances. We will come back to this point below, when discussing how interpretations of Descartes's position that conflict with the first thesis invariably (and perhaps inadvertently) conflict with the third thesis as well.

With this scholastic background in view, let us now turn to Descartes. Although Descartes's relationship to his predecessors is admittedly complex, important passages in his corpus strongly suggest that he embraces the three scholastic theses just highlighted. (Of course, to acknowledge that Descartes endorses all three of the scholastic theses is not to suggest that he accepts them because they were held by the scholastics, or for the same reasons.) Perhaps the most important passage in this context is the following, from the Geometrical Exposition of the Second Replies; henceforth, *the Second Replies passage*:

“Substance. This term applies to everything in which immediately inheres, as in a subject, or [*sive*] by means of which [*per quam*] exists, whatever we perceive. By ‘whatever we perceive’ is meant any property, quality or attribute of which we have a real idea” (AT 7.161/CSM 2.114).¹⁴

Descartes's commitment to the subject conception of substance in this passage seems unambiguous, as the term ‘substance’ is said to apply to the subject in which modes inhere. (Descartes's preferred term for a property is ‘mode’, as opposed to the scholastic term ‘accident’.¹⁵ I will generally

14. I have altered the word order from CSM in a way that is more faithful to the original Latin. I have also translated *inest* as ‘inheres’ rather than ‘resides’ (recall note 6).

15. It might seem odd, then, that Descartes does not use the term ‘mode’ in this passage. Yet elsewhere Descartes makes clear that the terms ‘mode’, ‘property’, ‘quality’, and ‘attribute’ are ambiguous and have both a broad and a strict, more technical sense. In the broad sense, all of these terms simply stand for “whatever we recognize as being naturally ascribable to something” (*Comments*, AT 8B.348/CSM 1.297). In the strict sense, modes, as opposed to attributes in the strict sense, are those things that are not

use ‘mode’ as well.) Granted, Descartes does not say explicitly that a substance does not inhere in anything whatsoever; but this is implied by his view, which he makes explicit elsewhere, that mode and substance are mutually exclusive and exhaustive categories for everything that exists.¹⁶ Moreover, this passage is not unique: there are many others places—in the *Meditations*, *Replies*, and *Principles*—where Descartes reiterates the claim that substance is the subject in which modes inhere.¹⁷

The Second Replies passage also seems to manifest a commitment to the minimal independence thesis. Descartes’s expression “by means of

only ascribable to something but are susceptible of change. Since modes in the strict sense are a special case of properties, qualities, and attributes in the broad sense, what is here said of property, quality, and attribute applies to mode as well. Note also that the difference between a mode and an accident is not merely terminological; for example, accidents were not thought of as essentially linked to any particular substance, whereas modes were (see, for example, Garber 1992, 69). We will come back to this characteristic of modes in section 5. For further discussion of the differences between accidents and modes, see Menn 1997, Normore 2010, and Klima 2011, as well as note 17.

16. See, for example, *Principles* 1.48 (AT 8A.22/CSM 1.208) for the exhaustiveness claim and *Comments* (AT 8B.353/CSM 1.300) for the exclusiveness claim.

17. See the Sixth Meditation (AT 7.79/CSM 2.55); Third Replies (AT 7.176/CSM 2.124); Fourth Replies (AT 7.222/CSM 2.156); Sixth Replies (AT 7.435/CSM 2.293 and AT 7.440/CSM 2.297); *Principles* 1.11 (AT 8A.9/CSM 1.196), 1.51 (AT 9B.47/CSM 1.210), and 1.52 (AT 8A.25/CSM 1.210). It should be noted that just as the difference between accidents and modes is not merely terminological (recall note 15), the difference between the scholastic formulation of the first thesis and its Cartesian formulation—in which accidents are replaced by modes—is not merely terminological. Following Suárez’s influential work, late scholastic authors generally held that whereas accidents are beings that are really distinct from substance, modes are aspects, modifications, or determinations of substance that are not really distinct from it. Consequently, modes, unlike accidents, were not thought to inhere in substance; as Suárez writes, “A mode is not properly a *res* or an entity. . . . Here is where its imperfections shows best: it must always be affixed to another, to which it is immediately united *per se*, not by means of another mode [namely, inherence]” (*Metaphysical Disputations* 7.1.19). Indeed, as the last quotation attests, inherence was itself considered a mode (see also *Metaphysical Disputations* 7.1.17); and so modes could not be allowed to inhere in a substance, on pain of a vicious regress. Instead, according to Suárez, modes are “immediately united *per se*” to the substance, a relation that he evidently did not view as threatening to give rise to a similar regress. When Descartes therefore treats modes as inhering in a substance, he seems to be adopting a new understanding of modes as well as of the inherence relation itself. His position here illustrates the earlier point about the complexity of Descartes’s relationship to his predecessors, which involves both an appropriation and rejection of their views, sometimes in very close quarters. For further discussion of the scholastic (especially Suárezian) view of modes and inherence, see the works cited in note 15, as well as Pasnau 2011, chaps. 11 and 13. I am grateful to Tad Schmaltz for prompting discussion of this point.

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which exists” recalls the scholastic formulation, according to which a substance is that in which and by which (*per quam*) an accident exists. He also invokes the formulation in the letter, dated February 9, 1645, to Mesland, this time mentioning modes explicitly: “A mode, or manner of being, cannot be changed without a change in that *in which or by which* [*en quoi ou par quoi*] it exists” (AT 4.163/CSMK 241; my emphasis). In the Second Replies passage, Descartes explicitly links this point about the dependence of mode to inherence (he uses the term ‘*sive*’, which is often translated as ‘or’, though it indicates not a disjunction but an equivalence). For Descartes, as for others in the Aristotelian tradition, a mode exists by means of a substance because, or at least insofar as, it inheres in a substance. Similarly, in the *Meditations*, Descartes claims that faculties, which are modes, “cannot be understood apart from some substance for them to inhere in” (AT 7.79/CSM 2.55); and in the Fourth Replies, he says that “modes must inhere in something if they are to exist” (AT 7.222/CSM 2.156). Since Descartes sees inherence as a type of dependence, and since moreover he sees substance as not inhering in anything, it follows that he sees substance as independent, at least in this respect (and possibly others, as we will consider below).¹⁸

As noted above, the ordinary conception of substance seems to fit naturally with the subject conception of substance, given that the latter provides straightforward grounds for the classification of ordinary objects as substances. It should come as no surprise, then, given Descartes’s endorsement of the subject conception, that a significant number of passages in Descartes’s corpus suggest that he is committed to the third scholastic thesis—the ordinary conception of substance—as well. In the *Meditations*, Replies, and *Principles*, among other places, Descartes explicitly says of ordinary objects, such as a stone, a human body (though, in

18. It might come as a surprise to some readers that I claim that in the Second Replies passage Descartes endorses the *independence* of substance, even in this minimal sense. In the literature on Descartes’s theory of substance, this passage is often said to present a “subject criterion” for being a substance, whereas another passage, from the *Principles* (to be discussed in detail in the next section), is said to present an “independence criterion”—which may suggest that *only* the latter passage is concerned with independence. But as will become clear in the ensuing discussion, all parties to the debate agree de facto that inherence is a type of dependence, and its absence is a type of independence. (What they disagree about is whether the *Principles* passage is concerned in addition with another, possibly more general type of independence.) In this respect, using the labels “subject criterion” and “independence criterion” for, respectively, the Second Replies passage and the *Principles* passage is misleading in my view.

interesting contrast with the Scholastics, not a human being), a hand, and clothing, that they are substances.¹⁹ In addition, he simply speaks of bodies, or finite parts of matter, as substances;²⁰ according to Descartes, ordinary objects such as human bodies, animals, plants, and inanimate objects, just *are* bodies. So here, too, we have evidence for his endorsement of the ordinary conception of substance. Of course, as in the case of the scholastics, this is not to say that *only* ordinary objects are substances according to Descartes. In particular, he views minds as substances, as well as God. This is just to say that Descartes thinks of ordinary objects as substances as well—at least, if the aforementioned passages are an indication of his considered view.

It must be recognized that there are other passages in Descartes's corpus, including a central passage from the *Principles*, that have been taken to show that Descartes holds quite a different view of substance from the one suggested in the Second Replies passage, which is moreover inconsistent with the scholastic theses. This gives rise to the concern, noted at the outset, that there is a serious tension afflicting Descartes's metaphysics. In the ensuing sections, I will address this concern through an examination of three prominent interpretations of Descartes's position, each of which weighs the textual data in a distinctive manner. I will argue that each interpretation is problematic in a significant respect.

19. A stone is mentioned in the Third Meditation (AT 7.44/CSM 2.30) and *Principles* 2.11 (AT 8B.46/CSM 1.227); a human body and a hand (and the body without the hand) are mentioned in the Fourth Replies (AT 7.157/CSM 2.222); clothing is mentioned in the Sixth Replies (AT 7.441/CSM 2.297) and *Comments* (AT 8B.351/CSM 1.299). (As the last example attests, Descartes, unlike the scholastics, did consider artifacts to be substances; see, by way of comparison, *Principles* 4.203, AT 8B.326/CSM 1.288.) As noted, Descartes never says of a human being, which he views as a union between two substances (a human body and a human mind), that it is a substance; though he does say at times that it is a "substantial union." Scholars disagree about whether Descartes nonetheless views the mind-body union as a substance: Hoffman (1986) famously argues that he does, whereas others, for example, Rozemond (1998) and Kaufman (2008), argue that he does not. For the purpose of this essay, I will simply bracket this controversial issue. Indeed, as indicated in the introduction, it seems to me that progress could be made on this issue by achieving a better understanding of the notions of substance and independence. It is the latter task that I focus on here.

20. For example, in the Second Replies: "The substance that is the immediate subject of local extension and of the accidents that presuppose extension, such as shape, position, local motion, and so on, is called body" (AT 7.161/CSM 2.114); and the letter to Gibieuf, dated January 19, 1642: "I consider the two halves of a part of matter, however small it may be, as two complete substances" (AT 3.477/CSMK 202–3); see also *Principles* 1.60 (AT 8A.28/CSM 1.213).

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This will lead me to identify and develop an alternative approach, which removes the tension while avoiding the problems that beset existing interpretations.

2. The *Principles* Passage and the Causal Interpretation

In a well-known passage from the *Principles*, Descartes characterizes substance in terms of “independence.”²¹ I will call it *the Principles passage*, quoted here in full:

By *substance* we can understand nothing other than a thing which exists in such a way as to depend on no other thing for its existence. And there is only one substance which can be understood to depend on no other thing whatsoever, namely God. In the case of all other substances, we perceive that they can exist only with the help of God’s concurrence. Hence the term ‘substance’ does not apply *univocally*, as they say in the Schools, to God and to other things; that is, there is no distinctly intelligible meaning of the term which is common to God and to his creatures. In the case of created things, some are of such a nature that they cannot exist without other things, while some need only the ordinary concurrence of God in order to exist. We make this distinction by calling the latter ‘substances’ and the former ‘qualities’ or ‘attributes’ of those substances.²² (*Principles* 1.51, AT 8A.24/CSM 1.210; compare *Principles* 1.48 and 1.53, AT 8A.22–25/CSM 1.208–10)

This characterization of substance as what “exists in such a way as to depend on no other thing for its existence” raises several important questions. What type of independence is at stake here? Is it simply that a substance must not depend on any other thing as a subject of inherence, as in the Second Replies passage (and per the minimal independence thesis)? Or is Descartes invoking a different, perhaps more general, notion of independence? If the latter, are the two notions of independence related in such a way that would make the two characterizations of substance consistent or inconsistent? And, we may ask, is the *Principles* passage compatible or incompatible with the three scholastic theses that appear to underlie the Second Replies passage?

