Harmonizing Leibniz's Ontology

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ABSTRACT: I propose a novel compatibilist interpretation of Leibniz's mature views concerning what is metaphysically basic. Drawing on a compatibilist reading of Aristotle on primary substance in the Categories and Metaphysics Z, I argue that Leibniz is working with two complementary ways of being metaphysically basic—one applying to immaterial monads, the other to corporeal substances. Although corporeal substances derive their status as basic from their dominant monads, they are nevertheless fully real, unified, and genuinely capable of acting. This perspective respects Leibniz's idealist tendencies and his commitment to the reality of bodies without (implausibly) attributing inconsistency to his considered views.

RÉSUMÉ : Je propose une interprétation compatibiliste des positions de Leibniz sur ce qui est métaphysiquement fondamental. En m'appuyant sur une lecture compatibiliste de ce que dit Aristote de la substance première dans les Catégories et au livre Z de la Métaphysique, je soutiens que Leibniz pense en fonction de deux manières d'être fondamentales—l'une qui s'applique aux monades immatérielles, et l'autre aux substances corporelles. Ces dernières sont fondamentales d'une façon secondaire, mais elles sont néanmoins vraiment réelles, unifiées et capables d'agir. Cette approche respecte à la fois les tendances idéalistes de Leibniz et son attrait pour la réalité des corps, sans pour autant attribuer d'incohérence aux positions en question.

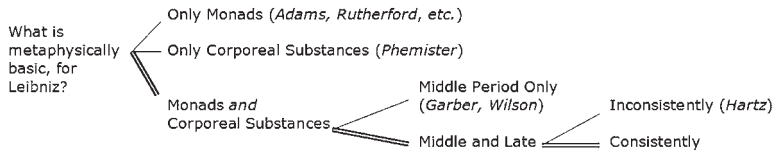
What are the metaphysically basic entities, on Leibniz's considered view?[1] A historically influential idealist line of interpretation claims that for Leibniz, corporeal substances are nothing but *phenomena bene fundata*, appearances founded on or reducible to the perceptions of souls or soul-like monads.[2] Others have contended that Leibniz sees corporeal substances, in addition to or instead of monads, as basic realities.[3] Noting the textual support for each of these incompatible lines of interpretation, Glenn Hartz (1998, 2005) has

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argued for a third position: that Leibniz inconsistently maintains a dual commitment to both monads and corporeal substances throughout his mature (middle to late) writings. In what follows, I reject all three of these positions in favour of a compatibilist line of interpretation that shows how Leibniz could (and did) take *both* monads and corporeal substances as "metaphysically basic," in distinct but significantly related senses of that expression.

The following diagram shows how the different interpretations of Leibniz's ground-floor metaphysical views stand in relation to one another:



The view I propose (represented by the double-lined path), admits (with Hartz) a metaphysically basic status for both monads and corporeal substances holding throughout Leibniz's mature corpus. But unlike Hartz, I do not see Leibniz's dual commitment as logically inconsistent. Instead, I suggest a way of loosening the knot in which Leibniz's system appears to be tied by drawing attention to a proposed resolution to a parallel debate concerning primary substance in Aristotle. Wedin (2000) insists that both the individual substances of Aristotle's *Categories* (oxen, human beings, dogs, etc.) and the forms of such creatures in *Metaphysics* Z, are properly called "primary substance," but in different senses, with the former sense being derived from the latter. My contention is that there is a significant analogy between the relation of form to composite substance in Aristotle and the relation of monad to corporeal substance in Leibniz. Leibniz, I argue, understands two distinct but importantly related ways of being metaphysically basic; one (involving what I call "strict" unity) applies to immaterial monads and the other (involving "derivative" unity)[4] to corporeal substances.[5]

Before arguing for my own position, I will briefly outline and critique the three main competitors. But first, since we are considering what Leibniz takes to exist "in metaphysical rigor" or to be "metaphysically basic," it will be useful to have in mind at least a general idea of what, on Leibniz's view, it takes for something to possess that status. Briefly, an entity must meet three related criteria in order to count as metaphysically basic. It must (a) be a self-subsistent substance; (b) be a genuine unity and hence indivisible, and (c) possess a principle of activity or a capacity to initiate change.[6] Hartz's contention, then, is that Leibniz is inconsistent in holding that both monads and corporeal substances meet these critieria. My claim will be that it is quite coherent to have different entities meeting criteria (a)-(c) once it is seen that the criteria can be satisfied in different, though related, ways. For the sake of clarity concerning these terms, the following table offers a brief description and comparison of the relevant entities that appear in Leibniz's ontological theorizing.[7]

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	Constituents	Type of Unity	Ontological Status	Distinguishing Feature	Examples
(Mere) Aggregate Body	Aggregate of corporeal substances	*Unum per accidens*	Purely phenomenal	May be more or less coherent	A rock, an army, a flock of sheep
Organic Body (Secondary Matter)	Aggregate-part of a corporeal substance	*Unum per accidens*	Purely phenomenal	Organized / organic	The body of an animal or plant, taken without its dominant monad
De Volder Monad (DV Monad)	Entelechy + Primary Matter	*Unum per se*	Incomplete, Substantial	Living	The soul of an animal
Corporeal Substance	Organic body + dominant monad	*Unum per se*	Complete, Substantial	Existent (in nature)	An animal, a plant, an angel

The four kinds of entities listed here all play an important part in the explications of the competing interpretations, including my own.

