# LEIBNIZ: A METAPHYSIC OF SUBSTANCES

A Thesis

by

# MARK CHRISTOPHER BERNIER

Submitted to the Office of Graduate Studies of Texas A&M University in partial fulfillment of the requirements for the degree of

# MASTER OF ARTS

May 2006

Major Subject: Philosophy

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Approved by:

Chair of Committee,	Stephen Daniel
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### ABSTRACT

Leibniz: A Metaphysic of Substances. (May 2006) Mark Christopher Bernier, B.A., Rhode Island College Chair of Advisory Committee: Dr. Stephen Daniel

For Leibniz, corporeal substance is the union of body and soul, and he dedicates much of his thought to understanding the mystery of this union. However, there is a divide among scholars over what he proposes as a solution. Many have judged that for Leibniz there are no bodies "out there" in a world independent of the mind. There is, in fact, no world outside of perceiving things and their appearances. This is taken to imply that corporeal substances are (at most) the logical relations underlying phenomena; they would not then be *real* substances.

Another interpretation is that *young* Leibniz believes in corporeal substance, but *mature* Leibniz recognizes that their reality cannot be maintained. It is in his "later years" that he finally comes to embrace hard-core phenomenalist commitments, eschewing the material world as nothing but phantasmagoria. Leibniz has changed his mind, on this account, and corporeal substances are real only in his "middle years."

I believe that these interpretations are incorrect, and I attempt to show two things. First, Leibniz holds to *real* corporeal substances (i.e., they are not merely logical grouping of monads). Establishing this involves scrutinizing the textual evidence, both for and against this position. Second, Leibniz has the resources to account for the true unity of corporeal substance. At the heart of Leibniz's metaphysics are the twin themes of unity and harmony, which permeate every facet of his thought. They are the keys to understanding what is real, and what is not. A *true* substance, for Leibniz, is that which has true unity, and I believe that the unity of a corporeal substance can be explained only through the harmony of its elements. In short, its harmony is its unity. A third ancillary point is that corporeal substances are at the heart of his metaphysical system. In the end I suggest a starting point for a "new system" of interpreting Leibniz's metaphysics. For Chris

μυκτήρ σου ώς πύργος τοῦ Λιβάνου σκοπεύων πρόσωπον Δαμασκοῦ·

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#### CHAPTER I

#### INTRODUCTION

To see a World in a Grain of Sand And a Heaven in a Wild Flower, Hold Infinity in the palm of your hand And Eternity in an hour.<sup>1</sup>

-William Blake

### THE BACKGROUND: UNITY, HARMONY, AND DIPLOMACY

In the eventide of the seventeenth century, Gottfried Wilhelm Leibniz, the last "universal genius," is working out the structure of his metaphysics. A councilor to princes and adviser of kings, he is a statesman and courtier, found at the epicenter of the great diplomatic struggles of his day; during his lifetime there are nine major wars and a theologically fractured Church divided against itself. In his "spare time" he tirelessly pursues mathematics, physics, philosophy, and he contributes to virtually every subject matter.<sup>2</sup> As a philosopher, he is one of the most brilliant of

This thesis follows the style and format outlined in The Chicago Manuel of Style, 15th edition.

<sup>1. &</sup>quot;Auguries of Innocence," 1794, in 100 Great Poets of the English Language, ed. by Dana Gioia with Dan Stone (New York: Pearson Longmann, 2005), 130.

<sup>2.</sup> Matthew Stewart sums this up well: "When an idea flared in his kinetic mind, he would grab it like a torch and run until the next bright light caught his eye, and then he would add that one to the bundle in his arms, too, dropping a few others in his haste and so leaving behind a trail of smoldering visions. In the 120 volumes' worth of material in the Leibniz archives, there are without doubt hundreds of sparkling inventions that have yet to be catalogued, let alone realized. He wrote about everything, to everybody, all the time"; *The Courtier and the Heretic*, Matthew Stewart (New York: W. W. Norton & Company, 2006), 91. Leroy Loemker writes that "few achievements of the day can be named in which he did not have a hand," e.g., the discovery of phosphorus and European porcelain, a self-regulating mechanism for the steam engine, history and jurisprudence, to name a few. *Gottfried Wilhelm Leibniz: Philosophical Paper and Letters*, ed. and trans. by Leroy E. Loemker (Boston: Kluwer Academic Publishers, 2nd edition, 2nd printing, 1989), 8.

