

CARTESIAN SUBSTANCES, INDIVIDUAL BODIES, AND CORRUPTIBILITY

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Abstract: According to the Monist Interpretation of Descartes, there is really only one corporeal substance—the entire extended plenum. Evidence for this interpretation *seems* to be provided by Descartes in the Synopsis of the *Meditations*, where he claims that all substances are incorruptible. Finite bodies, being corruptible, would then fail to be substances. On the other hand, ‘body, taken in the general sense,’ being incorruptible, would be a corporeal substance. In this paper, I defend a Pluralist Interpretation of Descartes, according to which there are many corporeal substances. In particular, I show that none of the claims in the Synopsis about incorruptibility and substance entail either that finite bodies are not substances, or that the only corporeal substance is the entire plenum.

Like nearly all of his predecessors and contemporaries, Descartes holds a ‘substance-based ontology.’¹ According to Descartes’s version, there are two kinds of finite substance: thinking substance or mind, and extended substance or body; and all of the intrinsic features of a substance depend on their substance and are merely modes or ‘ways’ of being that kind of substance.² Everything that is not substance is ontologically-dependent on substance.

Despite the importance and centrality of the notion of substance in his work and the sheer amount of text Descartes devotes to it, there is significant disagreement among scholars about Descartes’s notion of substance. One of the more significant controversies concerns the extension of the term ‘substance’ in Descartes; that is, *which things* Descartes picks

¹In this paper, I employ the following abbreviations:

- AT Descartes (1996), *Oeuvres de Descartes*. Cited by volume and page.
CSM Descartes (1985), *The Philosophical Writings of Descartes*, vol. 1 & 2. Cited by volume and page.
CSMK Descartes (1991), *The Philosophical Writings of Descartes*, vol. 3. Cited by page.
DM Suárez (1965), *Disputationes Metaphysicae*. Cited by disputation, section, and paragraph.

²Here I am ignoring the attributes had by both thinking substances and corporeal substances, such as existence, number, duration, etc.

out with the term ‘substance.’ To my knowledge, a scholarly consensus obtains concerning finite immaterial substances or minds: every mind is a substance, and there is an indefinitely large number of these immaterial substances. However, there is strong disagreement concerning which corporeal things are corporeal *substances*. The interpretation I favor is ‘Pluralism,’ according to which individual bodies including ordinary material objects are Cartesian corporeal substances. Another interpretation, ‘Monism,’ has gained prominence. According to Monism, there is only one corporeal substance, namely the entire extended plenum of matter.

In what follows, I shall be guided by an important methodological consideration, namely to take Descartes’s examples of corporeal substances seriously. Among his examples are the following: A whole human body,³ a hand,⁴ the rest of a human body minus the hand,⁵ half of a teeny-weeny particle (and any proper part of any body),⁶ a stone,⁷ an article of clothing,⁸ a piece of bread,⁹ a piece of gold,¹⁰ and so-called ‘body, taken in the general sense.’¹¹ Now, admittedly, these examples of corporeal substances are not, by themselves, decisive in favor of Pluralism. Even allowing that Descartes says that, say, a human body is a corporeal substance, it is still a matter of controversy *how* Descartes could consider the human body a substance, or whether Descartes could hold that it is a substance.

In fact, many scholars have argued that Descartes *really* does not think that most of his own examples of corporeal substances are in fact substances.¹² Others concede that Descartes holds that individual bodies such as hands and articles of clothing are substances, but they are only substances in an impoverished or derivative sense; that Descartes may have been merely “speaking lightly” when he calls these things substances.¹³

The controversy concerning the substancehood of individual bodies seems to be rooted in two sources. First, individual bodies do not satisfy the conditions for being *really distinct*, and a real distinction is a relation that obtains between all and only substances. If that is true, then individual

³ AT VII 78; CSM II 54, AT VII 222; CSM II 157, AT III 476; CSMK 202, AT III 508; CSMK 209.

⁴ AT VII 222; CSM II 157.

⁵ AT VII 222; CSM II 157.

⁶ AT III 477; CSMK 202–203, AT VIII 28–28; CSM I 212, AT VIII A.

⁷ AT VII 44–45, CSM II 30–31, AT VIII 29–30; CSM I 214, AT VIII A 46; CSM I 227–228.

⁸ AT VIII B 351; CSM I 299, AT VII 441; CSM II 297, AT III 460; CSMK 200.

⁹ AT IV 372; CSMK 284.

¹⁰ AT IV 372; CSMK 284.

¹¹ AT VII 14, CSM II 10.

¹² See Woolhouse (1993), Cottingham (1986), Stuart (1999), Smith and Nelson (2010), Sowaal (2004), Gueroult (1968–1974), and Secada (2000). Secada concedes that Descartes ‘sometimes’ calls individual bodies substances (2000, 297n36). While true, Secada’s statement is a Gricean nightmare; after all, ‘sometimes’ conversationally implies that it is not very often. But, as we have already seen, nearly all of Descartes’s examples of corporeal substances are individual bodies.

¹³ See Stuart (1999, 100).

bodies will not be Cartesian substances. I address this concern elsewhere; in this paper, I concentrate only on the second source of controversy: In a passage from the Synopsis of the *Meditations*, whose point is reiterated in the Second Replies, Descartes seems to place conditions on substancehood that would rule out the existence of a plurality of individual corporeal substances, or at the very least would rule out the substancehood of ordinary objects such as a human body, a shirt, and a stone. Henceforth, I will refer to these texts as the ‘recalcitrant texts.’ A substance, we are told in the recalcitrant texts, is incorruptible by its very nature. Individual thinking substances or minds are incorruptible, but individual bodies, like all composite things, are corruptible. It seems, then, that individual bodies are not Cartesian corporeal substances. But Descartes, in the Synopsis, adds that something he calls ‘body, taken in the general sense’ is incorruptible and hence is a substance.

In this paper, I will argue that nothing Descartes claims in the recalcitrant texts entails that individual bodies are not substances. I start by clarifying exactly what these texts do and do not say. In the second and third parts of this paper, I examine the crucial notions of ‘body, taken in the general sense’ and incorruptibility respectively; and I examine how each of these concepts must be understood, given the particular datum that body in general—*whatever* it is—is incorruptible according to Descartes. In the fourth part, I argue that the plausible candidates for being body in general and being incorruptible do *not* entail that the human body and other individual bodies are corruptible in a way that would preclude their status as a Cartesian substance. This is a good result insofar as it makes sense of the recalcitrant passages, does not affect Descartes’s stated goal in those passages (namely to argue for the natural immortality of the soul), and it gives the result that all of Descartes’s examples of corporeal substances can be corporeal substances.¹⁴

1 The Recalcitrant Texts

The Synopsis of the *Meditations* contains one of the most interesting and problematic passages in all of Descartes’s works. In this passage, Descartes discusses the immortality of the soul/mind. The key to this immortality is

¹⁴Two other preliminary considerations require mentioning. First, I will not discuss either Descartes’s ‘Independence criterion’ or his ‘Subject criterion’ for substancehood. I believe that the issue of corruptibility and substance is distinct from the issue of whether certain individuals satisfy the Independence or Subject criteria for substancehood. And although these are important issues, they must wait for another occasion. Second, I will also assume the following methodological principle: Any plausible interpretation of a philosopher absolutely must not commit him to the existence of anything he *explicitly* and *repeatedly* claims is *impossible*. It might seem unnecessary to mention this preliminary. However, as we shall see, several Descartes scholars (unknowingly, I presume) violate this important methodological principle. An interpretation that violates this principle *could* be given, but it is unclear that it would be an interpretation of *Descartes*.

showing that the death of the body, or any intrinsic change to an extended thing, could not affect the existence of the mind. Therefore, barring annihilation of the mind by God, the mind is immortal. Crucially, Descartes claims that “the first and most important prerequisite for knowledge of the immortality of the soul is for us to form a concept of the soul which is as clear as possible and is also quite distinct from every concept of body” (AT VII 13; CSM II 9). He takes himself to have shown this in the Second and Sixth Meditations.¹⁵ Descartes continues:

[W]e cannot understand a body except as being divisible, while by contrast we cannot understand a mind except as being indivisible. For we cannot conceive of half of a mind, while we can always conceive of half of a body, however small; and this leads us to recognize that the natures of mind and body are not only different, but in some way opposite. . . . [T]he destruction [*interitum*]¹⁶ of the mind does not follow from the corruption [*corruptione*] of the body. . . . [A]bsolutely all substances, or [*sive*] things which must be created by God in order to exist, are by their nature incorruptible, nor can they ever cease to exist unless they are reduced to nothingness by God’s denying his concurrence to them. Secondly, we need to recognize that body, taken in the general sense, [*corpus quidem in genere sumptum; le corps, pris en general*] is a substance, so that it too never perishes. 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. For even if all the accidents of the mind change . . . it does not on that account become a different mind; whereas a human body becomes another body merely as a result of a change in the shape of *some* of its parts.¹⁷ And it follows from this that

¹⁵ The subtitle of the 1641 first edition of the *Meditations* was “*in which the existence of God and the immortality of the soul are demonstrated*” [*in qua Dei existentia et animae immortalitatis demonstratur*], but the subtitle of the 1642 second edition was “*in which the existence of God and the distinction between the human soul and body are demonstrated*” [*in quibus Dei existentia et animae a corpore distinctio demonstrantur*]. (The 1647 French translation retains the subtitle of the second edition.) This is speculation, but perhaps the reason for this change was due to Mersenne questioning whether Descartes in fact demonstrates the immortality of the soul in the *Meditations*. In the 24 December 1640 letter to Mersenne, which will we will see shortly, Descartes concedes that the real distinction arguments in the Sixth Mediation do not establish the immortality of the soul because God could annihilate the soul upon the death of the body.