Three Disharmonious Interpretations

a. Idealism

Among the best arguments for an idealist reading of Leibniz, some depict corporeal substances as types of aggregates, which Leibniz clearly does not see as metaphysically basic,[8] while others admit the distinction between corporeal substances and aggregates, but claim that, being extended, corporeal substances possess the same feature that disqualifies aggregates from being metaphysically basic.[9] Both sorts of argument come to grief, however, because they require us to disregard an abundance of textual support for the view they attempt to deny—namely, that Leibniz thinks corporeal substances are real and possess genuine unity (are unities *per se*). To take just one example, in a letter to Remond dated 1715 Leibniz writes,

> …secondary matter (for example, the organic body) is not a substance, but… a mass of many substances… and as a result is called *unum per accidens*, in a word, a phenomenon. A true substance (such as an animal) is composed of an immaterial soul and an organic body, and it is the composite of these two that is called *unum per se*.[10]

To call something a mere phenomenon or a being by aggregation while admitting that it is both a "true substance" and "*unum per se*" would, for Leibniz, be like calling the darkness light. But this is what the idealist interpretation requires us to do. Hartz lists sixteen other texts with dates between 1686 and 1715 in which Leibniz clearly attributes strict, genuine, perfect, true, or *per se* unity to corporeal substances.[11]

Of course, the fact that in a large number of texts Leibniz expresses commitment to the fundamental reality of corporeal substances doesn't *necessarily* mean that he was actually so committed. Indeed, advocates of the idealist interpretation have made a small science of explaining why, in spite of remarks to the contrary, he is not. Generally, the idea is that sometimes Leibniz is being sincere, and in other places he is concealing his real views. But there is no general

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agreement among Leibniz's interpreters about when Leibniz is and is not being secretive. Rutherford and others dismiss the claims made about corporeal substances in the later sections of the *Monadology* on the grounds that the work was intended for the general public, while Phemister (2005), arguing *for* a Leibnizian commitment to corporeal substances, dismisses the first part of the same work on the grounds that it was written for a Cartesian audience. Each has apparently principled reasons, yet if we follow them both, we end up having to discount the entire work as an insincere subterfuge. Hartz expresses his frustration with commentators who lay too much emphasis on such interpretive strategies:

> …somewhere in this aimless search for the 'real' Leibniz, we have to stop discounting what he wrote…. In the end, the value of studying later Leibniz seems undermined by the degree of philosophical prostitution he is supposed to have engaged in. 'Correcting' Leibniz in so many spots makes a mockery of the entire late corpus.[12]

Instead, Hartz says, we should admit that in Leibniz's writings both "monads and corporeal substances are granted the status of genuine individuals—that is, unities of the strictest metaphysical order,"[13] in spite of the logical inconsistency in which this view involves him.

b. Hartz's Incompatibilism

Recall that, for Leibniz, to exist in metaphysical rigor or to be metaphysically basic is to meet criteria (a)-(c) from part one above. Hartz claims that there is an irreconcilable tension concerning what kind of entity possesses this status in Leibniz's middle to late writings. The argument is simply this:

(1) The mature Leibniz believed that, "In metaphysical rigor, there are only monads."
(2) The mature Leibniz believed that, "In metaphysical rigor, there are monads and corporeal substances."
(3) (1) and (2) are logically inconsistent.
(4) The mature Leibniz's metaphysical system contains, at its heart, a fundamental logical inconsistency.

Hartz takes the following text to be clear evidence of Leibniz's confusion:

> A substance is either simple, such as a soul, which has no parts, or it is composite, such as an animal, which consists of a soul and an organic body. But an organic body, like every other body, is merely an aggregate of animals or other things which are living and therefore organic, or finally of small objects or masses; but these also are finally resolved into living things, from which it is evident that what, in the analysis of substances, exist ultimately are simple substances—namely, souls, or, if you prefer a more general term, monads, which are without parts. For even though every simple

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> substance has an organic body which corresponds to it—otherwise it would not have any kind of orderly relation to other things in the universe, nor would it act or be acted upon in an orderly way—yet by itself it is without parts. And because an organic body, or any other body whatsoever, can again be resolved into substances endowed with organic bodies, it is evident that *in the end there are simple substances alone*, and that in them are the sources of all things and of the modifications that come to things.[14]

On the one hand, Leibniz clearly asserts that some composites, namely animals, are substances (hence not mere aggregates or phenomena). On the other hand, he asserts twice that all such composite being is founded on simple monads. The conclusion Hartz draws is that we cannot determine whether Leibniz thinks there are, in metaphysical rigor, only simple substances, or that there are both corporeal substances and simple substances.[15] And so we are forced to say that

> there is at least a deep tension between the Idealist strain of Leibniz's thought and the realist thread attaching to corporeal substances. My conclusion: no commentator intent on representing the historical Leibniz will ever succeed in eliminating the discord between the idealist and corporeal substance doctrines in the later metaphysic.[16]