the century, and his interests coincide with his diplomatic goals. He aspires to improve the wellbeing and happiness of humanity, and to this end he encourages the formation of an *Ordo Theophilorum*, an Order of God-lovers, whose members are to be charged with improving the wellbeing of all people.<sup>3</sup> He attacks the problem of reconciliation, which he sees in Europe and Christianity, through seeking out a common metaphysical theory that will *unite* the parts divided over theological differences. His goals depend, at least partially, upon this metaphysical ground he articulates and defends. In this ground he hammers in the notions of *unity* and *harmony* as being the most essential of all to understanding the structure of reality.

Perhaps it is when Leibniz walks with Queen Sophia, in her garden at the summer palace of *Herrenhausen*, that he is most struck by the balance each individual part can have when belonging to a whole. The garden as a whole is designed so that there are many smaller gardens, each built according to its own *principle of organization*, and then hidden beyond the curve of the path, folded from sight until you come upon it. Fish ponds and fountains—which Leibniz is consulted with for matters of design—are carefully planned in the enormous palace grounds, concealed by hedges and walkways, or conspicuously placed at crossroads. Harmony was, in such a place, seemingly palpable.<sup>4</sup>

And perhaps it is in his duty as a diplomat for the House of Hanover that he comes to appreciate how inseparably connected all the European states are, and how important harmony is to any unification—perhaps too, he sees Louis XIV, the *Sun King* of France, as an aggressive, untethered prototype for his doctrine of *unification through domination*—though what Leibniz has in mind is something more benevolent, tempered by his ontological and theological commitments.

<sup>3.</sup> Ibid., 9.

<sup>4.</sup> See Leroy Loemker's introduction, *Philosophical Paper and Letters*, 13, for detail on the garden and historical context.

All things are inescapably connected, on all levels of existence. Even in its deepest recesses, reality moves towards unification, which is always achieved through the domination of that which perceives more clearly, more perfectly, over that which is confused. But nature is designed by a perfect God, so such striving is one and the same with striving after perfection, which is expressed as universal harmony. Justice, for both God and humanity, is the charity of the wise, and ontological domination works within the confines of wisdom and charity.<sup>5</sup> Each element of nature is manifestly related with every other, organized according to a divine vision of harmony.

For Leibniz, these twin themes of unity and harmony are the most essential characteristics of reality. Whatever does not exhibit them does not, in any true sense, exist. And what has such qualities is, by definition, and by its very nature, a substance. His ontology is an ontology of substance, of that which is truly one and truly in universal harmony. The axiom he holds, *yea with both hands*, is that "nothing is truly *one* being if it is not truly one *being.*"<sup>6</sup> *Unity* is central to understanding *being*. I know of no other pronouncement on his part (save perhaps when he talks of geometry), where he so forthrightly tells us his *axiom*. This forms the cornerstone of his metaphysics. And I endeavor to show that unity and harmony both converge in the one-ness of a corporeal substance. The harmony of a corporeal substance is its true unity.

Of course, there is disagreement about what sorts of things exist in the metaphysical expanse he illuminates. There are substances, surely, but what exactly qualifies as a substance?

<sup>5. &</sup>quot;I have put in my preface to the *Codex Iuris Gentium*, that justice is nothing else than the charity of the wise, that is to say goodness toward others which is conformed to wisdom." "Meditation on the Common Concept of Justice," 1702-3, *Leibniz: Political Writings* (Cambridge: Cambridge University Press, 2nd printing, 1988), 54. "That justice is nothing but the charity of the wise. That charity is universal goodwill, the execution of which the wise person performs in conformity with the measure of reason, in order to obtain the greatest good." From a letter written to Arnauld, 23 March 1690, G.W. *Leibniz: Philosophical Texts*, ed. and trans. by Richard Francks and R.S. Woolhouse (New York: Oxford University Press, 1998), 137.