There has been considerable debate in the literature about the *Principles* passage and the questions it raises. The first, and arguably most

21. Interestingly, neither in Latin nor in French does the text feature the exact equivalent of our English ‘depend’, that is, *dependere* (Latin) and *dépendre* (French). The Latin expression is *indigere*, and the French expression is *avoir besoin*.

22. The last two sentences were added in the French edition (see AT 9B.47).

popular, interpretation that I will consider is that this passage requires first and foremost that substance be *causally* independent. Let us call this *the causal interpretation*. It is motivated by the distinction the passage draws in the third sentence (and again in the penultimate one) between the independence of God, on the one hand, and that of created substances, on the other hand: whereas God's independence is absolute and exceptionless—he depends “on no other thing whatsoever”—there is an exception to the independence of created substances, namely, their causal dependence on God's concurrence.²³ But (the reasoning goes) an exception indicates a rule, and since the exception to the independence of created substances is causal, the independence itself—the rule—must also be causal. So, the distinction between God's independence and the independence of created substances does not concern the *type* of independence at stake—in both cases the independence is causal—but only its extent.²⁴

At the same time, proponents of the causal interpretation generally agree that causal independence is intended to supplement rather than replace the requirement that substance be independent in the sense of not *inhering* in anything—what we called above the minimal independence thesis. For they tend to read the last sentence of the *Principles* passage as pointing to a commonality in type between the dependence of created substances on God's concurrence and the dependence of qualities on the substances in which they inhere. As causalist Peter Markie (1994, 69) writes, “The concept of substance [in *Principles* 1.51] involves two kinds of independence. One is causal independence: the ability to remain in existence independently of another thing's causal power. The other is subject independence: the ability to exist without being a quality

23. See, by way of comparison, the letter to Hyperaspistes, dated August 1641 (AT 3.429/CSMK 193). While there is some scholarly disagreement about what God's concurrence amounts to, it is agreed that minimally, it is a causal act of conserving finite beings in existence, broadly akin to the initial causal act of creating them. For further details, see *Principles* 2.36 (AT 8A.61/CSM 1.240) and the discussion in Schmaltz 2008, sec. 3.1.3.

24. There are many versions of the causal interpretation in the literature, defended most prominently in Loeb 1981, 328; Markie 1994; Stuart 1999; Bennett 2001, 134–35; and Secada 2000, 200. It is also sometimes assumed without argumentation, as, for example, in Broackes 2006, 137; Kaufman 2008, 69; and Chappell 2008, 263. I focus here on what I take to be the general idea shared by the various versions of this interpretation, rather than on commitments specific to any particular one of them. As Rodriguez-Pereyra (2008, 79) remarks, the line of reasoning behind the causal interpretation is not always made explicit; his reconstruction (ibid.) is compatible with mine. I will consider Rodriguez-Pereyra's alternative, modal interpretation of independence below, in section 4.

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of another thing, without depending on another thing to provide the subject in which existence occurs.”²⁵

The causal interpretation thus understands Descartes’s characterization of dependence and substance in the *Principles* passage as composed of the following three theses (where ‘CI’ abbreviates ‘causal interpretation’, ‘Dep’ abbreviates ‘dependence’, and ‘Sub’ abbreviates ‘substance’):

(CI-Dep) x depends on y if and only if either x is caused by y or x inheres in y .

(CI-Sub) x is a substance if and only if x does not inhere in anything and x is not caused by anything whatsoever.

(CI-Sub_{Created}) x is a created substance if and only if x does not inhere in anything and x is not caused by anything other than God.²⁶

These theses indicate the causal interpretation’s answers to some of our earlier questions: the independence at stake in the *Principles* passage includes causal independence, and although God and created substances are both called “substances,” “there is no distinctly intelligible meaning of the term which is common to God and to his creatures” insofar as God satisfies a different characterization of substance—one that invokes independence to a wider extent—from that satisfied by created substances. Answers to the remaining questions, regarding the causal interpretation’s stance on the Second Replies passage and the scholastic theses, will emerge in the course of the following evaluation.

2.1. *Evaluating the Causal Interpretation*

In evaluating the causal interpretation, several considerations should be taken into account. First, as noted above, the primary textual support for it in the *Principles* passage is the distinction drawn there between God’s independence and the independence of created substances. But the manner in which the causal interpretation reads the distinction, as con-

25. See, by way of comparison, Stuart 1999, 89.

26. My formulation remains close in spirit to the formulation given by Markie (1994, 69), which contains additional complexity that is not necessary here. Also, whereas Markie limits the causal dependence at stake to a thing’s remaining in existence, others—for example, Stuart (1999, 89) and Secada (2000, 200)—take it to include coming into existence as well. My formulation is neutral between these two options and can be read in either way.

cerned with absolute versus limited *causal* independence, and the reasoning behind it, from an exception to a rule, is not beyond dispute.²⁷ As we will see below, other interpretations read this distinction differently.

Second, if the causal interpretation is correct, what Descartes says in the *Principles* passage is in direct conflict with the Second Replies passage and some of the scholastic theses underlying it. Recall the subject conception of substance, on which not inhering in anything is both a necessary and a sufficient condition for being a substance—a position Descartes seems to endorse in the Second Replies passage and elsewhere. The causal interpretation is incompatible with this thesis, since it views not inhering in anything as only a necessary condition for being a substance; a substance is required in addition to be causally independent.²⁸

Given the close link between the subject conception and the ordinary conception of substance, according to which ordinary objects are substances, it is not particularly surprising that the causal interpretation is also incompatible with the latter. Ordinary objects are as a rule causally dependent on things other than God. A table, for example, can be built by a carpenter and destroyed in a fire. An animal is born—brought about, hence caused to exist, by its parents—and eventually dies. In general, Descartes holds that bodies are brought into existence and are destroyed through the causal contributions of other bodies—in terms familiar

27. For example, it seems possible for there to be an exception that is *F* to a rule that does not itself invoke *F* but something else, which would block the reasoning from a causal exception to substance independence to the causal interpretation of this independence.

28. A causalist might suggest in response that the relations of inherence and causation are coextensive. If so, (CI-Sub) and (CI-Sub_{Created}) do not really posit disjunctions: there are not two individually necessary and jointly sufficient conditions for being a substance but just one condition, stated in two different ways. See Stuart (1999, 101) and Secada (2000, 204), for suggestions in this vicinity. However, while this suggestion would preserve the subject conception of substance, it would do so at great cost, requiring a radical revision in our understanding of Descartes's metaphysics. For it seems that on this suggestion, minds and bodies are not the ultimate subjects of properties but are themselves modes that inhere in God, to whom they bear a causal relation; moreover, bodies are modes that inhere in other bodies—namely, their causes. (This suggestion goes far beyond so-called monist readings of Descartes, sketched in note 30 below, which imply that bodies are modes of the entire physical universe but not of other bodies or of God.) Another way in which a causalist might attempt to avoid conflict with the first scholastic thesis (and with the third thesis, discussed next) is by interpreting Descartes as endorsing an occasionalist position on body-body interaction as a mere occasion on which God serves as the real cause. However, as Stuart (1999, 90–93) observes, occasionalist interpretations usually acknowledge that there remains a sense in which bodies are genuine causes of change in other bodies, in which case this is not an effective solution.

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from scholastic authors, bodies are capable of being naturally generated and corrupted.²⁹ But if so, (CI-Sub_{Created}) entails that bodies, ordinary objects included, are not substances, a result that directly conflicts with those many passages from the *Meditations*, *Principles*, and elsewhere in which Descartes speaks of bodies as substances. The causal interpretation must therefore treat the considerable textual evidence suggesting that Descartes endorses the two theses as misleading insofar as those passages do not express his considered view—rather, we are sometimes told, Descartes is there “speaking lightly.”³⁰

A third point concerns the causal interpretation’s disjunctive characterization of dependence in (CI-Dep). Descartes initially employs general language in the *Principles* passage, speaking of substance as what “depend[s] on no other thing for its existence,” before going on to mention specific instances of dependence. According to (CI-Dep), these instances include inherence and causation. Insofar as (CI-Dep) does not limit dependence to inherence, it might seem to capture the generality that is distinctive of the *Principles* passage, in contrast to the Second Replies passage, which focuses more narrowly on inherence. However, (CI-Dep) merely strings the two relations together in a disjunction: x depends on y iff *either* x inheres in y or x is caused by y . We are not thereby given a general characterization that identifies something in common to both inherence and causation and that might explain why these two relations, but not others, should be treated as instances of dependence. To this extent, (CI-Dep) appears to be open to the charge that it is ad hoc

29. Part 4 of the *Principles*, which concerns the formation of the earth and various other inanimate bodies, provides many examples of bodies generated and corrupted by other bodies, such as mountains, plains, and seas (*Principles* 4.44); water and ice (*Principles* 4.48); various metals (*Principles* 4.63); springs (*Principles* 4.64); and fire (*Principles* 4.80ff.).

30. The expression is from Stuart 1999, 100 (recall note 2); see, by way of comparison, Markie 1994, 67. Causalists typically do not deny that there are material or bodily substances—they simply deny that ordinary objects are among them. In general, causalists tend to fall into two camps regarding the scope of material substances, “monists” and “pluralists.” According to monists, the entire physical universe is the only material substance; see Gueroult 1984, Sowaal 2004, and Nelson and Smith 2010 for versions of this position. According to pluralists, the underlying chunks of matter, or “stuff,” that constitute ordinary objects are the material substances. See Stuart 1999, Slowik 2001, Normore 2008, and Schmaltz 2009 for versions of this position. (Note that these two camps are not limited to causalists; for example, Rozemond [2011] seems to favor the pluralist position, even though she endorses a noncausal interpretation of substance and independence in Descartes, to be discussed in detail in section 3 below.)

or philosophically unmotivated. (This point will be elaborated when I discuss the next interpretation, which faces a similar concern.)