The main reason Hartz offers for depicting Leibniz as caught in inconsistency is that, in spite of his evident desire to attribute *per se* unity to corporeal substances, he never provides a sufficient principle of unity for them besides his appeal to the (inadequate) doctrine of the Pre-Established Harmony (*PEH*). Indeed, says Hartz, he *cannot* provide any adequate principle, on grounds of his own reasons for denying the possibility of such a principle for aggregates.[17] I do not think Hartz is sufficiently careful here. The *PEH* is not an arbitrary effort on Leibniz's part to unify entities that are highly resistant to such unification. In spite of the independence of each monad from every other—including the dominant monad of a corporeal substance and its subordinate monads—there is an important sense in which they are intimately related. The harmony that exists among these monads is based on the reasons God finds in the inner natures of the beings God seeks to harmonize—reasons for accommodating one to another that have to do with the greater and lesser perfections of monads, where degree of perfection and imperfection get measured by degree of distinctness and confusedness of perception.[18] Admittedly, Leibniz has to bring in God as mediate cause between monads which would otherwise remain "world-apart" and unable to influence one another. So we might be tempted, with Hartz, to see this as a desperate attempt to unite things are in principle distinct. But since God finds the reasons for modifying one monad (the less perfect) in the inner nature of another (the more perfect)—Leibniz even describes the more perfect monad as rightly claiming "from the beginning of things" that God should "have regard to it" in deciding how the other less perfect monads should be regulated—there exists, via this device, a rather deep dependence

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of the subordinate monads on the dominant monad, even if (of course) this can only be seen as metaphysical dependence and not as physical causation. For these reasons, the illegitimacy of the PEH as a principle of unity for corporeal substances is not as clear as Hartz makes it out to be.[19]

While Hartz's desire to pay due respect to the evidence for Leibniz's commitment to corporeal substances is interpretively sound and admirable, his description of Leibniz's dual commitment as a fundamental logical inconsistency is implausible. The problem, it seems to me, is not only that it attributes a major logical blunder to a first-class logician, but—to use somewhat exaggerated language—that it makes Leibniz into a schizophrenic. How could a person of Leibniz's brilliance have asked himself the same question over and over again, "What are the fundamental realities?", and then time after time over a period of many years have given two logically incompatible answers—sometimes even in the same passage? This seems like a last resort explanation. I agree with Hartz that there are powerful intuitions driving Leibniz in different directions; on the one hand he wants to account for multiplicity in terms of something that is truly one, and on the other hand he wants to explain the reality of the bodies that are so manifest in our experience, and that were the subject matter of the thriving modern science of his day. But we do not have to infer from this a radical inconsistency in his thinking.

c. Phemister's Exclusive Corporeal Substance Interpretation

To take comprehensive stock of the main possibilities, we should consider Phemister's (2005) lonely interpretive stand, which denies that Leibniz thinks monads, in the sense of unextended soul-like substances, exist at all (at least, as such). Where the idealist interpretation reduces corporeal substances to immaterial monads, Phemister argues that the true monads, when rightly understood, *just are* corporeal substances. A certain reading of the 1715 letter to Remond cited earlier supports Phemister's position: "a true substance (such as an animal) is composed of an immaterial soul and an organic body, and it is the composite of these two which one calls *Unum per se*."[20] Another supporting text is the 1698 letter to Bernoulli: "What I call a complete monad or individual substance [*substantia singularis*] is not so much the soul, as it is the animal itself, or something analogous to it, endowed with a soul or form and an organic body."[21] Phemister holds that for Leibniz, the true unit, and therefore the true substance, is *not* the monad modeled on the Cartesian mind (what she calls the De Volder monad).[22] The *true* monads are not soul-like but *animal*-like, having perception and appetition *and* an organic body. These *just are* corporeal substances, and are real, simple, indivisible, naturally indestructible and ingenerable, and mechanically unalterable.

Phemister's approach respects Leibniz's commitment to the basic reality of corporeal substances in a way that many interpreters have failed to do. However, as Michael Futch (2007) points out, Phemister's *identification* of monads with corporeal substances leads to a sort of ontological circularity.

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A De Volder monad, according to her, is not a complete substance apart from its organic body (secondary matter). The completion of the monad—which it requires in order to exist—depends on the corporeal substances that make up its body. Without them, it cannot exist. But at the same time, the secondary matter in question depends for its existence on completed monads, since secondary matter just is the aggregation of many monads, which obviously must already exist in order to be aggregated.[23] So complete substances (monads) are ontologically dependent on secondary matter, and secondary matter itself is ontologically dependent on complete substances. There are two ways to counteract this result, but both are ultimately ineffective. The first—the way Phemister takes—is to say that since God creates all the monads together at once, circularity does not arise because all the monads *and* (hence) the secondary matter of all the monads come into being at the same time, together with their relations of dependence. But as Futch points out, the sort of circularity that is of concern here is unaffected by temporal sequence or lack thereof. Ontological dependence is, by its nature, an asymmetrical relation. Two entities can no more depend on one another for their existence *at* a time than they can *across* time. The second way out of the charge of circularity would be to argue that it is never the case that a given completed monad m_1 ontologically depends on a particular aggregate a as its secondary matter while a in turn ontologically depends on m_1. Instead, a will ontologically depend on some other monads, m_2, m_3, m_4, … m_n. So the asymmetrical nature of the relation of ontological dependence is preserved. But this only runs us into a different problem—namely that we get monads depending on secondary matter depending on monads depending on secondary matter…, all the way down with no ultimate foundation. Leibniz would hardly be happy with such a result. So we have to give the idealist reading more credence than Phemister does.