<sup>6.</sup> Leibniz to Arnauld, 30 April 1687, Texts, 124.

Does anything else besides substance exist? It is at times difficult to ferret out the content of his ontology, and most puzzling of all is the status of bodies and corporeal substances. We find there are three basic interpretations of Leibniz on this issue. There is, first, the *accepted* ontological reading, in which bodies are phenomena and corporeal substances simply do not exist. A second view treats Leibniz's "later years" and "middle years" more or less as separate partitions of his intellectual development. In his later, perhaps more mature philosophical reflections, Leibniz is seen as a full blown phenomenalist, while in the middle years he still believes in real bodies and substantial forms. So this second view holds that his ontological commitments experience a drift towards phenomenalism, until finally he falls under its spell. A third position, which is considered heterodoxical, is that Leibniz never accepts the phenomenalist picture at all. There is a *real* world out there (by which I mean that matter and bodies are not phenomenal) and preceding interpretations of Leibniz as a phenomenalist are egregious.

It is this last view with which I am sympathetic, and in what follows I will defend a version of it. The picture Leibniz gives us is more complex than the *accepted* view would have it, for he seems to claim that bodies are not only phenomena, but are also aggregates of corporeal substances.<sup>7</sup> It may be difficult to see how bodies can be both, and what ontological status corporeal substances can have in such a picture. Yet I believe that this is his considered view, which he holds to the end. My chief aim is to show that Leibniz does hold these seemingly disparate positions, and that his ontology is richer than he has been given credit for. Corporeal substances are *real* substances, and they require monads but are not reducible to them. This realization must, I believe, force us to rethink the structure of his metaphysics, and in the final

<sup>7.</sup> Cf. "Primary Truths," (1689), *Philosophical Essays: G. W. Leibniz*, ed. and trans. by Roger Ariew and Daniel Garber (Indianapolis: Hackett Publishing Co., 1989), 34; ibid., 105 (notes on Fardella, March 1690); ibid., 203 (Leibniz to Des Bosses, 29 May 1716).

analysis I will suggest an approach that seems a fruitful avenue of exploration. The result, I hope, will offer a more integrated approach to Leibniz, and perhaps in the end will provide a more penetrating understanding of his thought.

### THREE ONTOLOGICAL READINGS OF LEIBNIZ

Nonetheless, the *accepted* reading has the high ground. There is perhaps good reason for this; when writing to De Volder, Leibniz insists, "we must say that there is nothing in things but simple substance, and in them, perception and appetite." <sup>8</sup> On the standard interpretation, then, there is nothing real in the world except simple substances. There are no physical or material things. Only mind-like beings exist, and nothing more (save for the appearances inside them). He is, we might say, an *idealist*, meaning that mind-like entities are the foundations of (or perhaps the *only*) things that exist.

But the standard account goes further than idealism. It also embraces the related view of *phenomenalism*, by which I generally mean that *nothing but* these mind-like entities exist.<sup>9</sup> More accurately, the view I am calling phenomenalism is a theory of the ontological status of bodies and matter. Matter is not "stuff out there" composing bodies. Reality is at its bones composed only of these simple substances, and there is nothing *external* to minds. The appearances of reality are merely that: appearances. And there are only minds, and in them, appearances—so there can be no corporeal bodies. If there are no corporeal bodies, neither are there corporeal substances; for there

<sup>8.</sup> Cited in Daniel Garber, "Leibniz and Idealism," *Leibniz: Nature and Freedom*, ed. by Donald Rutherford and J.A. Cover (Oxford, New York: Oxford University Press, 2005), 95.

<sup>9.</sup> For a fuller treatment of the distinction between idealism and phenomenalism, and how this helps illuminate Leibnizian scholarship, see Nicholas Jolley, "Leibniz and Phenomenalism," *Studia Leibnitiana* 18 (1986): 38-51.

can be no union between a body and soul (that is, a corporeal substance) if there are no bodies to be unified with souls. There is only the non-material. So in answer to the question "what exists?" the standard account would have Leibniz answer that there are only these simple substances, pure mind-like beings, which he comes to refer to as *monads*. The claim that "only simple substances exist" amounts to saying Leibniz is both an idealist and phenomenalist. We can call this standard reading the Phenomenalist account.