2.2. *Putative Textual Support for the Causal Interpretation*

While these considerations speak against the causal interpretation, others may be cited in its support. Perhaps the strongest of these considerations is that there seems to be textual evidence, independent of the *Principles* passage, corroborating the causal interpretation's primary contentions.³¹ The most prominent such passage is from the Synopsis to the *Meditations*; henceforth *the Synopsis passage* (for ease of discussion, sentences are marked with letters):

[A] Substances, or things which must be created by God in order to exist, are by their nature incorruptible and cannot ever cease to exist unless they are reduced to nothingness by God's denying his concurrence to them. [B] Secondly, we need to recognize that body, taken in the general sense, is a substance, so that it too never perishes. [C] But the human body, in so far as it differs from other bodies, is simply made up of a certain configuration of limbs and other accidents of this sort; whereas the human mind is not made up of any accidents in this way, but is a pure substance. (AT 7.14/CSM 2.10)

31. Another consideration might be drawn from Descartes's rejection of substantial forms. Scholastic authors deemed substantial forms necessary for, among other things, accounting for the natural generation and corruption of substances: in such processes, the underlying prime matter is conserved, whereas one or more substantial forms is gained or lost—in contrast to creation and annihilation by God, in which case the prime matter itself begins or ceases to exist as well. If substantial forms are rejected, a common scholastic charge goes, two theses necessarily follow: first, natural generation and corruption are impossible, and substances can begin and cease to exist only by being created and annihilated by God; second, ordinary objects like animals, human beings, and artifacts are not substances, since they evidently begin and cease to exist without being created or annihilated by God. For scholastic arguments along this line, see, for example, John Buridan (*In De an.* 3.11), Marsilius of Inghen (*Generation and Corruption* commentary), and Domingo de Soto (*Physics* commentary), cited in Pasnau 2011, sec. 24.2; see also discussion in Des Chene 1996, chap. 3. Since the causal interpretation already attributes both theses to Descartes, its proponent might argue that they simply follow from Descartes's rejection of substantial forms. However, there is room to doubt whether the rejection of substantial forms in fact implies these two theses; in particular, one might plausibly hold, as some post-scholastic metaphysicians have done, that substantial forms are not needed to account for natural generation and corruption. Anstey (2011) and Pasnau (2011, sec. 27.6 and sec. 28.5) discuss this point in the context of seventeenth-century metaphysical debates; for a related discussion in the context of contemporary metaphysical debates, see Koslicki 2008, especially chapters 7–9.

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Another passage, from the letter to Regius, dated January 1642, includes a related remark:

[D] It is inconceivable that a substance should come into existence without being created *de novo* by God. (AT 3.505/CSMK 208)³²

Sentences [A] and [D] may be read as stating that substances begin to exist and cease to exist only through God's causal activity (or his withdrawal thereof), independently of the causal activity of other created things—as per the causal interpretation's (CI-Sub_{Created}). Sentences [B] and [C] may be read as stating that whereas the human mind and “body, taken in the general sense” are substances, because they satisfy the conditions of causal independence stated in [A] and [D], the human body fails to be a substance, because it fails to satisfy those conditions. Moreover, since as we have seen, finite bodies as a rule are causally dependent on other created things, it would seem that they too are not substances—as per the causal interpretation's denial that finite bodies are substances (and in contrast to the ordinary conception of substance).

To summarize, the four claims may be read as follows:

- [A'] Substances cease to exist only if God withdraws his concurrence from them.
- [B'] Body, taken in the general sense, but not the human body, is a substance.
- [C'] The human mind, but not the human body, is a substance.
- [D'] Substances begin to exist only if God creates them *de novo*.

When read this way, these claims lend textual support to some of the causal interpretation's primary contentions.³³

32. A third passage, from the Second Replies (AT 7.153/CSM 2.109), provides a more hedged version of what Descartes says in the Synopsis passage, so I will not discuss it separately. I am grateful to Tad Schmaltz for prompting the following discussion of the Synopsis passage and the letter to Regius.

33. For a reading of the Synopsis passage along the lines of [A']–[C'], see Stuart 1999. Note that this causalist reading is neutral between the two camps into which causalists tend to fall regarding the scope of material substances, monists and pluralists, mentioned above in note 30. Whereas both camps hold that the human body and other ordinary objects are not material substances, they disagree about what *is* a material substance, and specifically, what “body, taken in the general sense” (which is a substance, according to [B']) is: monists understand it as the entire physical universe, whereas pluralists understand it as the underlying chunk of matter, or “stuff,” that constitutes an ordinary object.

Although this causalist reading (as I will call it) can admittedly seem tempting, there are reasons to think that it is not mandated by either textual or philosophical considerations. It will be worthwhile to consider these reasons in some detail, as this will help to make room for an examination of alternative interpretations of the *Principles* passage. I will focus on [A]–[C], returning to [D] once I have had the opportunity to make four points about the Synopsis passage.

The first point is that the causalist reading goes beyond what is explicitly stated in the Synopsis passage. For example, notice that, in the Synopsis passage, Descartes never states that the human body is *not* a substance, as claimed by both [B'] and [C']—he states only that “body, taken in the general sense” and the human mind *are* substances, and moreover that the latter *is* a “pure substance.”

Second, the causalist reading goes beyond what is philosophically necessary for the argument contained in the Synopsis passage. Descartes’s overall purpose in the passage is to outline his reasoning for the claim that the mind is immortal and does not cease to exist upon the death of the human body. For the argument to succeed, it suffices to point out, as Descartes does, that whereas the body can and does cease to exist via the causal activity of other created things, the mind cannot cease to exist in this way—in short, the mind but not the body is causally independent of other created things.³⁴ In the present context, this is the relevant difference between them. Yet [A'] and [C'] go further, asserting that this difference in causal independence makes the mind but not the body a substance—a difference that, even if it is one that Descartes upholds, is irrelevant in this context.

Relatedly, it is also noteworthy that when Descartes explains—in [C] and subsequent remarks—why the mind and human body differ with respect to causal independence, his reasoning seems to appeal primarily to a difference in their constitution rather than a difference in their status as substances (as the causalist reading would lead one to expect): whereas the human body “is simply *made up* of a certain configuration of limbs and other accidents of this sort” and therefore “can lose its identity merely as a result of a change in the shape of some of its parts,” the mind “is not *made*

34. See, by way of comparison, *Discourse 5* (AT 6.60/CSM 1.141), where Descartes also sketches an argument for the immortality of the soul, drawing this conclusion directly from the premise that the soul cannot be destroyed either by the destruction of the body or by any other nondivine cause.

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up of any accidents in this way” (AT 7.14/CSM 2.10; my emphasis).³⁵ It might be argued that this difference in constitution entails a difference in status as substance, but such an argument would require an additional premise that links constitution to substancehood. Not only is the requisite premise not present in the Synopsis passage, it is, furthermore, one to which the causal interpretation would not obviously be entitled, since its characterizations of substance in (CI-Sub) and (CI-Sub_{Created}) seem to render constitution irrelevant.³⁶

Third, the causalist reading of the Synopsis passage inherits the vices of the causal interpretation, including the latter’s conflict with a significant body of textual evidence, as discussed above. Maintaining the causalist reading of the Synopsis passage forces one to hold that a wide range of other passages in Descartes’s corpus, including the Second Replies passage, must be dismissed or substantially reinterpreted. In my view, this provides at least some reason, independent of (and in addition to) the previous two points, not to interpret the Synopsis passage in the way proposed by the causalist reading—not, at least, if other readings are available, as I think there are.³⁷

This is the fourth point—namely, that there is room to interpret Descartes as making weaker claims in the Synopsis passage than the ones

35. Similar remarks appear in the Second Replies (AT 7.153–54/CSM 2.109) and *Passions* 1.6 (AT 11.330/CSM 1.329). Descartes’s comment that the mind “is not made up of any accidents” might suggest that the body *is* made up of a certain configuration of its accidents or modes. However, his explication of the constitution of the human body clarifies that it is made up of a certain configuration of its *parts*, and of its parts’ accidents or modes; and, importantly, Descartes insists that a body’s parts are not its modes (*Principles* 2.15, AT 8A.48/CSM 1.229). I return to the constitution of the human body below, in note 71.

36. The requisite premise is not licensed by Descartes’s comment that the mind but not the body is a “pure substance,” as there is no evidence, here or elsewhere, that Descartes understands “pure substance” as equivalent to substance *simpliciter*—to my knowledge, he does not use the term in such a way anywhere in his corpus. Plausibly, what is meant by “pure substance” is a substance that, like the mind, and unlike the body, is not made of a certain configuration of (its parts’) accidents; but I will not pursue this suggestion further here.

37. Another reason is provided by Pasnau’s (2011, 677–78) observation of a tendency among seventeenth-century figures to state something that looks very much like [A]—the claim that only God can take substances out of existence—when it is clear from their various other writings that they only endorse, and mean to state, a weaker claim, for example, that no substance can go out of existence *completely*, together with all its metaphysical parts. Pasnau finds this tendency in Basso, Gassendi, and Boyle; it is not implausible to attribute it to Descartes as well.

attributed to him in [A']–[C']. The key is to read claims [A]–[C] as concerned not with substances as such but only with those substances that fall into a certain category or satisfy a certain condition. Schematically, then, the alternative to the causalist reading is to interpret claims [A]–[C] as follows:

[A''] Substances that satisfy condition *c* cannot cease to exist unless God withdraws his concurrence from them.

[B''] Body, taken in the general sense, but not the human body, satisfies *c*.

[C''] The human mind, but not the human body, satisfies *c*.

On this reading, Descartes is not claiming in the Synopsis passage that causal independence is required of substance as such, as the causal interpretation holds. Causal independence is required only of a certain class of substances—namely, those that satisfy *c*.

There are various ways to understand the relevant condition *c*. For example, taking a page from our earlier observation that the Synopsis passage highlights the diverse constitutions of mind and body, one proposal is that there is an implicit focus on constitution in the rest of the passage as well. [A''] would then be interpreted as the claim that substances that “are not made up of any accidents” are causally independent of other created things. [B''] and [C''] would be interpreted as making the further claims that the human mind and “body, taken in the general sense,” but not the human body, are such substances. Consequently, the former pair is causally independent of other created things and can cease to exist only if God denies his concurrence to them—the desired result, given that the overall aim of the Synopsis passage is to argue for the immortality of the mind.³⁸

Returning now to claim [D], from Descartes’s letter to Regius, dated January 1642, several of the foregoing points apply *mutatis mutandis* to the causalist rendering of it in [D']: it goes beyond what is philo-

38. This constitutionalist reading of the Synopsis passage is compatible with the alternative, noncausal interpretations of Descartes’s characterization of substance discussed in subsequent sections. I will not, however, dwell on this compatibility in discussion of them and will focus instead on other textual and philosophical merits (and weaknesses) they possess. In addition, as was noted earlier with respect to the causalist reading of the passage (recall note 33), the constitutionalist reading is neutral with respect to various interpretations of the expression “body, taken in the general sense” in [B''] (though unlike the causalist reading, it does not view “body, taken in the general sense,” whatever it may be, as the only kind of material substance; according to it, ordinary objects are material substances as well).

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sophically necessary to advance the overall argument, against the existence of substantial forms, in which [D] is embedded; it conflicts with the textual evidence that the causal interpretation contravenes; and the schema described above points the way to an alternative reading:

[D''] Substances that satisfy *c* cannot begin to exist unless God creates them *de novo*.

For example, according to the constitutionalist reading explained above, the claim is that substances that “are not made up of any accidents” cannot begin to exist unless God creates them *de novo*—a claim that would contribute straightforwardly to Descartes’s case in the letter against substantial forms, which were held by their proponents to be substances of this sort.³⁹

Now, there may be other ways of interpreting [A]–[D].⁴⁰ For our purposes here, it suffices to show simply that the causalist reading is not mandated by textual or philosophical considerations and that it is not the only viable interpretative option, as there exists at least one alternative interpretation—an alternative, moreover, that coheres with Descartes’s purposes in the Synopsis passage and the letter, dated January 1642, to Regius, and is also compatible with those many passages in which Descartes appears to endorse the scholastic theses. All this suggests that any

39. For, if there were substantial forms, they would not be constituted by accidental features, and would therefore have to be created *de novo* by God in order to exist—yet proponents of substantial forms typically do not hold that they are created *de novo* by God, but rather that they “emerge from the potentiality of matter” (AT 3.505/CSMK 208). Therefore, they have to admit that by their own lights there are no substantial forms. For further discussion of Descartes’s argument in the letter to Regius, dated January 1642, see Rozemond 1998, 126–33, and 2010.