The problems with Phemister's interpretation do not end here. Seeing Leibniz as committed to the identity of monads and corporeal substances wreaks havoc with other important Leibnizian doctrines. Take, for example, Leibniz's view that the births and deaths of animals never (naturally) amount to literal creation or destruction, but are instead merely "developments and growths" or "envelopments and diminutions" of the animal.[24] In what appears to us to be the death of the (macro-)animal, at least a miniature "spermatic animalcule"[25] remains, and indeed this can never perish. But Phemister does not make clear whether it is only the organic body of the spermatic animacule or that of the large-scale animal that is required to complete the monad.

Even if we can get clear on this, we still have to account for the fact that on Leibniz's view, the soul is capable of enduring through complete changes in its bodily composition. At *Monadology* 71 Leibniz explains that it is not the case

> that each soul has a mass or portion of matter belonging exclusively to itself or assigned to it forever, and that it consequently possesses other inferior living things,

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> destined to serve it forever. For all bodies are in a perpetual flux like rivers, and parts enter them and leave them continually.

Now if the body is, as we must see it through Leibniz's eyes, made up of other monads, and vast numbers of these monads are continuously moving in and out of the organic body, clearly the body has parts which change. But in order to identify the true monad with the corporeal substance, Phemister needs to be able to say that the corporeal substance is *without* parts, since she holds that it is a true unity, immaterial, and indivisible.[26]

An Aristotelian Harmonization

The interpretations of Leibniz that see him as attributing a metaphysically basic status to only one of the two options (mind-like monads or corporeal substances) and the interpretation that sees him as attributing it to both but inconsistently all face serious problems. It seems, then, that we are in need of another line of interpretation. I argue that although both simple monads and corporeal substances are metaphysically basic, there are (on Leibniz's view) different ways of being metaphysically basic. The tension pointed out by Hartz only results in inconsistency if, for Leibniz, "metaphysically basic" always applies univocally, regardless of whether monads or corporeal substances are being considered. According to Hartz, there is no indication in the Leibnizian corpus of an attempt to draw a distinction between kinds of basic unity or reality.[27] I contend that even if Leibniz does not *explicitly* draw the distinction, the fact that he has it in mind is evident from its effects on his different metaphysical projects.

For Leibniz, whatever the ontologically basic entities turn out to be, they must also be true unities.[28] So to say that there are, in strict metaphysical rigor, *x*s, is to say that *x* is a "genuine individual" or a unity "of the strictest metaphysical order."[29] For this reason, if there are ontologically basic *y*s in addition to ontologically basic *x*s, then the *y*s and the *x*s must either both possess the same kind of genuine unity, or each possess one of two distinct kinds of genuine unity. In the literature on Aristotle's theory of substance there is a debate that is significantly related to this Leibnizian problem. Aristotle's *Categories* labels concrete individuals (particular men, horses, etc.) "primary substances." However, in the *Metaphysics*, he reserves the same title exclusively for forms. A large number of scholars have therefore viewed the two treatises as fundamentally incompatible. Contrary to this, Michael Wedin (2000) has argued persuasively for a compatibilist perspective, on which the project of the central books of the *Metaphysics*—especially book *Z*—is to develop a theory which explains how, or in virtue of what, *Categories*-style primary substances (or c-substances) exhibit their characteristic features—features like belonging to a species, remaining the same while taking contraries, etc.[30]

On Wedin's view, the mistaken appearance of a shift in recipient of the title of "primary substance" results from a failure to appreciate the different senses

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of primacy with which Aristotle is concerned. The *Categories* deals with *ontological* primacy, and this is accorded to individual substances because of the ontological dependence of all other things on these.[31] They are what remains numerically one and the same while admitting contrary qualities. In other words, they are the subjects of change.[32] In *Metaphysics* Z, the type of primacy that is important is *structural* or *explanatory* primacy, and this belongs only to the *forms* of c-substances because they are the reason for—or cause of—the above-mentioned features of c-substances.[33] Form unifies the material elements of a c-substance, brings about the arrangement of its parts, and confers determinacy on a given portion of matter, thereby making it a c-substance of a definite kind.