Robert Adams, perhaps the most trenchant Phenomenalist, insists that Leibniz's comment to De Volder reveals an axiomatic principle of his metaphysics. For Adams, Leibniz is unmistakably a phenomenalist: bodies are intentional objects.<sup>10</sup> They may be understood as belonging to a story—a scientific story—and are "nothing but thoughts."<sup>11</sup> Bodies are "not complex enough to express something that expresses the whole universe as a monad does."<sup>12</sup> Bodies are finite representations—appearances, expressions—of monads that contain within them an infinity of relations. In other words, bodies are the appearances of monads—an infinitude of them—based upon the limited perceptions of finite minds. Phenomena are modifications of substance modifications that have as their representational content other monads.<sup>13</sup> So, for example, matter and extension are the properties of phenomena, which is to say, *properties of the perception of the appearance of other monads*.<sup>14</sup> A corporeal substance would then be nothing more than an aggregate of monads corresponding to these appearances. It would not be *real* in any strong ontological

<sup>10.</sup> Robert Adams, "Phenomenalism and Corporeal Substance in Leibniz," *Midwest Studies in Philosophy* 8 (1983): 218.

<sup>11.</sup> Ibid.

<sup>12.</sup> Ibid.

<sup>13.</sup> Ibid., 220.

<sup>14. &</sup>quot;Bodies-organic or living bodies in particular-are appearances of monads." Ibid., 226.

sense, since its unity does not result from perceptions, but is the harmony of them.<sup>15</sup> The union of body and soul is the union of a "harmony of perceptions of monads"—the dominant monad being identical with the soul. The soul must therefore on this account be a substance.<sup>16</sup> Corporeal substances are therefore at bottom only *aggregates* of substances; but aggregates cannot have real unity, so their unity is only in the mind.

If one is already a committed Phenomenalist, then it is easy to see how Leibniz's comment to De Volder is a confirmation of Phenomenalism. It is worth noting, however, that while idealism and phenomenalism are compatible, the former does not entail the latter.<sup>17</sup> There is perhaps little disagreement about whether Leibniz was an idealist—at the least he seems to embrace something like it later in life. But idealism on its own is not evidence of phenomenalism. The real force of this view, as I see it, is summed up in Adams's question: "*How*, according to Leibniz, are bodies constructed out of simple substances and their properties?"<sup>18</sup> If we begin with mind-like beings, which have no causal interactions with each other, then it is hard to imagine (as Adams points out) that a *real being* can somehow be produced from the mix. For example, a bundle a wood arranged in a fire pit does not of *its own volition* catch fire. The catalyst, say a match or a lightning strike, must be added. Only then is there *a* fire (each individual piece of wood is on fire, but the collective result can perhaps be referred to as *one* fire). In the Leibnizian model, there is no apparent way (it

<sup>15.</sup> Ibid., 239. For Adams, "Leibniz's claim is that aggregates have their unity and, therefore, their being only in the mind and that this is true even of aggregates of real things."

<sup>16.</sup> See, for example, Robert Adams, Leibniz: Determinist, Theist, Idealist (New York: Oxford University Press, 1994), 275.

<sup>17.</sup> Idealism, as I have defined it, is the view that the ultimate elements of reality are mind-like things. However, idealism so defined would only entail phenomenalism if (1) being *mind-like* entails being *immaterial*, and (2) that collections of such things cannot have material qualities. But it is not clear that (1) is true, since it does not seem that a mind-like thing is *necessarily* immaterial (at any rate, I do not think Leibniz makes this case because he equates souls with substantial forms and active force—thus more may be implied than only perceiving); and (2) borders on a compositional fallacy.