40. For example, Kaufman (2014) defends an interpretation of the Synopsis passage as concerned with conditions under which a substance can be corrupted—where ‘corruption’ (*corruptio* or *interitus*) is understood as a technical term, drawn from late scholastic and certain early modern authors, for something ceasing to be *the kind of thing* it is (see, for example, AT 3.461/CSMK 200). Since on this interpretation corruption is indexed to a kind, and since an entity belongs to several kinds in an ascending level of generality (species, genus, and so forth), it follows that an entity can be corrupted with respect to one kind K but not with respect to a more general kind K*; for example, when a piece of wood is burnt it is corrupted with respect to the kind *wood* but not with respect to the kind *body* (Kaufman 2014, 96). According to this interpretation, condition *c* will presumably be understood as restricting the discussion to substances with respect to the kind *mind* or the kind *body*, and [A''], for example, would be filled in as the claim that substances, with respect to the kind *mind* or the kind *body*, are incorruptible (in the technical sense just discussed), since a body cannot cease to be a body and become a mind or vice versa.

evidence the Synopsis passage provides for the causal interpretation is at best inconclusive.

To summarize: I have explained, and subsequently scrutinized, the causal interpretation of Descartes's characterization of substance in the *Principles* passage. Although the interpretation appears to enjoy some support from other texts in Descartes's corpus, this support is not unassailable; moreover there is a considerable body of textual evidence, including the Second Replies passage, that strongly suggests that Descartes endorses theses that conflict with the interpretation. In addition, we saw that it characterizes dependence, in (CI-Dep), in a manner that seems potentially ad hoc or unmotivated. These considerations perhaps do not yet give us sufficient reason to dismiss the causal interpretation altogether. However, I submit that they do provide impetus to consider other interpretations, and to ask whether they enjoy more textual support and philosophical motivation by comparison.

3. The Inherence Interpretation

Let us turn, then, to another interpretation. Its starting point is Marleen Rozemond's (1998, 7–8; 2011, 244) suggestion that the *Principles* passage's expression "exists in such a way" (in the passage's first sentence) is intended to invoke the thesis, familiar from the scholastics, that a substance exists *per se*, that is, without inhering in anything. The contrast is, of course, a mode, which exists by inhering in something else. If this is correct, then the opening sentence of the passage is an explicit endorsement of the minimal independence thesis. In addition, the characterization of substance provided there, despite appearing to be more general, is merely a reiteration of the characterization offered in the Second Replies passage.

These remarks point to an interpretation of the notions of independence and substance in the *Principles* passage composed of the following two theses:

(II-Dep) x depends on y if and only if x inheres in y .

(II-Sub) x is a substance if and only if x does not inhere in anything.

Let us call this *the inherence interpretation* (hence, 'II').

The inherence interpretation is less popular than the causal interpretation—indeed, it is rarely even discussed, though, as we saw, it is grounded in a plausible suggestion (given voice by Rozemond) about

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the first sentence of the *Principles* passage.⁴¹ Perhaps, as Pasnau (2011, 105n10) comments, scholars are for the most part simply not “aware of th[e] interpretive choice” of reading the *Principles* passage as simply reiterating the characterization of substance in the Second Replies passage; or, perhaps they find it highly implausible, given the apparently general language employed in the *Principles* passage.⁴² Either way, I think that this interpretation merits serious consideration, for it succeeds where the causal interpretation falters: it provides a reading of the first sentence of the *Principles* passage in line with the scholastic theses Descartes endorses in the Second Replies passage and elsewhere. We have already seen how it sustains the minimal independence thesis. The subject conception of substance is clearly preserved as well—indeed, it is entailed by (II-Sub). And although the inherence interpretation is not explicitly committed to the ordinary conception of substance, there is also nothing in it that conflicts with that conception (in contrast with the causal interpretation). In fact, as we saw above, the ordinary conception is a natural companion to the subject conception, which the inherence interpretation endorses.

We have seen how the inherence interpretation understands the first sentence of the *Principles* passage. How does it read the next few sentences, where Descartes distinguishes between God’s absolute independence and the limited independence of created substances? It is from these sentences that the causal interpretation draws its main support, finding in them a distinction between absolute and limited causal independence, and a corresponding distinction between two types of substance: substance *simpliciter*, as in (CI-Sub), and created substance, as in (CI-Sub_{Created}). We also noted that this reading is not obligatory.

41. The attribution of this interpretation to Rozemond is complicated somewhat by the fact that she interprets the word ‘depends’ in the first sentence modally (as in the modal interpretation that we will consider in the next section). But I think that the basic idea behind her reading is nevertheless captured by what I am calling the inherence interpretation, since the target of (II-Dep) is not necessarily the meaning of the word ‘depends’ in the *Principles* passage, but the type of dependence Descartes uses when he characterizes substance. This characterization, according to Rozemond, is invoked by the phrase “exists in such a way” (that is, *per se*, without inhering in anything). The rest of the sentence, where the word ‘depends’ appears, does not on this interpretation constitute Descartes’s characterization of substance but, rather, articulates a consequence of it. The inherence interpretation is also suggested, but not endorsed as such, in Des Chene 2008.

42. An example of this view might be Rodriguez-Pereyra’s (2008, 84) comment that “all plausible alternative interpretations”—that is, alternatives to his own modal interpretation (discussed below)—are variants on the causal interpretation.

Indeed, the inherence interpretation understands this distinction differently.

Again, Rozemond's commentary on this passage is helpful. While admitting that Descartes's comment that the term 'substance' does not apply univocally is awkward from the perspective of her reading, Rozemond (1998, 262n53; my emphasis) writes,

On my view, Descartes should not have said [this], but he should have explained the difference between God and created substances in terms of *the different types of dependence* involved. I suspect that he saw the two types of dependence as united by the fact that either involves dependence for existence in a specific sense. A mode derives its existence from the created substance in which it inheres, a created substance derives its existence from God.

As I understand it, Rozemond's suggestion is that the distinction Descartes draws here is not primarily between *two types of substances*, independent to a greater or lesser extent (as the causal interpretation claims, and as Descartes's comment regarding univocity seems to suggest), but between *two types of dependence*, or two dependence relations. One dependence relation is inherence, which is the only type of dependence that is used to characterize substance, as in (II-Sub). The other dependence relation is causation, which according to Rozemond (1998, 8) is "irrelevant to the notions of mode and substance." It follows that there is only one type, or notion, of substance, and God and created substances fall under this notion in the same way, and to the same extent. The difference is that God *also* happens to be causally independent, whereas created substances happen to be causally dependent on God.

While this suggestion is promising, as it stands, it seems at best incomplete. My concern is not that the inherence interpretation implies that Descartes was mistaken, or that he misspoke, when he claimed that "there is no distinctly intelligible meaning of the term ['substance'] which is common to God and to his creatures."⁴³ Rather, my concern arises from reflection on the proposal that inherence and causation are associated with different types of dependence: one that is relevant to Descartes's characterization of substance, and one that is not. This proposal is crucial to the inherence interpretation's reading of the *Principles*

43. See note 76 below, where I sketch how the nonunivocity claim might be accommodated by an interpretation on which the *Principles* passage invokes two types of dependence, as Rozemond maintains.

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passage as a reiteration of the characterization of substance in the Second Replies passage, a characterization that employs inherence but not causation. Yet this proposal also gives rise to a question: what is the relevant difference between inherence and causation, the difference that makes the former but not the latter relevant to Descartes's characterization of substance? As Rozemond herself acknowledges, the two relations do have something in common—they both involve “dependence for existence.” Given this commonality, we may ask: why are they not *both* relevant to Descartes's characterization of substance—what makes them different, such that only one of them is? I believe that these questions point to an explanatory challenge that the inherence interpretation, at least as it stands, does not meet.

These questions are, of course, connected to a question concerning generality, which was foreshadowed in our discussion of the causal interpretation: What, *in general*, is the type of dependence relevant to the characterization of substance—the type of which some relations are, but other relations are not, an instance? That there is such a general type—possibly consisting of just one relation, inherence—is suggested by the first sentence of the *Principles* passage. And although the causal and inherence interpretations both place inherence within the scope of this general type (and moreover, both place a host of relations, such as logical and mereological relations, outside of its scope), they differ on the placement of causation: the inherence interpretation places it outside, whereas the causal interpretation places it inside, its scope.

This comparison can help to reinforce the explanatory challenge: the decision either to *exclude* or to *include* a specific relation, such as causation, in the type of dependence relevant to the characterization of substance can seem unprincipled and arbitrary, without further explanation of what *in general* makes a relation relevant or irrelevant, vis-à-vis other relations. What is wanted is a philosophical explanation of the proffered division—some insight into how the line is drawn. Absent such an explanation, and lacking reason to think that the line must be primitive, any interpretation that merely helps itself to such a line seems at best to provide only a partial understanding of Descartes's position. At worst, it attributes to him a view of substance grounded in an unprincipled or arbitrary metaphysical division.⁴⁴

44. It should be clear that a simple appeal to tradition—for example, that the scholastics characterized substance in terms of inherence but not in terms of causation—will not do to answer the explanatory challenge. First, as was noted in section 1, it is far from

For this reason, I believe that the inherence interpretation cannot yet be deemed to offer a fully adequate perspective on Descartes's views of substance and its independence.⁴⁵ While this lacuna is perhaps not a sufficient reason to reject the inherence interpretation altogether, I propose that it does recommend that we look for another interpretation, which might be in a better position to meet the challenge.

4. The Modal Interpretation

A third interpretation of the *Principles* passage reads independence in modal terms, as the claim that a substance *can exist without other things*. This interpretation, which I will call *the modal interpretation*, has the curious fate of being relatively unpopular in Descartes scholarship while quite common outside of it.⁴⁶ The reason for its unpopularity among Descartes scholars is, I suspect, that it is often thought to be vulnerable to (fairly simple) counterexamples from within Descartes's system. But it will nevertheless be useful to consider the modal interpretation here, for at least three reasons. First, we will see that many of the alleged counterexamples to it are based on a misunderstanding. Second, the modal interpretation proposes an answer to our explanatory challenge, and in this respect it is

obvious that Descartes accepted the scholastic theses that we have highlighted simply because they were held by the scholastics. And Descartes's departure from scholasticism is otherwise too extensive to allow for the assumption that he simply follows tradition, even when he accepts traditional views. Second, even if Descartes was influenced by the scholastics on this point, what is wanted is a philosophical rather than a biographical explanation of why Descartes drew the line where he did, and thus characterized substance as he did. Absent this we cannot yet claim to have a philosophical understanding of his position.

45. In recent work, and in a different context, Rozemond makes a proposal that suggests one way that proponents of the inherence interpretation might try to reply to the explanatory challenge that I am raising. Commenting on Descartes's view that two substances are "separable" and "can exist apart," Rozemond (2011, 251) proposes to understand the separability of *a* from *b* in a manner borrowed from Suárez—namely, as *a*'s ability to exist "without a real union with *b*"; and she goes on to suggest that separability (in this sense) is closely linked to substance independence. If this is correct, perhaps what makes inherence relevant to the characterization of substance is that when *a* inheres in *b*, *a* is inseparable from *b* (in this sense); whereas when *a* is caused by *b*, *a* is nonetheless separable from *b* (in this sense). However, Rozemond does not explain what the ability to exist without a real union amounts to, and why it is compatible with causation but not with inherence. Thus I do not think that this proposal, as it stands, offers an adequate response to the explanatory challenge.