¹⁶ The verb ‘*intirire*’ is important, as we shall see shortly.

¹⁷ In *Principles* II.6, Descartes explains rarefaction of the *one and the same* body in terms of change of shape (as well as in terms of subtle matter infiltrating ‘pores’). So obviously

while the body can very easily perish [*interire*], the mind is immortal by its very nature. (AT VII 13–14; CSM II 9–10)

The main point of this passage, of course, is that the death of the human body or the destruction of *any* body does not entail the destruction of the mind. As Descartes says in a letter to Mersenne, responding to an objection that he has not proven the immortality of the mind:

You say that I have not said a word about the immortality of the soul. You should not be surprised. I could not prove that God could not annihilate the soul, but only that it is by nature entirely distinct from the body, and consequently it is not bound by nature to die [*mourir*] with it. This is all that is required as a foundation for religion, and is *all that I had any intention of proving*. (AT III 265–266; CSMK 163, emphasis mine)

And when asked about the immortality of the soul in the Second Objections, Descartes refers his objector to the Synopsis passage and reiterates its main points:

I did already explain this [the immortality of the soul] in the Synopsis of my *Meditations*. And . . . I did provide an adequate proof of the fact that the soul is distinct from every body. . . . Our natural knowledge tells us that the mind is distinct from the body, and that it is a substance. But in the case of the human body, the difference between it and other bodies consists merely in the arrangement of the limbs and other accidents of this sort; and the final death of the body depends solely on a division or [*aut*] change of shape. Now we have no convincing evidence or precedent to suggest that the death or [*sive*] annihilation of a substance like the mind must result from such a trivial cause as a change in shape, for this is simply a mode, and what is more not a mode of the mind, but a mode of the body which is really distinct from the mind. Indeed, we do not even have any convincing evidence or precedent to suggest that any substance can perish [*interire*]. And this entitles us to conclude that the mind, in so far as it can be known by natural philosophy, is immortal. (AT VII 153–154)¹⁸

However, the recalcitrant texts seem to contain a further argument, an argument that will be my focus in this paper.

there are changes of shape that don't affect identity (e.g., in cases of rarefaction) and there are changes of shape that do affect identity (e.g., those changes that result in the body's not having the appropriate disposition to sustain life).

¹⁸ See January 1642 letter to Regius (AT VI 59–60; CSM I 141).

(1) All substances are incorruptible.

(2) The human body is corruptible.

So, (3) The human body is not a substance.

And in the Synopsis passage, Descartes claims that, in addition to minds, ‘body, taken in the general sense,’ however, is incorruptible. It follows that:

(4) Body, taken in the general sense is incorruptible and is hence a substance.

Generalizing from this argument, as some scholars have,¹⁹ Descartes appears to be committed to the view that individual bodies—and hence most of Descartes’s examples of corporeal substances—are not in fact corporeal substances.²⁰ Anything composite could cease to exist through a change in shape, as the human body does, and would be corruptible and thus not a substance.²¹ Living creatures, artifacts, and ordinary medium-sized bodies are all composite, and hence they are susceptible to ceasing to exist in this manner. If the recalcitrant texts commit Descartes to the view that anything that can cease to exist in this manner is not a substance, then it is not clear how any of Descartes’s examples of corporeal substances could be substances. And yet nearly every example of corporeal substance is a composite material thing. Needless to say, there is problematic tension here.

1.1 What the Recalcitrant Texts Do *Not* Say

Because the implications of the recalcitrant texts are far-reaching, we must be very careful to be clear about exactly what the recalcitrant texts say and do not say. *First*, contrary to some prominent interpretations, the texts do not say that the entire extended plenum is a substance, let alone the only substance. The meaning of ‘body, taken in the general sense’ (henceforth ‘body in general’) is not obvious at first glance,²² and at second glance, what it means will depend on what Descartes means by ‘incorruptibility.’ After

¹⁹ See Cottingham (1986), Secada (2000), Woolhouse (1993), Gueroult (1953, 1968–1974), Smith and Nelson (2010), Lennon (1994, 2007), Rodis-Lewis (1950), Sowaal (2004).

²⁰ Cottingham (1986, 84): “Thus, though it may undergo indefinitely many changes or modifications, corporeal substance or ‘body’ in the general sense, never perishes. . . . Descartes offers a radically monistic view of corporeal substance. The physical universe is a single indefinitely extended thing. . . . Individual items—planets, horses, trees—are thus construed simply as local modifications of the single extended substance.”

²¹ Descartes (AT XI 28): “*mais que, generalement, tous les corps qui paraissent autour de nous, sont mélez ou composez, & sujet à corruption*” [to be sure that, in general all bodies that appear around us are mixed or composite and subject to corruption]. See also Stuart (1999, 100).

²² Laporte (1950), Schmaltz (2002), and Hoffman (1999) have pointed out that if Descartes intended body in general to be the entire plenum, then it would have been more appropriate and accurate to use ‘*corpus in globo*.’ As we shall see, ‘*in genere*’ has a widely-accepted standard use in the seventeenth century, and it does not mean anything like ‘all,’ as the monist interpretation would have us believe.

all, *whatever* body in general is, it must be something incorruptible—in Descartes’s sense of ‘incorruptible.’ It is, nevertheless, equally clear that this text does not rule out Monism. Other considerations would need to be brought in either way.

Second, the recalcitrant texts do not commit Descartes to certain controversial forms of essentialism, such as mereological essentialism, the doctrine that a thing could not have any parts other than those it actually has, nor could it persist through any loss or addition of parts. Descartes does not say that a body ceases to persist if it loses or gains parts, let alone if it loses *any* of its parts or gains *any* new parts. Rather he says that a body ceases to persist in virtue of a change in the *shape* of *some* of its parts; and shape is a mode, and modes are not parts, according to Descartes.²³ If anything, the recalcitrant texts are silent on the issue of mereological essentialism, and they must be, given Descartes’s commitments elsewhere. For instance, in an important letter to Mesland (AT IV 166–167; CSMK 242–243), Descartes explicitly says that the human body in so far as it is united to the soul can survive a whole host of changes in its material parts,²⁴ as can a river.²⁵ In the recalcitrant texts, if Descartes were committing himself to mereological essentialism about bodies, let alone the human body, he would be holding something he explicitly denies in the letter to Mesland. And as we have seen, there is no explicit textual evidence in the Synopsis that he is making such a commitment.

Nor does Descartes hold what I shall call ‘diachronic superessentialism’ about bodies—the view that a body cannot persist through any change of modes.²⁶ Although Descartes claims that the human body cannot persist through certain changes of shape, he says, more precisely, that it cannot survive a change in the “shape of *some* of its parts.” Presumably, this degree of specificity would not be worth mentioning if Descartes were thinking that a body cannot survive *any* change in modes. Furthermore, Descartes explicitly rejects diachronic superessentialism. For instance, in *Principles* I.64, he says that “one and the same body [*unum & idem corpus*], with its quantity unchanged, may be extended in many different ways (for example, at one moment it may be greater in length and smaller in breadth and depth, and a little later, by contrast, it may be great in breadth and smaller in length)” (AT VIII A 31; CSM I 215, emphasis mine).²⁷ And in a letter

²³ See also AT VIII A 48; CSM I 229.

²⁴ See AT IV 166–167; CSMK 242–243.

²⁵ See AT IV 165; CSMK 242.

²⁶ ‘Superessentialism’ is a term prominent in Leibniz scholarship. Leibnizian superessentialism however differs in two ways from diachronic superessentialism: (1) The former allows for changes in the properties of a substance over time, whereas the latter does not. (2) The former, however, denies that something could have had any properties other than the ones it actually has at different times (i.e., if x if F at t , then anything (possible or actual) that is not F at t is not x), whereas the latter is silent on that issue.

²⁷ In this passage (and what precedes it), Descartes claims that a body can change in exactly the same way that minds can change their particular thoughts. See [Stuart \(1999\)](#). Spinozists

to an unknown correspondent, Descartes says: “Thus shape and motion are modes, in the strict sense, of corporeal substance; because the *same body* can exist at one time with one shape and at another with another, now in motion and now at rest.” (AT IV 349; CSMK 280, emphasis mine) Finally, in the famous wax example from the Second Meditation, the wax undergoes a change in shape, etc., but Descartes asks: “*Remanetne adhuc eadem cera?*” and unequivocally answers: “*remanet cera*” (AT VII 30; CSM II 20). The *same* wax survives changes in modes.