At *Metaphysics D*.8,1017b23-6, Aristotle lists the two main senses of substance:

(a) The ultimate subject, which is not further predicated of anything else.
(b) Whatever, being a this, is also separable—such is each thing's shape and form.[34]

According to Wedin, sense (a) picks out the c-substance. Yet we find no reference to "thisness" in its description.[35] In (b) on the other hand, form is called "a this" (τόδε τι) and "separable." Wedin concludes that Aristotle is here describing form as "a this," not in the *ontological* sense, but rather in a *structural* sense.[36] This sense turns out to be, in a way, more fundamental, since τόδε τι in the structural sense is capable of unifying a collection of material parts (something that is not on its own a τόδε τι) into a c-substance (something that is *derivatively* τόδε τι) by transforming the material parts into functional parts of the c-substance.[37] According to Aristotle's distinction between kinds of parts, remnant (or material) parts can exist outside of the organized system, though in such a state they are unable to exercise their characteristic function. One common example is a hand or an eye cut off from its body. A hand or eye in this condition would continue to exist, but not *as* a hand or an eye, since in such a state they would no longer be capable of exercising their characteristic functions of grasping and seeing. Functional parts, on the other hand, exercise characteristic functions or roles in the organized system, and are defined in terms of these, and hence cannot exist apart from the system. A hand connected to the living body by the relevant nerves, bones, tendons and tissues is truly a hand, and likewise for an eye connected to the visual cortex by means of its optic nerve and other relevant tissues. According to Aristotle, the definition of the form of a c-substance specifies the functions of the c-substance, and it is the form that unifies the functional parts into an organized whole or unity.[38]

But what does all this have to do with Leibniz? As is well known, Leibniz wanted his views to be consistent with the true thought of Aristotle.[39] The

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following analogy displays what I take to be the crucial connection between the systems of the two thinkers:

$$\frac{\text{form}}{\text{c-substance}} \;:\; \frac{\text{dominant monad}}{\text{corporeal substance}}$$

The relation of the form to the c-substance is relevantly similar to the relation of the dominant entelechy (or De Volder monad) to the corporeal substance. Allowing ourselves to be guided by this analogy, we can say that the dominant monad is that which confers unity on the organic body (the infinite collection of subordinate monads[40]) and unites its organs into a single corporeal substance capable of performing its characteristic functions.[41]

Recall the passage quoted earlier, which Hartz took as evidence of the close co-existence of irreconcilable points of view in Leibniz. It seems much more plausible, in view of the above analogy, that Leibniz is there distinguishing two distinct senses of "substance" and attempting to explain how it is that a substance of the second type (a composite substance), possessing an organic body that is analyzable into an infinity of component corporeal substances, can yet be called a substance and "one." It can be so-called, Leibniz is saying, in virtue of the simple monad dominating the simple monads of all these subordinate corporeal substances—which unifies them into a being which is no longer an aggregate but a living being capable of acting on other corporeal substances and of being acted upon by them in the orderly way in which they interact in the natural world. Consider the relevant portion of that passage again: "For even though every simple substance has an organic body which corresponds to it—otherwise it would not have any kind of orderly relation to other things in the universe, nor would it act or be acted upon in an orderly way—yet by itself it is without parts." It is the possession of their derivative unity and consequent capacity for activity that makes it legitimate to say that corporeal substances are fundamentally real and not mere phenomena. So Leibniz's claim that "in the end there are simple substances alone" should not be read as a devious denial that corporeal substances truly exist and are genuine unities, but rather as an affirmation that their existence as unified substances is conferred on them by the simple monads on which they are dependent.

The dominant monad or first entelechy is thus prior to the corporeal substance in the sense that the latter derives its unity from the former. In a letter to Thomas Burnet dated 1699, Leibniz explains:

> In bodies I distinguish corporeal substance from matter, and I distinguish primary from secondary matter. Secondary matter is an aggregate or composite of several corporeal substances, as a flock is composed of several animals. But each animal and each plant is also a corporeal substance, having in itself a principle of unity which makes it truly a substance and not an aggregate. And this principle of unity is that which one calls soul, or it is something analogous to soul. But, besides the principle of unity, corporeal substance has its mass or its secondary matter, which is, again, an aggregate of other smaller corporeal substances—and that goes to infinity.[42]

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Simple substances are without parts and indivisible *per se* and are necessary to avoid an infinite regress of composites within composites with no foundation.[43] Corporeal substances are not unities in this sense. Nevertheless, due to the unifying agency of the dominant monad, corporeal substances possess a unity which we might label, following Pratt (1996), "integrity." Integrity distinguishes the corporeal substance from a mere aggregate, which possesses only a kind of pseudo-unity. Break a block of marble into bits and they still remain bits of marble, but break up an animal into pieces, and you don't get a bunch of small animals of the same kind. The contrast between integrity and the pseudo-unity of the aggregate body parallels the Aristotelian distinction between functional parts and remnant parts. The monads forming the organic body, taken in themselves, are analogous to remnant parts; when under the influence of the dominant monad, they are functional parts which cannot exist as such apart from the body of which they are parts, and in this sense they share in the indivisibility of the simple substance.

Monads (in their roles as dominant over other monads) are metaphysically basic, for Leibniz, in the sense that they possess strict unity and indivisibility in themselves. They have no parts and hence can in no way be split up into components. They *act* in the sense that God finds reasons in their natures for adapting to them the monads that come under their influence. Further, they are self-subsistent substances in that they do not depend on anything but God for their (possible) existence. For God could have created any monad alone, and have given it, existing on its own, all the same perceptions and appetitions it would have had as a member of a world actually populated by an infinity of other monads. Monads confer a derivative unity and a derivative indivisibility on the multiplicity of subordinate monads that make up their organic bodies, and this is what explains the sense in which corporeal substances are metaphysically basic. They are genuine unities and indivisible, though they possess these features in ways distinct from, but importantly related to, the ways in which their dominant monads possess them. In spite of the derivative nature of their unity and indivisibility, corporeal substances are self-subsistent because although the subordinate monads depend on dominant monads for their existence as members of organized, living bodies, they do not depend on dominant monads for their existence *simpliciter*. And corporeal substances act in that they are what constitute the created, natural world of interacting bodies. In fact, without them, monads themselves would be incapable of acting, in the sense of that word here specified.[44]