<sup>18.</sup> Adams, "Phenomenalism," 217.

is thought) to bring together the elements for a fire, since there is nothing outside, no match or lightning strike, to unite the bundle in one flaming mass. There is nothing external to mind-like substances, which poses a problem of explaining how they could *come together* as one substance. This is what Samuel Levey calls the "problem of construction."<sup>19</sup> Since a *being by construction* almost seems automatically to have accidental unity—and for Leibniz, this would amount to having no real unity at all—there seems to be a real difficult question about the unity of corporeal substances. No aggregate or collection of things is itself a thing. As Adams states, "Leibniz's claim is that aggregates have their unity and, therefore, their being only in the mind and that this is true even of aggregates of real things."<sup>20</sup> The unity of such things, then, is an appearance.

Adams thus declares that aggregation is phenomenal; there are no (literal) heaps of monads—minds or souls take up no space and cannot heap. Reality is an infinity of these mind-like monads and their perceptions, all in full-step harmony, and being *real* simply means being a monad (according to Adams, this is the main criterion), or perceiving a grouping of them (which gives only the appearance of a thing). On the way in which such aggregations of substances result in bodies, Adams sums up his position:

In order for there to be corporeal aggregates that are real by virtue of the reality of the substances aggregated in them, they must appear as material masses in this coherent system of phenomena and, therefore, they must satisfy the harmonious perceptions condition for reality.<sup>21</sup>

<sup>19.</sup> Samuel Levey, "Leibniz and Idealism," unpublished manuscript.

<sup>20.</sup> Adams, "Phenomenalism," 239. The passage from Leibniz he cites in support is, "I have believed therefore that I would be permitted to distinguish Beings of aggregation from substances, since those Beings have their unity in our mind, which relies on the relations or modes of genuine substances"; original source is *The Leibniz-Arnauld Correspondence*, ed. and trans. by H. T. Mason (Manchester: Manchester University Press, 1967), 121.

<sup>21.</sup> Ibid., 247.

A living body is thus a corporeal substance, which is the union of a dominant monad with an organic mass. The formation of such a substance follows the principle of pre-established harmony among *all* perception. This harmony is a pre-requisite for being *real*, or well-founded, and the phenomena that make up all bodies are systematically organized. Adams writes that "Phenomena are real, in a weak sense, if and only if they fit into a single scientifically adequate system."<sup>22</sup> Corporeal substance is thus both an aggregate of substances as well as a phenomenon (understood as a systematic organization of perceptions), existing as a single thing without parts, as an aspect of minds. The *reality* of which Adams speaks is heavily phenomenal.

The standard view Adams defends has been challenged in recent literature; by a position I will call *Restricted Phenomenalism*. Since Daniel Garber's "Leibniz and the Foundations of Physics: the Middle Years," scholars have sought to understand Leibniz as having a middle or later period of thought, and the attempt to understand his corpus of work systematically has been somewhat abandoned.<sup>23</sup> It is true that Leibniz in fact denies having built a system.<sup>24</sup> He describes to Placcius how "extremely distracted" he is, consumed by his duties as a historian for the House of Brunswick, and how he has so many thoughts in mathematics and philosophy (as well as literary observation) he does not want lost, that he's "often bewildered as to where to begin."<sup>25</sup> Indeed, some of his best philosophical work is found in his correspondences, and not in any single definitive piece. He gives no overarching, self-contained system to posterity. On this account, he

<sup>22.</sup> Ibid.

<sup>23. &</sup>quot;Leibniz and the Foundations of Physics: the Middle Years," in K. Okruhlik and J. R. Brown (eds.), *The Natural Philosophy of Leibniz* (Dordrecht: D. Reidel, 1985), 27-130.

<sup>24.</sup> In a letter to Des Billettes, 1696, Leibniz writes, "My system, about which you express curiosity for some news, is not a complete body of philosophy, and I make no claim to give a reason for everything which others have sought to explain. We must proceed by stages to proceed with firm steps. I begin with principles, and I hope to be able to satisfy most of the doubts like those which have troubled Mr. Bernier." *Paper and Letters*, 13.