Third, if Descartes were to hold that a body cannot survive *any* change of modes, then he would be committed to the denial of corporeal *accidents*, a category of properties he clearly accepts, as well as a type of change which he accepts (i.e., alteration or ‘accidental change’). For instance, he tells Regius that “the term ‘accident’ means anything which can be present or absent without the *corruption* of the subject [*sine subjecti corruptione*]” (AT III 460; CSMK 200).²⁸ The use of ‘corruption’ here is quite telling; Descartes is characterizing accidents as those determinate modes with respect to which a subject can change without that subject being *corrupted*.²⁹

We have now seen what Descartes does *not* hold in the recalcitrant texts, but nevertheless those texts do seem to rule out the substancehood of the human body or any ordinary material object. In order to see whether this is truly the case, we need to answer certain questions: What does Descartes mean by ‘body in general’? What is corruptibility? Does the fact that the human body is corruptible really entail that it is not a substance? We will now look at these questions in turn.

2 What Is ‘Body, Taken in the General Sense’?

The notion of body in general and equivalent notions are found in a number of places other than the recalcitrant texts. With one exception, a uniform general picture of what body in general is emerges.³⁰

Monist scholars suggest that body in general is the entire plenum, and it is the only corporeal substance; thus they make Descartes out to be much

will have a harder time dealing with this passage, however. Also, in *Principles* II.6, Descartes explains the rarefaction of the same body in terms of change in shape.

²⁸ This is the standard definition of ‘accident.’ See, for instance Peter of Spain: “accident: what is present to and absent from a thing without the corruption of its subject” (1972, 83).

²⁹ See also the August 1649 letter to More: accidents are “all the things which can be present or absent without the corruption of their subject [*sine subjecti corruptione*]” (AT V 403; CSMK 381).

³⁰ This well-known anomalous text is found in the 9 February 1645 letter to Mesland (AT IV 166–167; CSMK 242–243), which, for reasons of length, I will not quote here. Although this anomalous text does not fit into the uniform characterization of body in general I will discuss very shortly, two points about it must be made. The first is that my Monist opponents must also admit that the notion of body in general found in the anomalous text is not the notion found in the Synopsis; the latter is incorruptible, whereas the former is highly corruptible. The second is that the anomalous text supports Pluralism; there are lots of bodies in general.

more of a Spinozist than even Spinoza thought!³¹ I address the Monist Interpretation toward the end of section 3; so I will not discuss it here.

Although Descartes's references to 'body in general,' 'extension in general,' and 'matter in general' are not difficult to find, I will focus on texts in which Descartes discusses these notions in a way that makes them a plausible candidate for being something incorruptible and thus a candidate for body in general in the Synopsis. And as we shall see, the notion of body in general found in Descartes is also common in the works of many early modern philosophers.³²

In a June 1645 letter to an anonymous correspondent, Descartes says: "I explained our idea of body in general [*cors en general*], or of matter, as being no different from our idea of space" (AT IV 224; CSMK 252). Here Descartes is referring to the explanation he gives in *Principles* II.10, in which he says that there "is no real distinction between space or internal place, and the corporeal substance contained in it." In *Principles* II.4, a section whose title proclaims "The nature of body consists . . . solely in extension," Descartes gives his typical characterization of body in general: "the nature of matter, or body considered in general [*sive corpus in universum spectati*] [*la nature de la matiere, ou du corps pris en general* (AT IX 65)³³], consists . . . simply in its being something which is extended in length, breadth and depth" (AT VIII A 42; CSM I 224). In *Principles* II.18, he says that "there is a very strong and wholly necessary connection between the concave shape of the vessel and the extension, taken in its general sense [*extensionem in genere sumptam*], which must be contained in the concave shape" (AT VIII A 50; CSM I 230). And in a letter to Mersenne written between the *Discourse* and the *Meditations*, Descartes writes: "For the idea that we have of body, or matter in general [*du cors, ou de la matiere en general*], is contained in the idea that we have of space, i.e. of something which has length and breadth and depth" (AT II 482; CSMK 132).

Based on these texts, I want to suggest a candidate for body in general, one that is not only rooted in the texts above, but which has additional support from two of Descartes's important thought experiments. In *Principles* II.12, as in other texts, Descartes discusses *extensio in genere*, "which is thought of as being the same, whether it is the extension of a stone or of wood, or of water or of air or of any other body . . . provided that it

³¹ See Lennon (1994, 2007), Gueroult (1953, 1968–1974), Secada (2000), Woolhouse (1993), Cottingham (1986), Smith and Nelson (2010), Sowaal (2004).

³² Slowik (2001, 7): "What Descartes seems to be stressing in this passage [i.e. Synopsis] is that the nature of the human body, as a substance or unique entity depends upon a distinct correlation of its numerous parts; a correlation of parts, moreover, that is not required for the substancehood of mind or of *any body* not possessing a complex internal structure—that is, not required of body taken *generally*."

³³ Note: '*le corps pris en general*' is exactly how 'body, taken in the general sense' is translated in the 1647 French translation of the *Meditations*. So the fact that the Latin texts differ is unimportant.

has the same size and shape, and keeps the same position relative to the external bodies that determine the space in question” (AT VIII A 46–47; CSM I 228).³⁴ It may be thought that Descartes is merely talking about matter or extension, but I want to suggest that he is telling us exactly what body in general is. Body in general is *any body, considered merely as extended*; that is, it is any body *qua* body. Looking back to the Synopsis, Descartes uses ‘cognitive’ language to discuss body in general: it is ‘body, taken [*sumptum, pris*] in the general sense.’ This notion should not strike us as peculiar, especially considering the famous wax example in the Second Mediation and one of the things it illustrates. Among other things, the wax example shows that the nature of body is extension; that is, the nature of body *qua* body (not *qua* wax) is extension. The wax is taken as body in general, and, contrary to what Descartes curtly and misleadingly tells Hobbes, that is (and *must* be, for the purposes of Descartes’s project in the *Meditations!*³⁵) of the points of the wax example (AT VII 175; CSM II 124). After all, Descartes cannot claim to know the nature of the wax (which is merely a proxy for *any* body) without showing what the nature of the wax *is*—namely extension.³⁶ An even more important thought experiment is found at *Principles* 2.11.³⁷ Descartes asks us to consider the a stone:

Suppose we attend to the idea we have of some body, for example, a stone, and leave out everything we understand to be non-essential [*non requiri*] to the nature of body: we will first of all leave out hardness, since if the stone is melted or pulverized it will lose its hardness without thereby ceasing to be a body [etc.] . . . and finally we will leave out cold and heat and all other such qualities, either because they are not thought of as being in the stone or because if they change, the stone is not on that account thought to have lost the nature of body. After all this, we will see that nothing remains in the idea of the stone except that it is something extended in length, breadth and depth. (AT VIII A 46; CSM I 227)

³⁴ See Schmaltz (2002, 99–100). Note: having the same size, shape and position is not a necessary condition for being ‘extension in general’; what Descartes says is that extension in general “is thought of being the *same*” only if same *size*, etc.

³⁵ See AT VII 13; CSM II 9.

³⁶ Descartes says: “And yet, and here is the point,” and goes on to claim that his perception of the wax is not by means of the senses or of the imagination, but of the mind/intellect (AT VII 31; CSM II 21).

³⁷ Rozemond (1998) thinks that these two arguments are quite different. The wax argument is an ‘Argument from Change,’ and the stone argument is an ‘Argument from Elimination.’ However, the reason she thinks they are different is that they are commonly, though mistakenly, taken to be arguments against the existence of sensible qualities. (She disagrees.) But for the purposes of demonstrating the nature of body, they are sufficiently similar, *and* they both effectively show not only that sensible qualities do not belong to the nature of body but also that the nature of body *qua* body is extension.

In both the wax example and the stone example, a particular body is used to demonstrate something not about the nature of this or that kind of body but about the nature of body in general—something of the kind *body*.³⁸ To be sure, the stone and the wax examples illustrate the nature of body, not by holding that the wax and the stone actually lack certain features that make them a stone and wax, but by *considering* them—‘grasping’ or ‘taking’ them—merely *qua* bodies or extended things. The wax and the stone are examples of particular bodies being considered as instances of body in general.³⁹ The stone, the wax, the dog, etc. actually have *determinate* shapes and sizes, and they actually have qualities that cause perceivers to have ideas of colors and tastes (whether or not they actually have colors, tastes, etc.). The stone actually is, say, round, but its roundness is not part of the nature of body (*qua* body), nor is it part of the nature of the stone *qua* body. In order to understand the nature of body—what *every* body *necessarily* is—we *consider* the stone minus some properties it actually has. That is, we consider it *qua* body, i.e., *qua* something in the genus of body without regard for its determinate properties, i.e., as body in general. And, of course, it is one of the most famous Cartesian doctrines that “nothing whatsoever belongs to the concept of body [*rationem corporis*] except the fact that it is something which has length, breadth and depth” (AT VII 440; CSM II 297).

It should be noted that understanding body in general as any body considered merely as extended, as I am suggesting, is not something peculiar to Descartes. On the contrary, this view is incredibly common in the seventeenth century, even among very different sorts of philosophers. For instance, in the course of discussing his non-scholastic account of *materia prima*, Hobbes characterizes body in general in the manner I have suggested:

Materia prima . . . signifies a conception of body without the consideration of any form or other accident except only magnitude or extension, and aptness to receive form and other accident. So that whensoever we have use of the name *body in general* [*corpus generaliter sumptum*], if we use that of *materia prima*, we do well. . . . *Materia*

³⁸ Imagine that Descartes uses a different example in the Second Meditation: Suppose that as Descartes places the wax near the fire, the body he is holding sprouts hair, four legs, a tail, and starts barking at the person delivering his mail. It seems that this example, while not achieving every goal of the original wax example (for instance, it won’t establish that we know the wax by the intellect rather than our perceptions of its sensible qualities), will achieve the goal of showing the nature of body. After all, at the end of the example, we don’t have wax at all; *a fortiori*, we don’t have the *same wax*. But the point Descartes is making about the nature of *body* remains: the *terminus ad quem* (the dog), despite having none of the qualities of the *terminus a quo*, the wax, is still a body, i.e., something extended.