46. See Hoffman and Rozenkrantz 1994, 53–57; Correia 2008, 1025; and Lowe 2010; for examples of the modal interpretation found outside of Descartes scholarship.

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superior to the previous interpretations. Third, while ultimately I will argue that the answer it gives is not satisfactory, reflection on its shortcomings will point us in the direction of an overall more satisfying interpretation.

In recent work, Gonzalo Rodriguez-Pereyra (2008, 80) has provided a careful defense of the modal interpretation. As his discussion makes clear, the interpretation consists of the following three claims (where ‘MI’ abbreviates ‘modal interpretation’):

(MI-Dep) x depends on y if and only if x cannot exist without y .

(MI-Sub) x is a substance if and only if x can exist without any other entity.

(MI-Sub_{Created}) x is a created substance if and only if God is the only other entity without which x cannot exist.⁴⁷

Like the causal interpretation (and unlike the inherence interpretation), the modal interpretation understands the distinction between God’s absolute independence and the limited independence of substance as concerning the extent of a single type of independence—though unlike the causal interpretation, it views this independence as primarily modal rather than causal; it also agrees with the causal interpretation (and disagrees with the inherence interpretation) that God satisfies a different characterization of substance from the characterization satisfied by created substances. I will first summarize the considerations in favor of this interpretation, and then I will turn to objections.

First, there is textual support for the modal interpretation, coming primarily from the penultimate sentence of the *Principles* passage, which appears to employ modal language: created substances “*need* only the ordinary concurrence of God in order to exist,” whereas modes “*cannot* exist without other things”—namely, substances. In fact, modal language also appears earlier in the passage, when created substances are said to be such that they “*can* exist only with the help of God’s concurrence.” This sentence follows immediately upon the characterization of substance as “a thing which exists in such a way as to *depend* on no other thing for its existence.” Consequently, there is some textual support for the modal interpretation’s proposal that we understand such dependence modally.⁴⁸

47. I have modified Rodriguez-Pereyra’s formulations of these claims to maintain consistency with the style I have adopted above.

48. In addition, Descartes sometimes says of two substances that they “can exist apart,” or that they are “separable,” claims that have been interpreted by some scholars

Second, the modal interpretation offers an answer to the explanatory challenge identified earlier, and in this respect it is superior to the causal interpretation and the inherence interpretation. Consider the following remark by Rodriguez-Pereyra (2008, 80; my emphasis), which is helpful in identifying the insight behind (MI-Dep):

This is a *general notion of dependence* in that it does not specify what type of dependence must obtain between x and y if they satisfy [the right-hand side of (MI-Dep)]. So x and y may satisfy [the right-hand side of (MI-Dep)] because x cannot exist without having y as a cause; or they may satisfy it because x cannot exist without having y as a subject of inherence; or they may satisfy it because x cannot exist without having y as a part; or they may satisfy it because x cannot exist without having y as a property, etc.

As this makes clear, (MI-Dep) identifies a general type of dependence that allows for various specific relations, including inherence and causation, as its instances. The function of (MI-Dep) is to mark out the general profile, a modal profile, that any given relation must satisfy in order to be relevant to characterizing substance. It thereby yields an answer to our explanatory challenge: what makes a given relation relevant to the characterization of substance is that its relata satisfy the right-hand side of (MI-Dep)—unlike other relations, the irrelevant ones, for which this is not the case.

Third, the modal interpretation yields concrete verdicts on a range of cases, including those mentioned in the *Principles* passage. As was just pointed out, any case of inherence is arguably also a case that satisfies the modal profile, since modes cannot exist without a substance in which to inhere—as suggested by the penultimate sentence of the *Principles* passage.⁴⁹ (Consequently, the modal interpretation honors the minimal independence thesis: a substance is independent because, or at least insofar as, it does not inhere in anything. We will return to the relation between the modal interpretation and the scholastic theses

as saying that it is possible for the one to exist without the other. See the letter to Hyperaspistes, from 1641 (AT 3.429/CSMK 193), and the letter to unknown recipient, from 1645 or 1646 (AT 4.349/CSMK 280); less clear, but perhaps also relevant, is the Fourth Replies (AT 7.226/CSM 2.159) and the Second Replies (AT 7.161/CSM 2.114). However, Rozemond (2011), following Hoffman (2002), argues against a modal interpretation of separability (as indicated in note 45).

49. Also, for example, in the Sixth Meditation: modes “cannot be understood apart from some substance for them to inhere in, and hence cannot exist without it” (AT 7.79/CSM 2.54–55).

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below.) It is also clear that one case of causation satisfies this profile: nothing could exist without God as both first and sustaining cause, and so all creatures—created substances included—entail the right-hand side of (MI-Dep) with respect to God.⁵⁰

But are these the only cases that satisfy the right-hand side of (MI-Dep)? Of particular interest would be cases in which a created substance cannot exist without another created substance, or without a mode. If there were any such cases, then they would be counterexamples to (MI-Sub_{Created}). In fact, many readers, including Spinoza and Leibniz, have alleged that there are such cases. They point to the fact that a substance cannot exist without some mode or other;⁵¹ or that a body—a corporeal substance—cannot exist without the bodies surrounding it (on pain of vacuum), and without the bodies that are its parts.⁵² These are just a few of the most popular examples.

However, the allegation that these are counterexamples rests on a misunderstanding of (MI-Dep) and a failure to distinguish it from another thesis:

(MI-Dep_{Generic}) x depends on F s if and only if x cannot exist without some F

Notice how this thesis differs from (MI-Dep), repeated here:

(MI-Dep) x depends on y if and only if x cannot exist without y .

Whereas (MI-Dep) says that there is a specific entity y to which the dependent entity x is modally related, (MI-Dep_{Generic}) says that there is *some* entity, of a given type F , to which the dependent entity x is modally related. Let us call the modal relation designated by the right-hand side

50. This result also follows from the fact that God exists necessarily. It is impossible that something exists while God does not exist, simply because it is impossible that God does not exist. Hence in reply to Stuart's query (1999, 87), which is meant to challenge the modal interpretation, "Is there a Cartesian argument showing that the existence of each of his [Descartes's] candidates for secondary [that is, created] substance implies the existence of God?" the answer is plainly affirmative.

51. See Markie 1994, 66; Hoffman and Rosenkrantz 1995, 54–55; Stuart 1999, 88; and Bennett 2001, 134. A version of this concern is already expressed by Leibniz (1969, 389): "not only do we need other substances; we need our own accidents even much more. Therefore, since substance and accident depend upon each other, other marks are necessary for distinguishing a substance from an accident."

52. See Markie 1994, 66; and Hoffman and Rosenkrantz 1994, 54–55. A version of the vacuum counterexample is already raised by Spinoza, in *Ethics* 1p15s.

of (MI-Dep_{Generic}) ‘generic modal dependence’; by contrast, we can call the modal relation designated by the right-hand side of (MI-Dep) ‘strict modal dependence’.⁵³

Strict modal dependence entails generic modal dependence, though not vice versa: if x cannot exist without y , and y is an F , it is true that x cannot exist without some F . However, if x cannot exist without some F , and both y and z are F s, it is possible that x can exist without y —as long as it is possible that z exists and y does not exist. Applying this distinction, we can see that there is room to hold, as Descartes clearly does, that a substance bears generic modal dependence to its modes, though it does not bear strict modal dependence to any specific mode.⁵⁴ Likewise, there is room to hold, as Descartes also clearly does, that a substance bears generic modal dependence to surrounding bodies (on pain of vacuum), although it does not bear strict modal dependence to the specific bodies that surround it.⁵⁵ Nor, for Descartes, do bodies bear strict modal dependence to each of their specific parts, even though they bear generic modal dependence to some parts.⁵⁶ So, none of these cases poses a counterexample to the modal interpretation.

The distinction between strict and generic dependence is helpful in addressing these cases.⁵⁷ But it is not obvious that it addresses another

53. These labels are borrowed from Koslicki 2013 (who cites Lowe 2010).

54. See, for example, the Conversations with Burman: “But the mind cannot ever be without thought; it can of course be without this or that thought, but it cannot be without some thought” (AT 5.150/CSMK 336). A parallel point concerning body and its modes is made in the letter to Gibieuf, dated January 19, 1642 (AT 3.475/CSMK 202), and the letter to Princess Elizabeth, dated May 21, 1643 (AT 3.665/CSMK 218).

55. See *Principles* 2.18 (AT 8A.50/CSM 1.231) and the letter, dated February 9, 1645, to Mesland (AT 4.164–65/CSMK 242–43).

56. See the letter, dated February 9, 1645, to Mesland: “We can say that the Loire is the same river as it was ten years ago, although it is no longer the same water” (AT 4.164–65/CSMK 242–43). Note, however, that the same letter also contains the following claim, which may indicate that in some cases a body nonetheless bears strict modal dependence to its parts: “if any [specific] particle of matter [of which the body is composed] were changed, we would at once think that the body was no longer quite the same, no longer numerically the same” (ibid.). While I do not have the space to discuss the quoted claim further, I will note that if it is representative of Descartes’s considered view about this case (which Rodriguez-Pereyra does not discuss; he does not consider the letter to Mesland), it would arguably constitute a counterexample to the modal interpretation. I will not, however, rely on it in what follows.

57. Rodriguez-Pereyra also considers the example of a substance and its (specific) essential properties, without which a substance cannot exist. His response is that a substance is merely conceptually distinct from, and hence identical to, its essential properties; since (MI-Sub) requires only that a substance can exist without any *other* entity, this is not a

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kind of case, which to my knowledge has not yet been discussed, in which a created substance bears strict modal dependence to another created substance. The case involves causation.

Consider causal interactions in the physical universe—namely, causal interactions between distinct bodies. All such interactions are governed by Descartes's three laws of nature, which are necessary truths.⁵⁸ Given some initial condition—for example, one billiard ball is moving toward another, equal-sized ball, at rest—together with these laws of nature, a certain outcome follows necessarily; in this example, the second ball will gain motion. And while in this case of body-body interaction the outcome is the coming-into-existence of motion—a mode—in other cases the outcome is the coming-into-existence (or going-out-of-existence) of a substance. We have already mentioned some such cases (in section 2): a piece of wood is destroyed in a fire, or an animal is born—caused to exist—by its parents. In such cases, given the necessary laws of nature that govern them, since x causes y to exist, it is necessary that if x exists, then y exists as well: x cannot exist without y . Here we have cases of strict modal dependence between two created substances.⁵⁹ The result is a counterexample, constructed out of Cartesian materials, to the modal interpretation's (MI-Sub_{Created}).

Now, that this case is a counterexample relies upon acceptance of the ordinary conception of substance, according to which bodies are substances, and the subject conception underlying it. Proponents of the modal interpretation could decide to reject them, although they would have to do so in the face of the considerable textual evidence,

counterexample (Rodriguez-Pereyra 2008, 8–82). For Descartes's notion of a conceptual distinction, see *Principles* 1.62 (AT 8A.30/CSM 1.214) and the letter to unknown correspondent, from 1645 or 1646 (AT 4.349–50/CSMK 208–81). However, Hoffman (2002) argues against this interpretation of conceptual distinction. I will not pursue this example further.