<sup>25.</sup> Letter to Placcius, 1695, Papers and Letters, 12.

perhaps has impressive sketches, with themes and explorations sometimes later revised if not abandoned.<sup>26</sup> Garber holds that in the "middle years" Leibniz was a realist with regard to bodies and corporeal substances, but he later abandons this for the more "familiar" position of phenomenalism. Catherine Wilson says that in these later years, after 1703, his "new theory of immaterial atoms could not be grafted on to the old theory of corporeal substance."<sup>27</sup> We thus find, in his middle or "late-middle" years, his attempts to reconcile the contrary doctrines of monads and corporeal substances. He actively resists the collapse of his system into a "pure phenomenalism."<sup>28</sup> It is the pressure from De Bosses that finally causes him to knuckle under; Des Bosses, Wilson claims, forces Leibniz, "for the sake of logical coherence...to choose definitely between monads and corporeal substances."<sup>29</sup> After flirting with the unfortunate, but understandable postulation of a *vinculum substantiale* "urged on him by de Bosses," Leibniz finally capitulates. When it came right down to it, "he did not hesitate" to choose monads over corporeal substances.<sup>30</sup> "He did not care in the end about the *vinculum* because he did not care in the end about corporeal substances."<sup>31</sup> Leibniz is compelled to accept phenomenalism.

<sup>26.</sup> While it may be questioned whether Leibniz has a fully developed system, it is above reproach that he is a systematic thinker. His desire was in part to bring peace to Europe, to end the wars sprung from theological rifts. There was a keen and certain purpose behind what he attempted, which was (in my estimation) to synthesize all that he considered good in other systems, to bring them together in one "open system." His systematic thinking was then influenced by the desire to accommodate other viewpoints. Of course, it is important to realize that Leibniz does talk as though he *has* a system, and he tells us what it is like: "If someone were to reduce Plato to a system, he would render a great service to mankind, and it would then be clear that my own views approach his somewhat" (Leibniz to Nicolas Remond, 11 February 1715, *Papers and Letters*, 659). In the following discussion, when I talk of Leibniz's "system" I will therefore have in mind that he did indeed aspire to a comprehensive system, even though it never was worked out fully in any one place.

<sup>27.</sup> Catherine Wilson, Leibniz's Metaphysics: A Historical and Comparative Study (Princeton, NJ: Princeton University Press, 1989), 191.

<sup>28.</sup> Ibid., 192.

<sup>29.</sup> Ibid.

<sup>30.</sup> Ibid.

<sup>31.</sup> Ibid., 193.

Return for the moment to the comment Leibniz makes to De Volder, quoted above: "we must say that there is nothing in things but simple substance, and in them, perception and appetite." For Adams, Garber and Wilson, this is inescapable evidence for the phenomenal Leibniz. Yet we may rightly ask what Leibniz means when he says "there is nothing in things," for it is not immediately obvious what he means by "things." Perhaps the case can be made that Leibniz here claims substances are in "things," in which case it would be strange to read "thing" as being a phenomenal object. Interestingly, in the same letter Leibniz writes: "For there can be nothing real in nature except simple substances and the aggregates which result from them."32 This raises questions on whether aggregates might have some standing apart from simple substances, which in turn might hinge on what he means by "result from." Ontological commitments of a realist persuasion are certainly not ruled out of the picture (and by realist I mean the heterodoxical view that matter and bodies are not simply phenomenal). Leibniz goes so far as to mention "actual bodies" in this letter, which creates even more potential distance from the bare phenomenalist interpretation. The point to be taken is that a passage, while seeming to be phenomenalist, will be balanced, often in the same letter or essay, by remarks that seem strikingly realist. I believe this casts doubt on the axiomatic status of there being nothing but simple substances, insofar as this is meant to imply a full-throated reductionism.

This brings us to a third view of Leibniz's ontological commitments. A growing group of heterodox thinkers claim that a *real* material world is a foundational component of his position. Pauline Phemister is one of its staunchest defenders. According to Phemister, an extended body to the Phenomenalist is merely "the result of a confused perception of what is in reality a logical

<sup>32.</sup> Leibniz to De Volder, 19 January 1706, Papers and Letters, 539.

grouping of unextended monads."<sup>33</sup> Reality, composed of an infinity of simple, unextended substances, appears to us as extended bodies—but the problem (for the Phenomenalist) is that bodily extension is not even close to being a description of the universe, and cannot be regarded as "even partially true."<sup>34</sup> The perception of bodies would then result from *confusion*. She argues that bodies are "more than the aggregation of unextended and indivisible monads: that he [Leibniz] regarded them also as aggregates of corporeal substances."<sup>35</sup> Thus Phemister argues that Leibniz held bodies to be results of monads, as well as being aggregates of corporeal substances, and she denies the view that extended bodies are simply phenomenal objects. She writes, "All corporeal substances ... have organic bodies composed of other corporeal substances, then, are the parts of bodies.