³⁹ A similar thought experiment is found in *Principles* II.4, in which features of a body that do not belong to the nature of *body* are eliminated. AT VIII 42; CSM I 224. See also AT VII 358, CSM II 248, and *Principles* II.19.

prima, therefore, is body in general, that is, body considered universally [*corpus consideratum universaliter*], not as having neither form nor any accident, but in which no form nor any accident but quantity are at all considered.” (*De Corpore* 2.8.24)

Hobbes, like Descartes, holds that body in general is not something that is *only* extended; rather it is something whose extension or quantity is the only thing considered.

Later Cartesians also understood body in general—and *Descartes*’ notion of body in general—in this way. Consider Antoine Le Grand’s discussion of ‘first matter,’ which is

a *Body*, as it may be conceived by us without any *Figure*, *Hardness*, *Softness*, *Colour*, or any other Modifications, and only as Extended and consisting of Three *Dimensions*. . . . *First Proposition*: The First Matter is *without form*: For in this, the Notion of *Extension* is abstracted from all Modification . . . (1694, 94; emphasis mine)

For as Humanity, or the Nature of *Man*, doth not differ from *Man* generally consider’d, but only as an Abstract and Concrete, so neither doth Extension differ from a *Body* in a general acceptation. (94)

And after a long discussion of the nature of corporeal things, under the subject-heading “*De Affectionibus Corporum in genere*,” Le Grand says: “Hitherto we have considered the *Nature* of a *Body* in *General* [*Naturam Corporis in genere*]” (1679, 4.9.10; see also 4.7.11).

Walter Charleton, the person mostly responsible for a resurgence of atomism in England, who disagrees with Descartes on a number of issues (e.g., infinite divisibility, atomism, void space) states the following in a discussion explicitly about *Descartes*’ view of body: “the Essence of matter, or a *Body* considered in the *General* doth not consist in hardness, weight, colour, or any other relation to the senses; but only in its *Extension* into three *Dimensions*” (*Physiologia*, 1654, 1.3.1).

If Descartes were not using ‘body in general’ in something like the sense described above, he would be bizarrely deviating from the use of his contemporaries. Furthermore, he would be deviating from the standard use of the modifier ‘in general’ in late medieval and early modern philosophical works.⁴⁰ Standard texts by Eustachius a Sancto Paulo, Christof Schleiber (‘the Protestant Suárez’), Johann Magirus, and Francis Burgersdijk frequently introduce a topic as ‘*x in genere*’ and then proceed with a

⁴⁰ Others, Crakanthorpe for instance, *Introductio in metaphysicam* (1619), use the phrase “*in communi*” and others use “*in universam*.”

discussion of the different species of *x*.⁴¹ So ‘*corpus in genere*’ and ‘*corpus sumptum in genere*’ would just be body in general or body considered in general in nothing more than the sense described above. In the Synopsis, after all, Descartes too mentions body in general and then goes on to discuss a *species* of the genus *body*—the human body.

3 Corruptibility

The Aristotelian-Scholastic philosophy, which Descartes learned at La Flèche, meticulously mapped out various kinds of change: change of place in terms of local motion, alteration or qualitative/accidental change, change of quantity or augmentation/diminution, and substantial change or generation/corruption (Des Chene 1996, 25).⁴² And all of these kinds of change differ from creation and annihilation, in which things come into existence *ex nihilo* and go out of existence *ad nihilum*. Although Descartes and other early modern mechanical philosophers reject many of the ontological commitments underlying scholastic accounts of change, they recognize the difference between substantial change and creation/annihilation, and the difference between accidental change and substantial change. Something peculiar about Descartes’s view, at least in the Synopsis, however, is his claim that substances are incorruptible and just how far this seems to diverge from scholastic thought. According to the scholastics, the substantial change of generation and corruption is a kind of change proper *only* to composite substances and to *all* composite substances. Generation and corruption just *are* substantial change. Perhaps when we properly understand what Descartes’s notion of corruptibility, this apparent divergence will vanish.

There are two ways in which a substance can cease to exist, either by being annihilated or by being corrupted. Annihilation is the complete ceasing to exist of a substance and all of the substance’s parts, including its ‘metaphysical parts,’ such as matter and substantial form.⁴³ Unlike corruption, annihilation eliminates even the underlying matter, the substratum of substantial change; in cases of annihilation, the matter does not become the matter of another substance, rather it ceases to exist altogether. As Suárez, the best representative of early-modern scholasticism says:⁴⁴

[A]nnihilation signifies, as it were, a complete and whole change [*mutationem quasi integram et totalem*] which

⁴¹ See Eustachius, *Summa philosophiae* (1609); Scheibler, *Metaphysica duobus libris* (1665); Magirus, *Physiologiae* (1597); Burgersdijk, *Institutionum metaphysicarum* (1653, 66ff, 227–230).

⁴² See Aristotle’s *Physics* 5c1, 225a.

⁴³ “*annihilatio . . . quod transitum ab esse ad non esse*” (Coimbra Commentators 1984, 1.4.16.1; quoted in Gilson 1979, §103).

⁴⁴ For a different view of Suárez’s influence (or lack thereof) on Descartes during the *Meditations*-period, see Clemenson (2007).

makes a thing cease to exist completely. (1616–1617, 50.7.5)

[A] difference between the destruction of a thing by corruption and by annihilation is to be noted...For in annihilation, an essence in its total self and all of its parts is altogether destroyed, because it is altogether deprived of being; for *that is the nature of annihilation, that it leaves no being, neither integral nor partial*, and so it leaves nothing of essence. . . . But then in corruption, although the essence that is corrupted, . . . is destroyed so that the whole no longer remains, nevertheless it is not so destroyed that *some part* of the essence cannot remain; for the subject or matter always remains, and sometimes even the form, as in the death of a man. (DM 31.12.37; emphasis mine)⁴⁵

According to Aquinas, there are two general sorts of corruption-*simpliciter*: The first sort, applicable to both living and non-living things, occurs when a substantial form that was present in matter—thus composing a ‘complete’ substance—is no longer present, and the matter becomes informed by a new substantial form. The second sort of corruption, which is a species of the first but is applicable only to living things, consists in death. Consider what Aquinas says about generation and, by implication, corruption:

‘generation’ is used in two ways. In one sense, common to everything subject to generation and corruption, and in this sense generation is nothing but change from non-existence to existence. In another sense, proper to living things, and in this sense ‘generation’ signifies the origin of a living being from a conjoined living principle. And this is properly called birth. . . . In living things, which proceed *de potentia* to actual life, such as men and animals, generation includes both these kinds of generation. (ST Ia.27.2.res)⁴⁶

Aquinas’s view is echoed by many others, including Suárez: “In the first way, [generation] means the production of a substance from preceding matter. In another way it is especially taken to mean the birth or conception of the living” (1856–1878, vol. 1, 720). What Aquinas says about generation—“*generatio non fit ex non ente simpliciter*”—is said about corruption: corruption is not a change to non-being *simpliciter*: “For when

⁴⁵ Suárez (1616–1617, 50.7.8): “Annihilation, however [as opposed to corruption], is properly opposed to creation, and it signifies the destruction of the being *qua* being or as having being through creation.” Suárez (1616–1617, 50.7.9): *annihilatio est desitio totius entis secundum se* . . .

⁴⁶ See SCG I.26, I.99, II.57 and DPN 1, 12.

a thing is corrupted it does not dissolve into absolute non-entity, any more than a thing is generated from absolute non-entity” (SCG II.55). Rather, corruption is a change of species or kind in virtue of the loss of one substantial form and gaining of another: “[Ev]erything that is changed from species to species is corrupted” [*omne quod mutatur de specie in speciem corrumpitur*] (SCG II.80).⁴⁷

Kinds or species are crucial to the concepts of generation and corruption. After all, generation and corruption are *substantial change*, and for most scholastics only things of a kind are substances. This general view about generation and corruption survives in counter-reformation scholastics such as Toletus, Eustachius a Sancto Paulo (*Summa* 2.2.2.5), the Coimbran Commentators, Magirus (*In phys.* 1.5.com.), Fonseca, Scipion Duplex (*The Resolver or Curiosities of Nature*, 222), and Suárez (DM 7). For instance, Toletus—with whom Descartes is familiar as far back as his education at La Flèche⁴⁸—states

Indeed, you know that which is generated and corrupted *always differ in species or genus*: for never is the one corrupted into another of the same species, but [into] another [species], as a man into a cadaver, fire into water, air into fire, and the same goes for everything. (1615–1616, 1.4.7; emphasis mine)

The standard view holds that corruption involves a change of kind. If x is corrupted, *something* of x remains, namely the matter previously informed by the form F -ness. On the other hand, if x is annihilated, absolutely nothing remains of x . In the case of a living thing, corruptibility consists in ceasing to exist by dying and ‘becoming’ a corpse; a corpse is a different kind of thing from the living creature. The view that death is a case of corruption is a widely-accepted scholastic view,⁴⁹ one inherited by the

⁴⁷ Coimbrans, *De gen. & corr.*, 1.3.exp., (1984, 40): “*Corruptio est mutatio totius, id est, ex toto, sub eadem material.*”

⁴⁸ Clemenson makes the persuasive claim that Fonseca, Toletus, Rubio, and the Coimbran Commentators are most likely that the scholastics with whom Descartes is familiar when writing the *Meditations*. See Clemenson (2007, 9–10) for a list of ‘the La Flèche texts,’ i.e., those texts that “were written by authors Descartes can be shown (with a high degree of probability) to have read at La Flèche.”