58. The three laws of nature are discussed in *Principles* 2.36–40. These laws do not (or at least do not obviously) govern interactions between minds and bodies. On the modal status of these laws, see *The World* (AT 11.44/CSM 1.97) and *Discourse* (AT 6.43/CSM 1.132). That the laws of nature are necessary is usually not disputed. What is sometimes disputed is whether they have the same modal status as the truths of mathematics or logic, the so-called eternal truths. On this question, discussed briefly in note 61 below, see Broughton 1987 and Dutton 1996.

59. Earlier we noted one case of causation that satisfies the right-hand side of (MI-Dep): created substances bear strict modal dependence to God. That case is not at odds with the modal interpretation, however, since (MI-Sub_{Created}) is especially designed to accommodate it. The present case cannot be handled in the same way.

including the Second Replies passage, indicating that Descartes subscribes to them. So, this does not seem like an ideal solution. It may be possible to avoid the counterexample in some other way (for example, by rescinding Descartes's commitment to the necessity of the laws of nature, or by resisting the claim that their necessity entails that if one body x causes another body y , then necessarily, x cannot exist without y);⁶⁰ but I believe that to do so would be to overlook a lesson that can be learned from the prospect of such counterexamples—from the fact that the modal interpretation threatens to give rise to them in the first place.

The lesson can be traced to the modal interpretation's answer to our explanatory challenge. It holds that what makes a given relation relevant to the characterization of substance is that it satisfies the right-hand side of (MI-Dep) in a given case. But this explanation, which is its principal virtue, due to its generality, is also the source of what may be its principal vice. For satisfaction of the right-hand side of (MI-Dep) is potentially too coarse grained—*too* general—to do the relevant work, given that it is indifferent to the relation that underwrites such satisfaction. Strict modal dependence can arise in a wide variety of ways, owing to a wide variety of relations in a wide variety of circumstances—it has, in

60. For example, it might be suggested that whereas the necessity of the laws of nature entails that every link in the actual series of causes and effects follows necessarily from the preceding one, the series itself is not necessary, and could have been different, given different initial conditions. If so, then it is arguably possible that a different series existed and contained x , but in which x causes z rather than y . And hence it is possible that x exists but y does not exist. While this is suggestive, I think there are nevertheless difficulties with this proposal. A minor concern is that it requires attributing to Descartes a commitment to transworld identity, although there is not any obvious textual evidence in support of this attribution. Perhaps a more pressing worry is that it commits Descartes to a particular view of the modal status of existing entities vis-à-vis that of the initial conditions (namely, that given different initial conditions, they could have not existed), one to which he does not to my knowledge ever subscribe. In fact, some textual evidence suggests that he subscribes to its denial; for example, in *Discourse* 5 Descartes claims, "Even if in the beginning God had given the world only the form of a chaos, provided that he established the laws of nature and then lent his concurrence to enable nature to operate as it normally does, we may believe without impugning the miracle of creation that by this means alone all purely material things could in the course of time have come to be just as we now see them" (AT 6.45/CSM 1.133–34). This passage and others like it (for example, *Principles* 3.47) suggest that the different series of causes and effects arising from different initial conditions would eventually converge, resulting in a world that is "just as" the actual one. A final concern is that the proposal also holds Descartes's position on substance and independence hostage, so to speak, to a seemingly unrelated debate, which Descartes's texts do not clearly resolve, about the status of the initial conditions of the world (and, concomitantly, the strength of his necessitarianism).

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other words, a heterogeneous class of origins, some but not all of which are of interest from the perspective of substance. As a result, the modal interpretation fails to discriminate between cases that satisfy the right-hand side of (MI-Dep) because they involve a relation, such as inherence, that is *always* relevant to the characterization of substance, and cases that satisfy the right-hand side of (MI-Dep) because they involve a relation, such as causation, that is *sometimes but not always* relevant to the characterization of substance.⁶¹

This concern is fairly abstract, but it can be made concrete by considering an alternative interpretation that resolves it. What is wanted is an interpretation that (1) meets the explanatory challenge, while (2) providing the requisite level of discrimination and, at the same time, (3) honoring Descartes's scholastic commitments. With these desiderata in view, the next section turns to develop an interpretation that satisfies all of them.

5. The Nature-Based Interpretation

We can begin to develop this interpretation by noticing that the various interpretations that we have considered all agree in one important respect: all accept that a substance is independent in that it must, minimally, not inhere in anything. That is, they all honor Descartes's commitment to the minimal independence thesis. I propose, then, that we seek to uncover *why* Descartes embraces this thesis. What makes inherence inimical to the type of independence that is characteristic of substance?

It seems to me crucial to recognize that, for Descartes, the inherence of modes in substance is not merely an extrinsic or accidental

61. It might be argued that the modal interpretation does have the resources to discriminate between relevant and irrelevant cases of satisfaction of the right-hand side of (MI-Dep). For example, some might wish to invoke a distinction between different types of necessity, for example, "metaphysical" as opposed to "physical" or "nomological": it might be argued that whereas the necessitation invoked in (MI-Dep) holds with "metaphysical" necessity, the necessitation of a given effect by its cause holds with mere "physical" or "nomological" necessity. But it is not clear whether Descartes subscribes to such distinctions, and even if so, whether he does so in a way that can support the modal interpretation as preferable to alternatives. Broughton (1987), for example, interprets Descartes as holding that indeed there is a distinction between the necessity of mathematical and metaphysical truths, on the one hand, and physical laws, on the other hand. This distinction, she argues, is grounded in a distinction between truths that hold by the nature of some entity and truths that do not. If this approach is adopted, whereby natures are playing a substantial role, then the modal interpretation threatens to collapse into a version of the nature-based interpretation defended below.

characteristic of modes. This point has been overlooked by other interpretations, but I believe it illuminates why Descartes regards the inherence of mode in substance as a type of dependence. Descartes holds, I will argue in a moment, that it is part of a mode's *natura* or *essence* (*natura* or *essentia*) that it inheres in its substance.⁶² The notion of nature plays an important role in Descartes's metaphysics and is prominent in some of the high-profile claims of the *Meditations*: that the nature of mind is thought; the nature of body is extension; and part of God's nature is necessary existence (*Principles* 1.53 [AT 8A.25/CSM 1.210]).⁶³ Descartes also cites the natures of ordinary objects such as a man, lion, horse, mountain, and fire, as well as the natures of abstract notions, such as geometrical figures (for example, triangles).⁶⁴ Importantly, he also mentions the natures of modes (for example, motion) (*Principles* 2.25 [AT 8A.53/CSM 1.233]). In general, Descartes seems to think of the nature of a given entity as that which defines it, or that which determines what it is for that entity to exist or to be what it is.⁶⁵ I would now like to show that part of what it is to be a mode is to stand in the inherence relation to a substance.

To begin, note that according to Descartes, it is part of anything that is a mode—say, the particular shape of the writing pad on my desk—that it is a mode. This point is made very clearly in the following passage, where Descartes responds to an author claiming that it is possible that a mind is either a substance or a mode of a corporeal substance. Descartes

62. The expression “nature or essence” (*natura sive essentia*) appears in Descartes's writings on several occasions, for example in the Fifth Meditation (AT 7.64/CSM 2.45) and the Fourth Replies (AT 7.240/CSM 2.169). I will treat these terms as equivalent, just as Descartes seems to treat them on such occasions.

63. See also the title of the Second Meditation (AT 7.23/CSM 2.16) and of the Fifth Meditation (AT 7.63/CSM 2.44).

64. A man: Second Replies (AT 7.149–50/CSM 2.106–7); a lion, horse, and mountain: First Replies (AT 7.118/CSM 2.84); a triangle: Third Meditation (AT 7.65/CSM 2.34) and the letter to Mersenne, dated June 16, 1641 (AT 3.383/CSMK 184); fire: *Principles* 4.80 (AT 8A.249/CSM 1.273).

65. The sense of definition I have in mind is of an *entity* and not of a *term*: it is a real rather than a nominal definition. Descartes is often skeptical about the possibility of defining terms such as ‘doubt’ or ‘thought’, though he thinks it is nevertheless possible to know *what those things are* (see, for example, AT 7.523/CSM 2.417). As I understand Descartes, he thinks of what is known when we know *what something is* as the essence, or nature, of that thing. I leave it as an open question what kind of entity an essence, or nature, is for Descartes.

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in response accuses the author of confusing an epistemic with a metaphysical possibility:

The author maintains that there is no contradiction involved in saying that one and the same thing possesses one or the other of two totally different natures, i.e. that it is a substance or a mode. If he had merely said that he could see no reason for regarding the human mind as incorporeal substance, rather than a mode of a corporeal substance, we could have excused his ignorance. . . . But when he says that the nature of things leaves open the possibility that the same thing is either a substance or a mode, what he says is quite self-contradictory, and shows how irrational his mind is. (*Comments*, AT 8B.352/CSM 1.300)

If the mind is a mode (or, alternatively, as Descartes thinks, a substance), then it is a mode (or a substance) by its nature, and hence there is no possibility of its being otherwise.⁶⁶

Now let us focus on the specific claim that a mode inheres in a substance by its nature. Consider the following passage concerning the possibility of a clear and distinct understanding of modes. This is possible, Descartes says,

provided they [modes] are regarded as modes of things. By regarding them as being in the substances of which they are modes, we distinguish them from the substances in question and *see them for what they really are*. If on the other hand we would be regarding them apart from the substances in which they inhere, we would be regarding them as things that subsist in their own right, and we would thus be confusing the ideas of a mode and a substance. (*Principles* 1.64, AT 8A.31/CSM 1.215–16; my emphasis)

Although the passage is primarily concerned with how modes “are regarded,” and thus with our ideas of modes rather than with modes themselves, it can nevertheless indicate an important fact about modes, given that the idea of modes it emphasizes—a clear and distinct idea—is veridical. What enables us to see modes for “what they really are” and distinguish them from substances is that we consider them as “in substances” (“*in substantiis*,” which abbreviates “*in substantiis esse*,” or “inhering in substances”). If this is indicative of modes themselves, then what makes modes different from substances—again, a difference that holds by their nature—is that they inhere in substances. Inherence in substances is therefore part of the nature of modes.

66. See, by way of comparison, *Comments* (AT 8B.348/CSM 1.297).

Of course, what is at issue here are particular modes—namely, the particular knowledge of grammar possessed by Socrates, or the particular shape of my writing pad, rather than, say, knowledge of grammar or shape in general. This is the sense in which Descartes speaks of modes in the remarks just cited (from the *Comments* and the *Principles*). The point is that Descartes thinks that a particular mode, such as Socrates’s knowledge of grammar, by its nature inheres in a particular substance (in this case, Socrates, or more specifically, Socrates’s mind).⁶⁷

If this is correct, then inherence is a relation that holds between a mode and its substance *by a mode’s nature*. On the other hand, Descartes does not seem to think that a mode inheres in its substance *by its substance’s nature*. The basic argument for this claim is simple. Consider first the case of body. Descartes holds that a substance’s nature consists in its principal attribute, in the case of a body, extension.⁶⁸ The first premise of the simple argument is that the nature of body is extension, or to be extended. The second premise is that to be extended does not involve standing in a relation to any other specific entity (with the possible exception of a causal relation to God, which for now I wish to bracket; we will return to this possibility below, in section 6). It follows from these two premises that a body is not related to any other specific entity by its nature. A parallel argument can be used to establish the same conclusion for mind, whose nature consists in thinking. In general, the nature of a given substance—body or mind—does not specify or involve a relation to any specific entity; in particular, it does not specify or involve a relation to any specific mode.⁶⁹

The word ‘specific’ is important. As in the case of the modal interpretation’s (MI-Dep), the claim that the nature of a given body does not specify, or involve, a relation to any other entity can be given a generic reading, according to which the nature does not specify a relation

67. Recall note 15, and see, for example, the *Comments*: “The nature of a mode is such that it [the nature] cannot be understood at all unless the concept of the thing of which it is a mode is implied in its own concept” (AT 8B.355/CSM 1.301). Of course, the point is that the nature of the mode cannot be understood *correctly* unless the concept of the substance of which it is a mode is so implied.