Distinguishing these two senses of being metaphysically basic, and the correspondingly dual ways of meeting each of the criteria for possession of this status, enables us to see our way to a new reading of the mature Leibniz's views about fundamental ontology. This interpretation does justice to what Leibniz actually says in a way that the exclusive idealist and exclusive corporeal substance interpretations fail to do. And unlike the incompatibilist interpretation, it does not require us to attribute a major logical blunder to a thinker of

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Leibniz's stature. Finally, it respects Leibniz's love for the rich harmony that results from blending apparently contrary positions, and his desire to be consistent with what he took to be the true thought of Aristotle.[45]

Notes

1 I take the expression "metaphysically basic" to be, at least for the purposes of this paper, equivalent in meaning to "metaphysically fundamental," "ontologically basic," "truly or fundamentally real," "existing in metaphysical rigor" etc.

2 Phemister (2005), 11. This position, attributed to Leibniz by Rutherford, Adams, Mates, Rescher, Garber and Wilson (the latter two ascribe it only to his late period) is sometimes referred to as "weak idealism" in contrast to the strong idealism of Berkeley.

3 Ever since Garber's (1985) article, which argues for Leibniz's commitment to the reality of corporeal substances, at least in his middle years, a challenge to the traditional interpretation has been mounting. Catherine Wilson (1989) expresses this sort of a position, and more recently (2005) Phemister has developed an even more radical variant (see diagram). It ought to be noted that more recently (2004, 2005) Garber has modified his views, at least slightly.

4 Both "strict" and "derivative" unity are cases of what Leibniz calls "genuine" unity (*unum per se*) by contrast to accidental unity (*unum per accidens*), the "unity" which applies to, for instance, mere aggregates.

5 One benefit of my view is that it describes a way in which Leibniz's thinking is consistent with that of Aristotle, which is something Leibniz presents himself as being interested in doing. Many commentators on Leibniz have indicated his consistent commitment to the true thought of Aristotle. George Gale (1989), for instance, has convincingly argued for the relevance to Leibniz's theorizing of an Aristotelian tension concerning the notion of substance besides the one I emphasize in this paper. Gale shows how Leibniz brings together in his notion of an individual nature elements of Aristotle's conception of substance in the *Categories* (as the formal source of change) and in the *Physics* (as "the bestower of reality" on individual substances). And Dan Garber (1997) has made clear how notions of matter and form originating in Aristotle play a central role in the way Leibniz presents substance (both simple and composite) in both his middle and late periods.

6 See Pratt (1996).

7 The entelechy itself is not included since the *DV* monad is standing in for it. God, for Leibniz, would not be properly characterized as a *DV* monad, since God is entirely immaterial.

8 They are thus at best "substances by courtesy only, mere collectives of totally separate units" (Rescher, 1991, 46).

9 The former argument pattern Hartz calls the "Aggregate Argument" and the latter he calls the "Phenomena Argument." The interested reader may wish to pursue the other, less threatening, arguments that Hartz swiftly dismisses (196-7).

10 Quoted by Hartz, 195. I follow Hartz and Phemister in identifying corporeal substances with the soul-body composites exemplified by animals. This identification

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is, of course, not one that is universally made—see, for instance, Adams (1994, 280). I think, however, that Phemister does a good job of establishing the position (2005, 72-75).

11 Hartz, 196.

12 Ibid, 201.

13 Ibid, 202.

14 "Metaphysical Consequences of the Principle of Reason" C 13-14/P 174-5; last italics Hartz's.

15 In the final section of the paper, I will show that this passage is much better read as supporting a compatibilist reading of Leibniz.

16 Hartz, 194.

17 Ibid, 203. Hartz regards Leibniz's appeal to the PEH as tantamount to the admission of a lack of ability to explain what unifies the infinite multitude of monads into a single corporeal substance.

18 See *Monadology*, 49-52.

19 In his response to Father Tournemine in 1708 (*AG* 196-7), Leibniz appears to deny that he takes the PEH to be responsible for the unity that obtains between soul and body. However, in the same letter Leibniz distinguishes between a harmony existing at the purely phenomenal level (concerning what he calls the "perceived" relation between body and soul), and a non-phenomenological, metaphysical union. I take Leibniz to be elucidating this deeper, metaphysical connection in the sections of the *Monadology* referred to above, which is something he had not attempted to do in the two-clock metaphor on which Tournemine was commenting. Although at other places in his late period—most notably in his correspondence with Des Bosses—Leibniz similarly seems to have abandoned the PEH as a means of uniting soul (dominant monad) and organic body, there is clear evidence from that same correspondence that he believed in their unity. See Garber (1997), 348f. Whether or not Leibniz finally accepted the *vinculum substantiale* as a new component of his solution to the problem of the unity of the corporeal substance arguably does not remove the PEH altogether from playing a role in how Leibniz saw things fitting together, even at this late stage. Its role in the late *Monadology* further suggests that the PEH continued to play a key role in his thinking on this subject.