⁴⁹ The scholastics generally follow Aristotle (*De gen. & corr.* 1.3) in holding that every instance of generation is also an instance of corruption, and vice versa. Thus, they have certain views about death and the relationship between the living human body and its corpse. Either they deny that every corruption (in this case, death) is a generation of something other individual—so that a corpse is not an individual of a kind/species but perhaps a mere *ens per aggregationem*. Eustachius, for instance, rejects both the *forma cadaveris* and the *forma corporeitatis* and holds that the corpse is merely an aggregate of the parts of the living body which have their own forms, both in the living body and in the corpse (*Summa* 257). Or they must explain how the corpse is a thing, not only having accidents, but accidents qualitatively indistinguishable from those of the living body. Several positions were taken on this issue. For instance, Duns Scotus and Henry of Ghent, postulated a *forma corporeitatis*, which the living body and the corpse have even after the death of the living human body. Another tradition,

sixteenth and seventeenth-century counter-reformation scholastics, as well as the mechanical philosophers of the seventeenth century. Of course, the latter dispense with the metaphysically-spooky features of the scholastic accounts, such as substantial forms, prime matter, *forma corporeitatis*, *forma cadaveris*, etc.

Without exception, early modern philosophers, very different from each other in many respects, emphasize that corruption is a change of kind or sort. To illustrate and press this point, I present merely a small sample:

The Aristotelian, Daniel Sennert:

Herein therefore consists the whol Nature of Generation and Corruption, that the last and specifick form be abolished, and another arise, or be introduced, by which the compound generated may differ specifically or as another sort . . . Yet it must be here observed, that the Generation of one, is not the corruption of a body of the same sort, but of another of a different sort. (*13 Books of Natural Philosophy*, 1661, III.3)

Hobbes:

When we say an Animal, a Tree, or any other specified body [*corpus nominatim*] is generated or destroyed [*Perire*], . . . [we mean that were made] a non-animal from an animal, from a tree a non-tree, &c. That is, that those accidents for which we call one thing an animal, another thing a tree, and another by some other name, are generated and destroyed [*interire*]; and that therefore the same names are not to be given to them now, which were given to them before. (*De Corpore*, 1655, 2.8.23; emphasis mine)

Robert Boyle:

so when a Body comes to loose *all* or *any* of those Accidents that are *Essential*, and necessary to the constituting of such a Body, it is then said to be *corrupted* or destroy'd, and is no more a Body of *that Kind*, but looses its Title to its former Denomination . . . 'tis no longer *such a Body*, as 'twas before, but perisheth in the capacity of a Body of that Kind. (*Works*, 1999–2000, V 329)

the '*forma cadaveris* tradition,' holds that the *matter* of the living body and its corpse are the same, but upon death the form of the living body evacuates the matter and a *forma cadaveris* informs the matter. We can say, then, that the living body and the corpse are neither the same individual nor individuals of the same species. As Suárez says: "For in the death of a human being or of any animal, a *forma cadaveris* is introduced in order that the matter may not remain without a form. . . . [O]ne should say that the cadaver is different in species, and consequently, is numerically distinct [from the living body]" (DM 15.10.15). See also Des Chene (2000, 91–92) and Adams (1987, 648–652).

Walter Charleton:

By the terme GENERATION, we ought præcisely to understand that *Act of Nature, whereby she produceth a Thing de novo, or gives Being to a Thing, in some certain Genus of Bodies Concrete*: and consequently, by its Contrary, CORRUPTION, *that whereby she Dissolves a Thing, so that thenceforth it ceaseth to be what it was*. For, when Fire, a Stone, a Plant, an Animal, or whatever is referrible to any one determinate kind of Bodies Compound, is first produced, or made, and begins to be so, Denominated; it is truly said to be Generated: and contrariwise, when a Thing perisheth, and loseth the right of its former Denomination; it is as truly said to be Corrupted. (1654, 416; see also 428, 85)

Jacques Rohault:

When a Thing is destroyed, or ceases to be what it was before, we call it *Corruption*; thus we say it is a *Corruption* of the Wood, when we see the Wood no longer, but only the Fire in Place of it; and in the same manner we say an Egg is *corrupted*, when we see the Egg no longer, but a Chicken in its place. (*System of Natural Philosophy*, 1723, 1.4.14 in English; *Traité de physique* 1671)^{50 51}

These philosophers of course recognize the difference between accidental change/mere alteration and substantial change, i.e., generation and corruption, and they, like their scholastic predecessors, appeal to the notion of kinds or species in order to characterize the latter. In cases of accidental change, not only does the same individual persist, also the same *kind* of individual persists. In generation and corruption, an individual of the same kind does not persist.

Although I have been emphasizing certain similarities between late scholastic and early modern views of corruption, I would like to call attention to one important difference between them, a difference that subtly yet powerfully reveals the crucial role kinds play in the early modern understanding of generation and corruption. Not all early modern philosophers accept the almost uniformly-held Aristotelian axiom, namely that every corruption (or generation) of something is the generation (or corruption) of something else and vice versa—*Corruptio unius est generatio alterius, et e contra*.⁵² Those who reject the Aristotelian axiom do so *because* they

⁵⁰ See Schmaltz (2002, 13) and Holden (2004, 210).

⁵¹ See also Locke's *Essay* (1975, 2.26, 3.3.19) and Spinoza's *Ethics* (1985, 1P15Sch5).

⁵² I say 'almost uniformly-held' to indicate that there are some philosophers who accept the axiom, but understand it in a way in which generation and corruption do not have to have individual things as their terms. For instance, Eustachius holds that the corruption of a living human being results in an *aggregate* of individuals (*Summa* 257).

accept a view of generation and corruption in which kinds or sorts are crucial. This point is illustrated clearly by Boyle. According to Boyle, experience shows that sometimes an *F* is generated from something that was not an *individual* of a kind, and sometimes the corruption of an *F* results in something that is not an individual member of a kind. For instance, an individual *F* can be corrupted into a mere blob of goo. As Boyle states:

Onely I doubt, whether the Axiome [i.e., *corruptio unius est generatio alterius, & e contra*] do generally hold true, if it be meant, That *every Corruption must end in the Generation of a Body, belonging to some particular Species of things*, unlesse we take Powders and fluid Bodies indefinitely for *Species* of Natural Bodies; since it is plain, there are multitudes of Vegetables, and other Concretions, which, when they rot, do not, as some others do, turn into Worms, but either into some slimy or watery Substance . . .
(*Works* V 330)

Boyle rejects/qualifies the Aristotelian axiom precisely because he holds that generation and corruption necessarily involve a change of kind, and not every case of corruption has an individual *F* as a *terminus a quo* or *ad quem*. But those who reject the Aristotelian axiom still hold kinds are crucial to generation and corruption insofar as the *terminus a quo* of corruption and the *terminus ad quem* of generation are, without exception, a *kind* of thing.

Descartes holds a view of corruptibility in which a change of kind is necessary. However, before fleshing out this claim, I wish to examine a competing interpretation, which has the support of several scholars.⁵³

A recent and rigorous defense of this competing view is found in Kurt Smith and Alan Nelson's 2010 paper. Smith and Nelson explicitly hold the view that Descartes accepts that: *For all x, x is incorruptible iff x is indivisible*. Let us call this the 'Indivisibility Analysis' of incorruptibility. They claim that "Descartes appeals to this principle in the Synopsis of the *Meditations*, for example, when he says that insofar as the mind is indivisible it is incorruptible, and so, immortal by its very nature." They then draw the inference that "For all x, x is a substance iff x is indivisible" (2010, 1).

I find the Indivisibility Analysis highly problematic. First of all, if Descartes's notion incorruptibility were correctly captured by the Indivisibility Analysis, then the recalcitrant texts would be the first time that a major philosopher would connect indivisibility and incorruptibility so strongly. As Marleen Rozemond points out, in the history of philosophy prior to Descartes, the concept of indivisibility and the concept of incorruptibility were completely separate. If my thumb is divided from the rest of my body, my size and shape have been changed. I have undergone accidental

⁵³ See Smith and Nelson (2010), Secada (2000), Markie (1994), Lennon (1994, 2007), Sowaal (2004), Cottingham (1986), Woolhouse (1993), Williams (1978).

change by virtue of this dividing, but I have not been corrupted. When I die and a corpse is left behind, I have been corrupted and a corpse has been generated. But my corruption does not *require* that my body be divided. So, it would be quite peculiar if Descartes were using the well-known technical term ‘incorruptibility’ to mean *indivisibility* when it had never meant that before.