68. This is, of course, a basic Cartesian commitment, stated many times. See, for example, *Principles* 1.53 (AT 8A.25/CSM 1.210).

69. This seems to be one of the lessons of the wax passage in the Second Meditation (AT 7.30–31/CSM 2.20; a similar point is made in *Principles* 2.11, AT 8A.46/CSM 1.226). See also *Principles* 1.64 (AT 8A.31/CSM 1.215) and the letter to unknown correspondent, from 1645/1646 (AT 4.349/CSMK 280).

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to *some* entity of a given type *F*, or it can be given a strict reading, according to which the nature does not specify a relation to any specific entity. I intend the second premise to be read strictly (as indicated by ‘specific’). Hence, whereas the nature of a body, extension, perhaps is, or involves, a relation to some entity or entities of a certain type—for example, perhaps it is, or involves, being contiguous to other bodies, or having other bodies as parts—it does not seem to be Descartes’s view that the nature of a body is, or involves, relations to any other *specific* entity or entities. For example, it does not seem to be his view that the nature of a body is, or involves, being contiguous to another *specific* body, or having a *specific* part.⁷⁰ Nor, again, does it seem that the nature of a body is, or involves, having any *specific* mode.⁷¹

70. Earlier, in note 56, we saw a passage from the letter to Mesland, dated February 9, 1645, in which Descartes claims that a body would not be “numerically the same” if one of its parts were changed, and which possibly raises a counterexample to the modal interpretation. This passage does not, or at least does not obviously, pose a challenge to the current proposal. To see this, consider that the fact that a body would not be numerically the same if one of its specific parts were to be changed does not by itself entail that the *nature* of the body would not be the same if one of its parts were to be changed, and that its nature therefore involves a relation to that part. This entailment would hold only if numerical distinctness entailed a difference in nature; or in other words, it would hold only if two numerically distinct bodies (or other substances) necessarily had different natures. But it is far from clear that this is Descartes’s view. It is Spinoza’s view: *Ethics* 1p5 is the proposition that “In nature there cannot be two or more substances of the same nature or attribute” (Spinoza 1985). Yet a close scrutiny of Spinoza’s demonstration of 1p5 (for example, the one undertaken in Garrett 1990) reveals that Spinoza there arguably relies on commitments that Descartes does not share, such as a thoroughgoing endorsement of the Principle of Sufficient Reason.

71. Recall that in the Synopsis passage, discussed at length in section 2, Descartes holds that the human body is constituted by its parts and their modes—it “is simply made up of a certain configuration of limbs and other accidents of this sort” and therefore “can lose its identity merely as a result of a change in the shape of some of its parts” (AT 7.14/CSM 2.10). Similarly, in part 4 of the *Principles of Philosophy*, Descartes explicates the natures of various inanimate bodies in terms of their parts and these parts’ modes, such as shape, density, and motion; see, for example, his discussion of the nature of air (*Principles* 4.45), water (*Principles* 4.48), and fire (*Principles* 4.80). Despite what might be the initial appearance, these remarks do not raise counterexamples to the nature-based interpretation, because they do not explicate the natures of particular bodies in terms of relations to other *specific* entities. In all these cases, the nature of a body consists in its having *some* parts with certain modes—certain shapes and motions—and not in its having *specific* parts, or in standing in a relation to any other *specific* entity. Hence, given that the second premise is to be read strictly, it is true of the human body and other specific bodies as well. I am grateful to James Messina and Colin Chamberlain for pressing me to clarify this point.

ANAT SCHECHTMAN

We are now in a position to formulate what I will call *the nature-based interpretation* of the *Principles* passage, which consists of the following two claims (where ‘NI’ abbreviates ‘nature-based interpretation’):

(NI-Dep) x depends on y if and only if (1) there is some relation R such that xRy , and (2) xRy by x ’s nature but not by y ’s nature.⁷²

(NI-Sub) x is a substance if and only if there is no entity y such that for some R , xRy by x ’s nature but not by y ’s nature.

According to this interpretation, the independence invoked in the characterization of substance concerns the nature of an entity and whether that nature involves relations to other entities. This is a type of ontological, rather than causal, conceptual, or epistemic, independence, as it concerns what it is to be that entity, rather than what is involved in bringing the entity into existence, forming a concept of it, or having knowledge of it. A substance, according to this interpretation, is an entity that does not stand in any relation by its nature to any other specific entity (with the possible exception of God): it is ontologically independent. That is the sense, on this interpretation, in which substance is “a thing which exists in such a way as to depend on no other thing for its existence.”

Let me make a few observations about this interpretation. First, in addition to the passages discussed above, it receives some textual support from the *Principles* passage itself. When Descartes mentions modes, he explicitly invokes their nature. Of course, Descartes also explicitly mentions modality, as when he asserts that modes “cannot exist without other things.” But notice that Descartes presents the fact that modes cannot exist without a substance as a result of the fact that modes have the nature that they do: modes are, he tells us, “of such a *nature* that they cannot exist without other things” (my emphasis; we will return to this below).

Second, the nature-based interpretation is similar to, yet importantly different from, the inherence interpretation. The dependence of mode on substance does not consist solely in its inherence in a substance, but also in the fact that it is *part of its nature* to so inhere. Conversely, the independence of substance does not consist solely in its failing to inhere in anything, but in the fact that it is not *part of its nature* to bear the inherence relation, or any other relation, to another entity.⁷³

72. This approach is influenced by Lowe 2010. Throughout, “ xRy ” should be read as “ x bears relation R to y .”

73. The present interpretation thus implies that if there were an entity that inhered in another entity, though without bearing this relation, or any other relation, to another

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This difference between the nature-based interpretation and the inherence interpretation is significant. For the former's emphasis on natures allows it to provide an answer to the explanatory challenge that was not available to the latter. The answer is made possible by the identification of a general type of dependence, in (NI-Dep), which marks a division between those relations that are relevant and those that are irrelevant to the characterization of substance. We have seen that inherence is an instance of this type of dependence. Below we will consider whether causation is another instance. But for now it suffices to note, as a third observation about the nature-based interpretation, that it provides a principled answer to the question posed by the explanatory challenge: to wit, a relation is relevant to the characterization of substance just in case it holds asymmetrically by the nature of its first relatum to a specific entity—namely, its second relatum.

Fourth, the nature-based interpretation has several modal implications, though not the same ones as the modal interpretation, and in this respect it is similar to, yet importantly different from, the modal interpretation. To see this, notice first that every case that satisfies the right-hand side of (NI-Dep) is also a case that satisfies the right-hand side of (MI-Dep). The reasoning for this claim is straightforward. Whatever holds by an entity's nature is necessary to that entity, so an entity must have it, if the entity exists. This means that if it is part of x 's nature that xRy , then it is also necessary that if x exists, then xRy . But if xRy and x exists, then y exists as well.⁷⁴ Hence, if it is the case that xRy by x 's nature, as the right-hand side of (NI-Dep) says, then necessarily, if x exists, then y exists, as the right-hand side of (MI-Dep) says. The converse, however, is not true. For example, it is necessary that if Descartes exists, then $2 + 3 = 5$, but Descartes does not stand in any relation by his nature to $2 + 3 = 5$. So, this is a

entity *by its nature*, then it would be a substance. This implication may seem surprising. However, one of Descartes's arguments against the possibility of real accidents seems to confirm it. Real accidents, at least as Descartes understands them, are accidents that are entities in their own right, really distinct from their substance and separable from it; hence real accidents supposedly inhere in a substance, though they do not bear this inherence relation (or any other relation) to substances by their nature. Descartes argues on several occasions (for example, the Sixth Replies, AT 7.435/CSM 2.293) that this would be sufficient to make them substances. He therefore concludes that there can be no real accidents: they would have to be both accidents and substances, which is impossible.

74. There may be exceptions to this conditional, perhaps including cases of what Brentano called "intentional inexistence," though it is not clear that Descartes would acknowledge them. At any rate, they seem irrelevant here.

case that satisfies the right-hand side of (MI-Dep) without satisfying the right-hand side of (NI-Dep): the former does not entail the latter.

The significance of this point is twofold. First, it follows from it that counterexamples to the modal interpretation need not be counterexamples to the nature-based interpretation (we will confirm this in the next section). Second, the nature-based interpretation can accommodate—and, indeed, explain—the presence of modal language in the *Principles* passage. On this interpretation, as foreshadowed above, the passage's modal claims are to be understood as direct implications of its claims about natures. In this way, the nature-based interpretation absorbs the insight behind the modal interpretation—that substance independence in some cases (though not all) carries with it modal independence, independence in the sense of (MI-Dep), without collapsing into a purely modal approach.

Fifth, and finally, let us turn to the question of how the nature-based interpretation fares with respect to Descartes's scholastic commitments, as expressed in the Second Replies passage and elsewhere. We noted above that the nature-based interpretation preserves the minimal independence thesis, which served as the interpretation's starting point. It would also seem that the nature-based interpretation is compatible with the other two scholastic theses: all and only the ultimate subjects in which modes inhere are substances; in particular, ordinary objects, which are such ultimate subjects, are substances. These results are entailed by the conclusion of the simple argument, according to which minds and bodies, including ordinary objects, have natures that are nonrelational (again, read strictly). Minds and bodies therefore satisfy the right-hand side of (NI-Sub); they are substances, according to the nature-based interpretation.

It might nevertheless be objected that the simple argument overlooks the possibility that the nature of body may not be *exhausted* by extension, or the nature of mind by thought; in particular, the objection continues, their natures might involve in addition causal relations to other specific entities. As we saw above, cases of causation—specifically, cases in which one body causes another body to exist—raised problems for both the causal interpretation and the modal interpretation and put pressure on their ability to preserve the subject and ordinary conceptions of substance. These cases gave rise to a dilemma: either acknowledge the cases as counterexamples, or reject these two conceptions despite the considerable evidence suggesting that Descartes endorses both.

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The objection we are considering is that the nature-based interpretation might face this dilemma as well.

In the next section, I will address this objection by taking a closer look at the connection between the causal relation and the natures of its relata. I will argue that, according to Descartes, the causal relation in body-body causation does not hold by the nature of either of its relata. I will also discuss the causal relation between created substances and God, which was noted (and postponed) above. If what I say about these cases of causation is correct, then the nature-based interpretation will be well positioned to honor all three of Descartes's scholastic commitments, while also delivering a satisfying answer to the explanatory challenge that yields the correct verdicts about particular cases. In other words, it will be well positioned to satisfy the three desiderata, identified at the end of the previous section, for a successful interpretation of Descartes's notions of substance and independence.