20 Quoted from Phemister, 72. She cites Gerhardt, C.I. (ed), *Die Philosophischen Schriften von Gottfried Wilhelm Leibniz*, 7 vols., Berlin: Weidman, 1875-90, 657. Phemister goes on to admit that, in the next paragraph of the letter, Leibniz is found asserting that the soul is a separable substance or monad. She explains this as a result of his tentative adoption of Malebranche's view of the soul for the purposes of responding to the latter's occasionalism. We need not explain away this apparent incompatibility, on my view.

21 *AG* 168.

22 See Phemister (2005), 31.

23 Futch, 163.

24 *Monadology*, 73.

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25 This expression, elsewhere translated as "seminal animals," is used at *Monadology*, sec. 82. The French reads, "*petits Animaux spermatiques*."

26 Although corporeal substances are not without parts and indivisible, it may be that a *kind* of indivisibility is conferred on them by their dominant monad. I will elaborate on this qualification in the next section. But note further that if monads are corporeal substances, and as such are extended, then monads will presumably be subject to the laws of efficient causality, contrary to what Leibniz says toward the end of the *Monadology*:

> 80. Souls act according to the laws of final causes through appetitions, ends and means. Bodies act according to the laws of efficient causes or motions. And the two kingdoms, that of efficient causes and that of final causes, are in harmony with one another.
>
> 81. According to this system bodies act as if (to suppose the impossible) there were no souls, and souls act as if there were no bodies, and both act as if each influenced the other.

So Phemister's interpretation also entails the rejection of the PEH as expressed here.

27 Hartz makes two claims that are relevant here. The first is that, in contrast to Scotus, there seems to be no indication in Leibniz of an attempt to distinguish senses of "ontologically basic." The second is that, "all indications are that he used this phrase to mark out an absolute feature—one that was 'all or nothing' " (204-205).

28 According to the well-known dictum, a being is not a *being* unless it is *a* being.

29 Hartz, 202.

30 In the literature, examples of the compatibilist position are by far rarer than incompatibilist accounts, but Wedin's compatibilism is not the only version of the latter position. Both Gill (1989) and Loux (1991) argue for a type of compatibilism on which the c-substance retains the title of primary substance in *Metaphysics* Z. See Witt (2002) for more on the compatibilism /incompatibilism debate concerning Aristotle.

31 In the strict sense of "exist" only substance individuals (c-substances) exist; all other things that are (tw~n o1ntwn) are traced to c-substances as their subjects by relations of ontological dependence. Non-substance entities (accidents) *inhere in* primary substances, while substance universals (species and genus terms) are predicated of them (*Categories* 2a34-b6).

32 Ibid, 4a10-12.

33 Ibid, 1041a6.

34 Wedin's translation, see 211.

35 "Thisness" is a requirement for anything counting as a primary substance in the *Categories*.

36 ὃ τόδε τι ὂν τῶ λόγῳ χωριστόν ἐστιν. See *Meta* H.1,1042a29-31. The kind of unqualified separateness (χωριστὸν ἁπλῶς) that is denied the form is that which belongs only to the compound or c-substance (See Wedin, 214).

37 Wedin, 449. Matter, then, and even the form-matter compound are substances only potentially, as a result of the causation of what is substance in actuality, namely the form.

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38 According to *De Anima* 412a6-11, it is the soul that *makes* a body (the material component of the compound) to be an actual living body.

39 Consider the following famous quotation concerning his desire to rehabilitate substantial forms:

> At first, when I had freed myself from the yoke of Aristotle, I was in favour of [material] atoms and the void, because this view best satisfies the imagination. But thinking again about this, after much meditation I saw that it is impossible to find the principles of a real unity in matter alone, or in what is only passive, since this is nothing but a collection or aggregation of parts ad infinitum…. So, in order to get to these real unities I had to have recourse to a formal atom, since a material thing cannot simultaneously be material and perfectly indivisible, or possessed of a genuine unity. So it was necessary to recall and, as it were, to rehabilitate substantial forms, which are so much decried these days…. I found, then, that the nature of substantial forms consists in force, and that from this there follows something analogous to feeling and desire; and that they must therefore be understood along the lines of our notion of souls.

From "A New System of the Nature and Communication of Substances" (1695), translated and edited by R.S. Woolhouse and Richard Francks (1997), 11, 12. See also *New Essays on Human Understanding*, 317-318.

40 Note that each of the subordinate monads is in turn endowed with its own body to form a corporeal substance.

41 Garber (1997), speaking of Leibniz's middle period, makes a very similar point: According to Leibniz, "[b]ecause of the harmony of the soul with its body, when the soul of the organic body has clear perceptions, *it acts on its body, and causes it to act as a whole, as a single unit*, as opposed to a multitude of individual corporeal substances, each acting on its own. In this way, the soul functions as the form of the organic body, *the source of its activity and the source of its unity*" (344, my emphasis). Thanks to an anonymous referee for drawing my attention to this passage. My account deepens the perspective presented by Garber here by showing its roots in an Aristotelian problematic not previously considered, and extends this understanding to Leibniz's late period in spite of some textual evidence that he abandoned certain aspects of this conception. See fn. 19 above.