Second, it is simply not true that Descartes says that the mind is incorruptible insofar as it is indivisible, let alone if and only if it is indivisible. Rather, Descartes says that the mind has a radically different nature from the body, and their natures entail that the mind is indivisible and the body is divisible. And given that they are of such different natures, the corruption of one does not entail the corruption of the other. Indivisibility, in this context as well as in the Sixth Meditation, simply acts as a noticeable feature to distinguish the nature of mind from the nature of body. It is not intended as an analysis of ‘incorruptibility.’

Third, Descartes never claims that x is incorruptible *if and only if* x is indivisible, nor does he need to for his stated purpose in the recalcitrant texts, namely to show the natural immortality of the mind. All he says or needs to say for this purpose is that being indivisible is merely *sufficient* for being incorruptible.⁵⁴ The soul is indivisible, and therefore it is incorruptible. Assuming, as Descartes does, that corruptibility/incorruptibility and divisibility/indivisibility are pairs of contradictories, and that being indivisible is sufficient for being incorruptible, it follows by contraposition that:

If it is not the case that x is incorruptible, then it is not the case that x is indivisible,

And this is logically equivalent to

If x is corruptible, then x is divisible.

At most in the Synopsis passage, Descartes claims that divisibility is a necessary condition for corruptibility, but he does not claim that it is sufficient. Nevertheless, the intended results are achieved: mind is incorruptible and body is corruptible. Both textually and philosophically, there is nothing warranting a stronger claim about the extensional equivalence of indivisibility and incorruptibility.

Although I believe that considerations like this significantly lessen the appeal of the Indivisibility Analysis, perhaps they do not settle the matter decisively. There *is* a problem, however, that by my lights settles the matter against the Indivisibility Analysis. I mentioned toward the start of this paper that a plausible interpretation of Descartes (or any philosopher) should not commit him to the existence of entities whose existence he explicitly and repeatedly claims is impossible. Consider what would follow if the Indivisibility Analysis were correct, and Descartes were to hold that x is

⁵⁴ See AT III 503; CSMK 203, AT VI 59–60; CSM I 141.

incorruptible if and only if x is indivisible. Some results would be that the human body is corruptible, but mind and God are incorruptible. In that respect, the analysis gets Descartes's view right. But now consider body in general, something explicitly stated to be incorruptible in the Synopsis. On the Indivisibility Analysis, then, body in general is incorruptible if and only if it is indivisible. However, this cannot possibly be Descartes's view because the "nature of body includes divisibility" (AT VIII A 13; CSM I 201). The essential divisibility of body is a well-known Cartesian doctrine and is the one that rules out the possibility of atoms. If divisibility is included in the *nature* of body, and body in general is incorruptible, then either body in general is not body (i.e., does not have the nature of body, i.e., is not extended), or indivisibility is not necessary and sufficient for incorruptibility. The former alternative seems too contrary to an important Cartesian doctrine even to entertain. Therefore, the divisibility analysis of corruptibility is false.

One disjunct of the result of the Indivisibility Analysis, we now see, is not something Descartes holds. Consider the other disjunct: if Descartes really thinks (or is committed to thinking) *that body in general is incorruptible iff it is indivisible*, then Descartes is committed to the existence of entities whose existence he not only repeatedly denies but whose existence he claims is *impossible*—atoms! Atomists, of course, are likely to think that atoms are very tiny particles. However, for Descartes, who may not be the most charitable interpreter or accurate critic of atomism, smallness is *accidental* to whether something is an atom or not.⁵⁵ As Descartes says: "We also know that it is impossible that there should exist atoms" (AT VIII A 51; CSM I 231), "which are conceived as extended and at the same time indivisible" (AT V 273; CSMK 363); "a thing which has length and breadth and extension . . . cannot be composed of indivisible things, since an indivisible thing cannot have any length or breadth or depth" (AT III 213; CSMK 155). If body in general were indivisible, it could not have length, breadth or depth, or it would be an atom. And if body in general were the entire extended world, as many scholars suggest, then the entire extended world would one enormous atom! If body in general is extended at all, then incorruptibility simply *cannot* be equivalent to indivisibility.

⁵⁵ See Secada (2000, 66–67). An interesting instance of this is found in the seventeenth-century British atomist, Walter Charleton. Although Charleton thinks that, as a matter of fact, atoms are very small, he doesn't think they are all of the same (or even roughly the same) size. Moreover, his account of atoms is consistent with very large atoms because atoms are simply bodies lacking any 'inanity' (1654, 85, art. 3).

It is almost certain that Descartes holds that atoms, were they to exist (*per impossibile*), would be very small. However, smallness is not part of the essence of atoms, nor does it seem to be a *proprium* of atoms. That is, for every thing Descartes says, if there were atoms (*per impossibile*), it would be possible for there to be large atoms—as long as they were extended and indivisible.

Extension in length, breadth, and depth is the *nature* of body.⁵⁶ We must recognize, therefore, that *whatever* body in general is (whether the plenum, matter, pieces of matter, portions of matter, any body considered solely in terms of its extension, etc.), incorruptibility cannot be equivalent to indivisibility; otherwise body in general will not be incorruptible or body in general will not be extended, i.e., body.

Of course, one may wonder why indivisibility is featured so prominently in the Synopsis passage if the Indivisibility Analysis doesn't capture Descartes's notion of incorruptibility. Although both the divisibility and corruptibility of the human body are mentioned, a close look at the passage reveals that divisibility is not introduced to explain or to provide an analysis of corruptibility or vice versa. Rather, just as in the Sixth Meditation, divisibility is mentioned in an argument showing that the mind and the body are of radically different natures, and thus the existence of one does not entail the existence of the other, nor does the destruction of one entail the destruction of the other. As Descartes states in the *Discourse*:

[W]e understand much better the arguments which prove that our soul is of a nature entirely independent of the body, and *consequently* that it is not bound to die with it. And since we cannot see any other cause which could destroy the soul, we are naturally led to conclude that it is immortal. (AT VI 59–60; CSM I 141)

Nothing about the Synopsis passage supports the view that corruptibility just *is* divisibility, nor does it support the view that divisibility is necessary and sufficient for corruptibility.

An alternative interpretation of Cartesian corruptibility is the following: In the Synopsis, Descartes appears to think that something is incorruptible iff it can cease to exist only by being annihilated by God; conversely, something is ingenerable iff it can begin to exist only by being created *ex nihilo* by God. I will discuss this shortly, but presently I wish only to point out that while all and only incorruptible things are such that they can cease to exist only through annihilation, this analysis is uninformative and does not explain *why* certain things are incorruptible and why those things can only cease to exist through annihilation. Hence a deeper analysis of incorruptibility will be required and will be offered shortly.⁵⁷

4 Cartesian Corruptibility and Substancehood

I have said a little about what Cartesian corruptibility is *not*, but we are now in a position to say more about what it is. In the same letter in which

⁵⁶ See *Principles* 1.48: “*ad extensam autem [referuntur], magnitudo, sive ipsamet extensio in longum, latum & profundum, figura, motus, situs, partium ipsarum divisibilitas, & talia*” (AT VIII A 23; CSM I 208–209).

⁵⁷ Thanks to Antonia Lolordo for pressing me on this point.

Descartes characterizes ‘accidents’ as those features which may be present or absent without the corruption of the subject, Descartes characterizes the difference between alteration and generation (and therefore between alteration and corruption). And he says:

A simple alteration [*alteratio*] is a process which does not change the form of a subject, such as the heating of wood; whereas generation [*generatio*] is a process which changes the form, such as setting fire to the wood. (AT III 461; CSMK 200)

The presence of the term ‘form’ is revealing. Despite the fact that Descartes here does not mean ‘substantial form’ in any metaphysically-weighty scholastic sense, he definitely means *kind* or *sort*.⁵⁸ A piece of wood does not cease to be wood when it is heated; it is merely altered or undergoes accidental change. But the wood does cease to be wood when it is burned. It ceases to be something of the kind *wood*, and something of the kind *fire* is generated.

According to Descartes, corruptibility is the ability of something to undergo a change of kind. A human body becomes a corpse, wood becomes fire, an egg becomes a chicken. There are several reasons to think that this is Descartes’s view of corruptibility. First, there is the tradition and prevalence of such a view in Descartes’s predecessors and contemporaries. In broad terms, the notions of generation and corruption have *always* involved changes with respect to kind or species. We have seen many texts in which this is expressed, both in scholastic terms and in mechanical terms. If Descartes were not holding the view I am attributing to him, he would certainly be at odds with the view held by an overwhelming majority of philosophers.

Second, unless Descartes holds the view I am attributing to him, he would be blatantly misrepresenting himself by employing the terms ‘*corrumpi*’ and ‘*interire*.’ By the time Descartes is writing, ‘*interire*’ had become a widely-used technical term, referring to the traditional notion of corruption as a change of kind. After roughly 1475, philosophers, even many scholastic philosophers, shied away the terms ‘*corruptio*’ and ‘*generatio*’ in favor of the terms ‘*ortus*’ and ‘*interitus*.’⁵⁹ In fact, it was not uncommon for Aristotle’s *De generatione et corruptione* to be referred to as ‘*De ortu et interitu*’ For instance, Eustachius a Sancto Paulo, whom Descartes read in the early 1640s in preparation for his ‘war with the Jesuits,’ uses the terms ‘*interitu*’ and ‘*corruptione*’ interchangeably, as do Pierre Gassendi,⁶⁰

⁵⁸ See Pasnau (2004).