6. Causation and Natures

Do cases in which one body causes another body to exist pose the same dilemma for the nature-based interpretation that they pose for the causal and modal interpretations? The point of contention is whether body-body causation undermines the status of either body as independent, and hence as substance. Since the nature-based interpretation holds that the independence of body, like that of anything else, is a matter of there being no relation to another entity that holds by the nature of that body, answering the question requires knowing whether body-body causation holds by the nature of either of its relata. If it does not, as I will argue, body-body causation does not satisfy the right-hand side of (NI-Dep), and so no counterexample to (NI-Sub) arises.

To begin, consider the following passage from the Second Replies, in which Descartes speaks of the "causal point of view": "It may be, with respect to a given thing, that we understand there to be nothing in the thing itself that precludes the possibility of its existence, while at the same time, from the causal point of view [*ex parte causae*], we understand there to be something that prevents its being brought into existence" (AT 7.152/CSM 2.108). Immediately before this passage, Descartes raises the question of what it is for the *nature* of an entity to imply no contradiction, and hence not to prevent the possibility of its existence. So when Descartes is here speaking about "the thing itself," we may read him as speaking about the nature of a thing. If so, then according to this passage,

the nature of an entity implies no contradiction when nothing in this nature prevents the possibility of its existence. Yet “from the causal point of view” of an entity, Descartes says, there *can* be something that “prevents its being brought into existence.” It follows that “the causal point of view” does not, or at least does not always, concern the nature of an entity.

This makes sense. While facts about causation and causal relations might prevent an entity’s existence, these are, or at least sometimes are, *external* impediments, which do not belong to the entity’s nature. Hence it seems to be Descartes’s view that causal relations, those that prevent something’s existence and presumably also those that bring something into existence, are not, or at least are not always, included in the nature of a given entity—specifically, in the nature of body.⁷⁵

Descartes’s discussion of motion suggests the same view. Descartes holds that motion is by its nature “the transfer of one piece of matter, or one body, from the vicinity of the other bodies which are in immediate contact with it, and which are regarded as being at rest, to the vicinity of other bodies” (*Principles* 2.25, AT 8A.53/CSM 1.233; compare *Principles* 1.65, AT 8A.32/CSM 1.216). Immediately following this definition, it is emphasized that, considered by itself, simply with regard to its nature, motion is only the transfer of a given body. Descartes emphasizes that motion is *not* “the force or action that *brings about* the transfer” (*Principles* 2.25, AT 8A.54/CSM 1.233; my emphasis); such force, or action—the cause—does not belong to the nature of motion. Likewise, we are told, the force, or action—the cause—that reduces motion and brings a moving body to a stop is not part of the nature of motion: contrary to the common belief that “it is in the very nature of motion to come to an end,” Descartes says that a body in motion will not “lose this motion of its own accord and without being checked by something else” (*Principles* 2.37, AT 8A.62/CSM 1.241). Once again, Descartes draws a contrast between what belongs to the nature of a thing (here, motion) and its causal relations, a contrast that indicates that for Descartes causal relations do not, or at least do not always, belong to the nature of the causal relation by their natures.

75. That causal relations are “external” to body and its nature is also suggested by the letter to Mersenne, dated April 26, 1643 (AT 3.649/CSM 216), and by *Principles* 3.22: “Fire, like any other body, having once been formed, always continues to exist unless destroyed by some *external cause*” (*Principles* 3.22, Descartes 1982, 92; my emphasis). See also axiom 10 in the Geometrical Exposition of the Second Replies (AT 7.166/CSM 2.117).

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If this is correct, then a given entity x may stand in a causal relation to y even though it does not do so by x 's nature. In general, a cause might not bear any relation to its effect *by the cause's nature*, and an effect might not bear any relation to its cause *by the effect's nature*. This means that it is false that in every case in which x and y are cause and effect, x depends on y in the sense of (NI-Dep). This remains so even if the laws of nature are necessary, such that given the initial conditions, it is necessary that if a specific cause x exists, then a specific effect y exists as well (that is, that x cannot exist without y). Consequently, the nature-based interpretation delivers the correct verdict: body-body causation does not satisfy the right-hand side of (NI-Dep), and thus it does not undermine the independence of body, or its status as substance.

This result has several implications. First, it entails that the objection (formulated above) to the simple argument is unsuccessful: specifically, the nature of a given body does *not* include its causal relations to other bodies. Second, it confirms that the nature-based interpretation avoids the dilemma facing the causal and modal interpretations. Unlike those interpretations, the nature-based interpretation can honor the subject and ordinary conceptions of substance without eliciting counterexamples arising from body-body causation. Third, it highlights the elegance and power of the answer the nature-based interpretation provides to the explanatory challenge: whether a given relation that one entity x bears to another entity y is relevant to the status of x as a substance is a function of whether that relation belongs to the nature of x . Specifically, causal relations between bodies are not relevant, because they do not belong to the natures of the relata.

To summarize, the answer provided by the nature-based interpretation to the explanatory challenge has several interrelated virtues: it fills the explanatory lacuna afflicting the inherence interpretation; it does so without unprincipled, ad hoc disjunctions of the sort that made the causal interpretation problematic; and by successfully handling cases of body-body causation, it achieves a level of discrimination that surpasses what the modal interpretation, which struggled with such cases, seemed capable of offering. This, in turn, allows the nature-based interpretation to honor Descartes's scholastic commitments.

Of course, body-body causation is not the only case of substance causation. Of special interest in the present context is the causal relation between created substances and God, which is explicitly mentioned in the *Principles* passage. Even if causal relations do not in general hold by the nature of their relata, and causal relations between bodies never hold by

the nature of bodies, one can legitimately ask whether the causal relation between created substances and God holds by the nature of the former. While I will not attempt to answer this question here, I will now try to show that the nature-based interpretation can equally accommodate affirmative or negative answers to it.

This question is connected to the distinction Descartes draws in the *Principles* passage between God and created substances: “The term ‘substance’ does not apply *univocally*, as they say in the Schools, to God and to other things; that is, there is no distinctly intelligible meaning of the term which is common to God and to his creatures.” We have seen above two approaches to this distinction: on the first, it is a distinction between two types of dependence (recall the reading given by the inherence interpretation); on the second, it is a distinction between two types of substance (recall the reading given by the causal and modal interpretations). The nature-based interpretation can be combined with either approach, thereby accommodating, respectively, a negative or an affirmative answer to our question.

Let us consider the hypothesis that the answer is negative: although created substances causally depend on God, the causal relation to God does not hold by the nature of created substances. If so, then created substances are independent of God in the sense relevant to the characterization of substance, provided by (NI-Dep); hence, God and created substances equally satisfy the right-hand side of (NI-Sub). On this hypothesis, then, the distinction drawn in the passage is to be understood primarily as a distinction between different *types of dependence*: causal dependence versus nature-based dependence.⁷⁶

76. While it might be doubted whether this proposal is compatible with Descartes’s claim that the term ‘substance’ does not apply univocally to God and to created substances “as they say in the schools,” there are reasons to think that it is. Notice, first, that although on this proposal the primary distinction in the text is between types of dependence, there remains room to draw another, secondary distinction, as it were, between types of substances. It will be a distinction between those things that do not satisfy the right-hand side of (NI-Dep) with respect to anything, and also *do not* require the ordinary concurrence of anything else in order to exist, on the one hand, and those things that do not satisfy the right-hand side of (NI-Dep) with respect to anything, but *do* require the ordinary concurrence of something else, such as God, in order to exist. Things of both types qualify as substance; but there remains a sense in which they are different *types of substances*. Second, it is an open question what Descartes means by “nonunivocality,” and some of the interpretive options are compatible with this amended proposal. According to the scholastics (or “in the schools”) a term can be nonunivocal in one of two ways: *equivocal* (roughly, there is no common sense in which the term applies) or *analogical* (roughly, there is some com-

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Consider now the hypothesis that the answer to our question is affirmative: it *is* part of the nature of created substances to bear a causal relation to God.⁷⁷ If so, then although created substances do not satisfy the right-hand side of (NI-Dep) with respect to modes or with respect to other created substances, they do satisfy the right-hand side of (NI-Dep) with respect to God. Of course, it would also follow that they do not satisfy the right-hand side of (NI-Sub). In order to secure the claim that, nevertheless, they are substances, it is possible to borrow a page from the causal and modal interpretations and add a third thesis, alongside (NI-Dep) and (NI-Sub):

(NI-Sub_{Created}) x is a created substance if and only if there is only one other entity $y = \text{God}$ such that for some R , xRy by x 's nature but not by y 's nature.

This reading would explain Descartes's distinction between God, who satisfies the right-hand side of (NI-Sub), and created substances, which satisfy the right-hand side of (NI-Sub_{Created}), as a distinction between two *types of substance*.

Again, I do not wish to take a stand here on which of these two answers is preferable. A comprehensive investigation of whether the natures of created substances include a causal relation to God is clearly beyond the scope of this essay. For now it suffices to indicate that the nature-based interpretation is compatible with both answers—and, relatedly, that it can accommodate the distinction in the *Principles* passage between God's independence and the independence of created substances.⁷⁸

mon sense in which the term applies, though it does not apply in all of the same senses). Of course, various scholastic authors understood these alternatives differently. While I cannot pursue the interpretative possibilities in detail here, the broadly Scotist understanding of analogy that Marion (1991) finds in Suárez is precedent for understanding nonunivocity in a way that fits with the current proposal. For recent discussion, see Beysade (1996) and Schmaltz (2000), who understand Descartes's notion of nonunivocity as (Thomist) analogy; Secada (2006) and Marion (1991) prefer equivocity.

77. This would be an exception to the claim made above, in section 5, that to be extended does not involve standing in a relation to any other specific entity.

78. It is also important to bear in mind the possibility that created substances bear another, noncausal relation to God by their nature, perhaps one having to do with their finitude. That the finitude of created substances involves some relation to God, an infinite being, is perhaps suggested in Descartes's comment in the letter, dated April 23, 1649, to Clerselier that "in order to conceive a finite being, I have to take away something from this general notion of [infinite] being" (AT 5.356/CSMK 377). If such a relation to God holds

7. Conclusion

My aim has been to develop a new interpretation of Descartes's notions of independence and substance that focuses on relations that do, and those that do not, hold by an entity's nature. The motivation behind this interpretation is precisely the importance of natures, that is, of what it is for an entity to be the entity it is. What matters for an entity's status as an independent being, and hence a substance, is what an entity is by its nature, rather than whatever extrinsic relations it happens to bear to other entities (for example, causal or modal relations).

Among the central virtues of this interpretation is that it treats the *Principles* passage and the Second Replies passage as expressing two equally important, and mutually compatible, strands in Descartes's theory of substance and independence: whereas the former highlights the general type of independence relevant to an entity's status as substance, the latter focuses on lack of inherence, a particular instance of this general type. By reconciling these passages, rather than prioritizing one over the other, the nature-based interpretation honors Descartes's scholastic heritage—preserving his three scholastic commitments—while also highlighting the philosophical integrity, interest, and innovation of his metaphysics.

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by the nature of created substances, it would support the second approach to the distinction discussed in the main text. I will not pursue this possibility further here.

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