42 *Philosophical Essays* (1989), 289.

43 This, I take it, is the lesson expressed in the first three sections of the *Monadology* (Rescher's (1991) translation):

> 1. The monad which we shall discuss here is nothing other than a simple substance that enters into composites. Simple means without parts. (See *Theodicy*, sec. 10.)
> 2. And there must be simple substances, since there are composites; for the composite is nothing but an accumulation or aggregate of simples.

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3. However, where there are no parts at all, no extension or figure or divisibility is possible. And these monads are the true atoms of nature, and, in a word, the elements of things.

44 George Gale, in his (1970) discussion of the relation of Leibniz's physics to his metaphysics, distinguishes three levels in Leibniz's system, and suggests that apparent tensions in Leibniz's claims about monads and corporeal substances can be dissolved by keeping in focus which level Leibniz is speaking at in a given context. According to Gale's explanatory model, monads and their perceptions comprise the most logically primitive level—the metaphysical level—while corporeal substance and the primitive active and passive forces that accrue to them logically derive from the metaphysical level and also play an explanatory role in relation to the observable level of derivative (active and passive) forces (e.g. the particular motions of physical bodies). This way of describing things bolsters my own account of the dual sense of being metaphysically basic that apply to monads and corporeal substances respectively in that it shows how Leibniz in one context speaks of corporeal substances as basic (the foundation of physical phenomena), while in other contexts he has in mind the way that corporeal substances themselves are grounded in monads and their perceptions, which can thus be seen as basic in relation to both of the other levels. I take this to show that while corporeal substances, in both Gale's presentation and my own, derive their reality from the monadic level, they constitute a further, genuine level of reality in their own right, which we must keep distinct from the purely phenomenal.

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References

Adams, R.M.
1994 *Leibniz: Determinist, Theist, Idealist*. New York: Oxford University Press.

Futch, M.
2007 "Review of *Leibniz and the Natural World*." *Journal of the History of Philosophy* 45.1, 162–163.

Gale, G.
1989 "Physics, Metaphysics, and Natures: Leibniz' Later Aristotelianism." *Leibnizian Inquiries*, ed. N. Rescher. Lanham, MD: University Press of America, 95–102.
1970 "The Physical Theory of Leibniz." *Studia Leibnitiana* II (2): 114–127.

Garber, D.
2005 "Leibniz and Idealism." *Leibniz: Nature and Freedom*, eds. D. Rutherford and J. A. Cover. Oxford: Oxford University Press, 95–107.
2004 "Leibniz and Fardella: Body, Substance and Idealism." *Leibniz and His Correspondents*, ed. P. Lodge. Cambridge: Cambridge University Press, 123–40.

https://doi.org/10.1017/S0012217312000704 Published online by Cambridge University Press

1997 "Leibniz on Form and Matter." *The Fate of Hylomorphism: "Matter" and "Form" in Early Modern Science (= Early Science and Medicine 2, Special Issue)*, eds. C. H. Luthy and W. R. Newman. Leiden: Brill, 326–352.

1985 "Leibniz and the Foundations of Physics: The Middle Years." *The Natural Philosophy of Leibniz*, eds. K. Okruhlik and J. R. Brown. Dordrecht: Reidel: 27–130.

Hartz, G. & Wilson, C.

2005 "Ideas and Animals: The Hard Problem of Leibnizian Metaphysics," *Studia Leibnitiana* XXXVII (1): 3–19.

Hartz, G.

1998 "Why Corporeal Substances Keep Popping up in Leibniz's Philosophy." *British Journal for the History of Philosophy* 6 (2): 193–207.

Leibniz, G.W.

1991 *G.W. Leibniz's Monadology: An Edition for Students*, ed., trans., N. Rescher. Pittsburgh: University of Pittsburgh Press.

1981 *New Essays on Human Understanding*, eds. P. Remnant and J. Bennett. Cambridge: Cambridge University Press.

1997 *Leibniz's "New system" and Associated Contemporary Texts*. eds., trans., R. S. Woolhouse and R. Francks. New York: Oxford University Press.

1989 *Philosophical Essays*. eds., R. Ariew and D. Garber, Indianapolis: Hackett.

1956 *Philosophical Papers and Letters*, ed. L.E. Loemker. Dordrecht: Reidel.

Loux, M.

1991 *Primary Ousia: An Essay on Aristotle's Metaphysics Z and H*. Ithaca: Cornell University Press.

Phemister, P.

2006 *The Rationalists: Descartes, Spinoza and Leibniz*. Cambridge: Polity Press.

2005 *Leibniz and the Natural World*. Dordrecht: Springer.

Pratt, V.

1996 "One for Leibniz." *Sorites* 4: 10–20.

Rutherford, D.

1995. *Leibniz and the Rational Order of Nature*. Cambridge: Cambridge University Press.

Wedin, M.

2000 *Aristotle's Theory of Substance*. New York: Oxford University Press.

Witt, C.

2002 "Critical Notice: Aristotle's Theory of Substance." *The Philosophical Review* 111, 1: 98–101.

https://doi.org/10.1017/S0012217312000704 Published online by Cambridge University Press