⁵⁹ In fact, as early as ca. 505, we find this term as a synonym for ‘*corrumpi*’ in Boethius’ *De divisione* (1860). Thanks to Bob Pasnau for discussion of much of the material found in this paragraph.

⁶⁰ The title of chapter seventeen of Gassendi’s *Syntagma* is “*De Ortu, & Interitu; seu Generatione, & corruptione rerum concretarum,*” and he says that “*Generatio [&] corruptio . . . est . . . mutations sive alterationis species*” (1649, 62–65).

Rodrigo de Arriaga,⁶¹ and Johannes Magirus (1597, 67),⁶² whose *Physica Peripatetica* was one of the most important textbooks of early-modern Aristotelian natural philosophy. Now when Descartes uses a well-established technical term, he typically either uses it in its accepted sense (e.g., his use of ‘objective being,’ ‘eminent containment,’ ‘real distinction’), or he makes it obvious that he is using it in a new or less-familiar sense. There is no indication that he is doing the former with respect to ‘*interire*’ or ‘*corrupti*.’ Thus, it is reasonable to think that Descartes is using these terms in their accepted technical sense.

Third, there is textual evidence in the Synopsis. As we have seen, Descartes claims that a human body is corrupted when it becomes ‘another body’ [*humanum autem corpus aliud fit*], and there is reason to think that ‘another body’ means not merely a numerically-distinct body, but another *kind* of body. Descartes is discussing *the* human body (*le corps humain*), not *a* particular human body, and it is reasonable to take Descartes’s mention of the human body “insofar as it differs from other bodies” to mean the kind *human body*.⁶³ When corrupted, something of the kind *human body* ceases to be of that kind and (perhaps?)⁶⁴ becomes something of another kind—a corpse. This, again, is precisely what traditional accounts of corruption hold, namely that death is a sort of corruption, and corruption is a change of kind. Descartes holds the same view.⁶⁵

Finally, consider the type of claim Descartes is making in the Synopsis. He is not merely making the mild claim that nothing that happens to, say, my body could affect the existence of my mind; rather he is making the strong claim that *nothing extended* could affect the existence of an immaterial thinking substance. To get clearer, let us recognize the traditional difference between *numerical identity* and *specific/essential identity*. Consider that *x* and *y* are numerically identical iff *x* and *y* are one and the same thing, but they are *specifically/essentially identical* iff they are numerically distinct individuals of the same kind or species. Two numerically distinct dogs are specifically identical. Loss of numerical identity does not entail loss of specific identity—e.g., it is possible that an individual at *t*₁ and *t*₂ are not the same dog, but they are both dogs at those times. If I am correct about the conditions for corruption, mere loss of numerical identity is not necessarily a case of corruption because corruption requires a loss of specific

⁶¹ “*Notandum praeterea est, Corruptionem seu interitum rei . . .*” (*Summa* 2.2.7, 217). And Arriaga *Cursus* (1632, 509).

⁶² See also Kargon (1966, 1).

⁶³ In the 1647 French translations of the *Meditations*, the Synopsis and the Second Replies use ‘*le corps humain*’ not ‘*un corps humain*.’ Descartes is not discussing *a* human body, but *the* human body.

⁶⁴ ‘Perhaps’ means ‘if Descartes thinks that every corruption is a generation of something else, and we have seen at least one prominent philosopher (Boyle) deny that.’

⁶⁵ “[D]eath never occurs through the absence of the soul, but only because one of the principal parts of the body decays” (AT XI 330–331; CSM I 329–330). See also AT XI 225; CSM I 315. See also Le Grand (1694, 292) and Des Chene (2001, 147–148).

identity, a change of kind. So, reading Descartes's statement about a body becoming another body as 'becoming another kind of body' guarantees that Descartes is discussing a case of corruption, as he intends to be doing. Moreover, loss of specific identity entails loss of numerical identity: if x ceases being a dog at t_1 , then there is nothing numerically identical to x at t_1 —a dog corpse is not identical to the living dog on the traditional understanding of corruption. So, the content of the weaker reading—i.e., that the human body loses its numerical identity—is also captured by my reading. But notice that although the human body changes kind when it is corrupted and becomes a corpse, what remains (the *terminus ad quem*) is still a body, something belonging to the genus of extended things.

We may now put all of the pieces of my interpretation together: body in general is any body considered solely in terms of its principal attribute of extension. That is, any body considered solely in terms of its nature (genus) *qua* body. And corruptibility is the possibility of a change from one kind to another kind of thing.⁶⁶ Let us now ask about the incorruptibility of body taken in the general sense. The explanation is simple: Body in general only has *one* kind—extension—and Descartes holds that it is metaphysically impossible for something extended to cease being extended, unless it ceases to exist altogether via annihilation. That is, body in general is incorruptible in virtue of the fact that it is metaphysically impossible for it to change kinds because its *only* kind is such that anything of that kind is *necessarily* of that kind. Not even God could corrupt body in general because to do so would require changing something extended into something non-extended, and even God could not do such a thing. To cause body in general to cease to exist, God would need to resort to annihilation and withdraw his conserving power. Descartes holds a view we may call '*de re* principal attribute essentialism,' i.e., if x is of principal attribute A , then *necessarily*, x is of principal attribute A . Because Descartes thinks that principal attributes exhaustively constitute the essence of finite substances at the level of genus, he cannot hold that it is merely a contingent fact that a mind is non-extended and a body is extended.

It has been suggested by others that Cartesian corruptibility ought to be understood simply as the capacity to cease to exist without having to be annihilated by God, and Cartesian incorruptibility is the impossibility of ceasing to exist unless annihilated by God. And it is *this* capacity/incapacity that captures the notion of corruptibility/incorruptibility. Now Descartes certainly thinks that there is an important connection between annihilation and corruptibility. However, on my interpretation, we can see *why* incorruptible things can only cease to exist only by being annihilated. There are two ways in which something can cease to exist: either via corruption or via annihilation. The *reason* why incorruptible things can only cease to exist by annihilation is their incorruptibility; the fact that incorruptible

⁶⁶ See Aquinas *ST* Ia 85.7 ad 2; and Suárez's *De Trinitate* IX.1.4.

things can cease to exist only by annihilation is not the *reason* why they are incorruptible. Given that there are only two ways to cease to exist, and given what Descartes thinks corruptibility is, it follows that anything incorruptible can only cease to exist by annihilation; but the fact that it can only cease to exist in this manner does not constitute or provide an explanation of its incorruptibility; rather its incorruptibility provides the explanation of the fact that it can only cease to exist through annihilation. Because body in general has only one kind, and that kind is metaphysically necessary to anything that belongs to it, body in general cannot be corrupted. That is *why* body in general can only cease to exist by being annihilated.

It must be noted that this way of thinking about body in general and corruption is by no means peculiar to Descartes. Something like it is standard fare in scholastic thought. Suárez, for instance, claims: “[prime matter] is of itself indifferent to all forms of corruptible things, and to their dispositions; it requires therefore in itself no distinction or multiplication of kinds” (DM 13.2.8). It is also found in many early-modern philosophers:

Hobbes:

When we say an Animal, a Tree, or any other specified body [*corpus nominatim*] is generated or destroyed [*Perire*], it is not to be understood as if there were made a body from non-body, or non-body from a body, but a non-animal from an animal, from a tree a non-tree, &c. That is, that those accidents for which we call one thing an animal, another thing a tree, and another by some other name, are generated and destroyed [*interire*]; and that therefore the same names are not to be given to them now, which were given to them before. But that magnitude for which we give to any thing the name of *body* is neither generated nor destroyed. . . . And therefore philosophers, who bind themselves to natural reason, suppose that a body neither can be generated nor destroyed, but only that it may appear otherwise than it did to us, that is, under different *species*, and consequently be called by other and other names; so that which is now called Man, may later be called non-Man; but that which is once called body, will never have the name of non-body. (1655, 2.8.20)

Le Grand:

The Fourth: A Body as such, or the First Matter, is In-generable and Incorruptible.

Physical Matter, therefore, or a Natural Body, is a Substance Extended in Length, Breadth and Depth. . . . For Extension, as hath been said, is the Primary, Intimate, and Radical Attribute which is conceived or apprehended

in every *Body*, and which in all alterations continues the same, nor can it be destroyed, but by Annihilation of the *Body*. (1694, 94; underlining mine)

Charleton:

there must be some *Common Stock*, or an Universal Something, *Ingenerable*, and *Incorruptible*, or which being prae-existent, all things are Generated, and into which being indissoluble, all things are, at the period of their duration, again restored. (1654, 2.1.7)

In order to understand what is going on, let us consider the notion of an ‘ontological level’ like *individual*, *species*, and *genus* such that the following ascend in their generality with respect ontological level: Josie (an individual dog), dog, animal, body. Now Josie can be corrupted by becoming a cat or a non-animal (e.g., a corpse). That is, Josie is corruptible in virtue of the fact that there is some level of generality *L* such that she can be a *K* at *L* and then cease to be a *K* at *L*. Because corruptibility necessarily involves a change of kind, it is ‘indexed’ to a kind and a level of generality. That is, it is possible that *x* is corruptible *qua K* but incorruptible *qua K** as long as *K* is a more specific ontological level than *K**.⁶⁷ If Josie somehow becomes a cat, then she has been corrupted at the level of *dog* but not at the level of *animal*. To take a more natural case: if Josie becomes a corpse, then she has been corrupted at the level of *animal* but not at the level of *body*.

At the ultimate level of generality for substances—where only principal attributes are concerned—such generation and corruption is impossible. Consider the fact that at the level of generality at which we consider body in general, there are (a) no higher levels of *kinds* of substances, (b) that there are only two kinds at that level of generality—thinking and extended; and (c) that it is metaphysically impossible for a thinking thing to change into an extended thing and vice versa. So, when Descartes claims that body in general is incorruptible, he is saying the following: there is no level of generality *L* and kind *K* such that an extended thing can cease being extended and become *K*, where *K* is *unextended* and is on *L*. Other than extension, there is, after all, only one other kind at the relevant level. *K* would, therefore, need to be *thinking* or *having the principal attribute of thought*. Thus, body *qua* extended (i.e., *ex natura sua*, as Descartes claims in the Synopsis) is incorruptible. *By their nature* (i.e., principal attribute), substances are incorruptible. Thus we can say that body in general is incorruptible at the level of ultimate genus/principal attribute in virtue of the fact that (i) body in general is extended, (ii) it is not possible that body in general cease being extended, (iii) it is not possible that body in general become something with the principal attribute of thought, (iv) extension and thought are both at the level of ultimate genus—in fact,

⁶⁷ This idea is found throughout medieval discussions of individuation and corruption.

they are the *only* kinds at that level. In claiming that body in general is incorruptible, Descartes is claiming that something *qua* extended cannot cease being extended. The only way an extended thing could cease to exist *qua* extended would be if God annihilated it completely.

Now consider the human body. Descartes claims that it is corruptible, but does this fact preclude its substancehood? I don't think so. Descartes's notion of corruptibility, I have argued, is indexed to a kind and a level of generality. When Descartes claims that *substance* is incorruptible, substance is considered in terms of its principal attribute, i.e., *by its nature*. After all, *that* is what Descartes says, not to mention that that is the sense in which body in general is incorruptible, as we have just seen. Notice, however, that in the sense of incorruptibility relevant to substancehood, the human body is just as incorruptible as body in general; when the two are indexed to the same ontological level, they have the same principal attribute. And the kind with respect to which body in general is incorruptible is the kind relevant to having the ontological status of substance. As Descartes thinks, anything with a principal attribute is a substance (AT VIII A 25; CSM I 210). To be sure, it is not *in virtue* of being a human body that *x* is a substance; rather a human body *x* is a substance in virtue of being extended (i.e., in terms of having a principal attribute) with respect to which it *is* incorruptible.

My conclusion, then, is that Descartes thinks that the human body is corruptible *qua* human body, but it is incorruptible *qua* body in general. The human body's corruptibility (*qua* human body) is sufficient for the purposes of the argument for the immortality of the soul in the Synopsis and Second Replies, i.e., that of showing that the death of the human body does not entail the destruction of the mind. And the latter incorruptibility (*qua* extended) is sufficient for the human body's status as a substance. Of course, what I have just claimed requires more support than I have offered to this point. But the following consideration, I believe, provides the support required.

Prior to *Principles* I.56, Descartes uses the terms 'mode,' 'quality,' and 'attribute' indiscriminately to refer to any intrinsic feature or alleged intrinsic feature of a substance. In I.56, Descartes then carefully distinguishes them as different technical terms:

But we employ the term 'mode' when we are thinking of a substance as being affected or modified; when the modification enables the substance to be designated as a substance of such and such a kind, we use the term 'quality'; and finally, when we are simply thinking in a more general way [*generalius spectandum*] of what is in a substance, we use the term 'attribute.' (AT VIII A 26; CSM I 211)

The first thing to notice about this passage is Descartes's use of the term 'attribute' to refer to what is in a substance when we are thinking

of it in a general way (AT VIII A 26; CSM I 211). Here Descartes is using ‘attribute’ to refer to what Chappell calls ‘omni-generic attributes,’ such as existence and duration (Chappell 1997). Attributes are those features without which a substance would not exist. These attributes are necessarily had by any substance whatsoever, irrespective of the *kind* of substance, i.e., irrespective of whether it is a thinking substance or an extended substance. And according to Descartes, we take *substance in a general way* when we consider the omni-generic attributes (AT VIII A 26; CSM I 211); they are common to both genera of substance. But when we consider *body* in general, as opposed to *substance* in general, we think of the principal attribute of extension because that it is attribute that exclusively and exhaustively constitutes the nature of body in general and doesn’t characterize any other genus of substance. As Descartes says: “First there are the most general [notions]—those of being, number, duration, etc.—which apply to everything we can conceive. Then, as regards body in particular, we have only the notion of extension” (AT III 665; CSMK 218). According to Descartes, principal attributes are mutually-exclusive and exhaustively-constitutive of the two ultimate genera of substance.⁶⁸

Now consider Descartes’s discussion immediately following the text from the *Principles* quoted above:

Hence we do not, strictly speaking, say that there are modes or qualities in God, but simply attributes, because in the case of God, no variation is intelligible. And even in the case of created things, *that which always remains through their changes*, such as existence or duration in a thing that exists and endures, should not be called a quality or a mode but an attribute. (AT VIII A 26; CSM I 211; emphasis mine)

God cannot have anything other than attributes because he is immutable. A creature’s attributes are those features that persist through *all* changes creatures undergo; attributes are immutable. It follows from the immutability of attributes, that *substances are incorruptible with respect to their attributes*. With respect to their modes and qualities, on the other hand, substances are mutable.

Now remember that omni-generic attributes do not delimit kinds of substances. Principal attributes delimit kinds of substances: it is in virtue of (and *solely* in virtue of) being extended that there is something of the kind *body*, and the same is true of thought and the kind *mind*.

These considerations support the following: Principal attributes sort substances into kinds at the most general level; there is nothing *above* principal attributes that delimits *kinds* of substance, and nothing *below* the level of principal attributes could serve in the notion of corruptibility

⁶⁸ “[E]ach substance has one principal property which constitutes its nature and essence.” See also AT III 478; CSMK 203, AT VIII B 347–348.

relevant to the incorruptibility of body in general. It is with respect to its extension that body in general is incorruptible, and it is a *datum* that body in general is incorruptible and is a substance for Descartes. Thus, the incorruptibility relevant to body in general's status as a substance is incorruptibility in terms of its principal attribute.

But we have already seen that body in general is merely *any* body *qua* body or *qua* extended. The human body, then, taken solely in terms of its extension is an instance of body in general. *Qua* an extended thing, the human body is incorruptible. Given that it is incorruptibility at the level of principal attribute that is relevant to being a substance, the human body is a substance *qua* extended. But the human body is corruptible *qua* human body. That is, the human body is a substance, but it is corruptible in such a way that supports Descartes's Immortality Argument. The human body can cease to exist *qua* human body (i.e., that which is united with the mind) without having any effect on the existence of the mind. Nevertheless, the human body is a substance in virtue of being incorruptible *qua* extended.

Note that this is not a case of numerically distinct things being co-located, where the individual *qua* human body is constituted by the individual *qua* extended. At least it is no more a case of constitution than is the case of Sophie-*qua*-dog and Sophie-*qua*-animal. The fact that Sophie can be corrupted *qua* dog without being corrupted *qua* animal does not entail that Sophie-*qua*-dog \neq Sophie-*qua*-animal.

5 Conclusion

I have attempted to show how the corruptibility of individual bodies is consistent with Descartes's explicit use of individual bodies as examples of corporeal substances. Hopefully, I have accomplished that, but if I have done nothing else, I believe that I have managed to shift the burden to the opponent of the pluralism interpretation.

On my interpretation, everything Descartes says in the recalcitrant passages is consistent with the substancehood of individual bodies. This, I believe, is a good result because (a) it does not deny anything explicitly stated in the Descartes's texts. For example, it takes as *data* that body in general is incorruptible, that substance is incorruptible, and that the human body is corruptible. (b) My interpretation is consistent with the substancehood of all of Descartes's examples of corporeal substances. (c) Finally, I accommodate everything needed for Descartes's main point in the Synopsis, which is also one of the main goals of the *Meditations*, namely that the mind is immortal because nothing that happens to a human body could entail the destruction of the mind. A bad result of an interpretation, on the other hand, would be if nearly none of Descartes's explicit examples of corporeal substances were substances at all. Examples, after all, are supposed to be helpful; at the very least, they should not horribly and

gratuitously misleading. The pluralist interpretation makes Descartes's examples of corporeal substances *examples of corporeal substances!*

Of course, some problems remain for the pluralist interpretation. In particular, the interpretation needs to address the other source of controversy concerning corporeal substances, namely Descartes's notion of real distinction and whether it could apply to individual bodies. This is a sticky topic, one requiring too much explanation to accomplish in the present paper. I hope to address this topic in another paper.

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