### HETERODOXY

Of these three views, the heterodox seems to me the most correct. As I will try to show, there are some important ways in which the other two views fail to account for textual evidence, and ignore important arguments Leibniz provides. Even though he is often understood as a phenomenalist, too much evidence stands against this claim, calling for a more realist account. Contrary to the Phenomenalist, Leibniz does in fact claim corporeal substances exist; and these are what make phenomena real, even if this raises the "problem of construction." In the fourth chapter

<sup>33.</sup> Pauline Phemister, "Leibniz and the Elements of Compound Bodies," British Journal for the History of Philosophy 7/1 (1999): 60.

<sup>34.</sup> Ibid.

<sup>35.</sup> Phemister, "Compound Bodies," 57.

<sup>36.</sup> Ibid., 64.

I will focus on answering this challenge, investigating the conceptual resources Leibniz has to support the real or substantial unity of corporeal substances.

Faced with the reality of corporeal substance, I believe a new interpretation of his system is needed, which both explains and allows for this sort of ontology. At the end of chapter IV I will offer an interpretation that can, perhaps, mark a direction to explore in Leibnizian scholarship. His system can be understood in terms of three levels, like a three-tiered city. The bottom, or first tier, is composed of simple substances, or monads. Each works autonomously, independently of all the other monads. From this activity results corporeal substances, which form the second tier of reality. So while the first tier is characterized by simples (which have absolutely no parts), the second is characterized by the union of body and soul. Body can be extended, and the relations of extended bodies result in the third tier, which is characterized by the union of phenomena in terms of space, time, extension and motion.

Extension can also be explained metaphysically, as the *order* of coexistences. The order of coexistences grounds the appearances of the extended bodies of corporeal substances. How we perceive reality, then, is not mistaken or false, for our perception corresponds with ideal relations among real bodies.<sup>37</sup> The order (i.e., the ideal relations) that is the extension of the body is neither phenomenal nor substantial, but is grounded in the modification of the soul's primary matter. The

<sup>37.</sup> It may be argued (on the account I give of Leibniz's view) that since an extended body is composed of other extended bodies, this network then reduces to merely ideal relations among monads. Bodies would then be redundant. I respond that the relations that make bodies real are different from the relations that make bodies extended. For Leibniz, I would argue, the former relations are real, since a body is made real through a substantial form. But extension is the relation among bodies (not corporeal substances), so we can understand this as the relation among substantial unities. Therefore, saying that extension is the ideal relation among real bodies does not reduce to merely ideal relations among monads (it would only reduce to this if bodies themselves are no more than aggregates of monads, which is something Leibniz does not seem to hold—bodies are, instead, aggregates of corporeal substances).

appearance of a body is thus at bottom both ideal and real, and this can be either the appearance of a corporeal substance or pure aggregation (depending on whether it has true unity).

The unity of appearances, however is only itself appearance, unless it can be explained through one of the deeper levels of reality. And this third tier of reality, dealing with phenomena, is the physical world as we experience it. Here we find the *appearances* of space and time, as well as extension and motion (where these all have deeper ontological components and explanations). Like reality itself, bodies can be understood in three ways: they can be understood as aggregates of monads, as aggregates of corporeal substances, and as real or well-founded phenomena.<sup>38</sup> This way of speaking about bodies resists the temptation to limit bodies simply to phenomena, and allows for an integration of the diverse elements of Leibniz's metaphysics.

<sup>38.</sup> See Phemister's article, "Compound Bodies," for an account of how bodies can be both monadic aggregates and aggregates of corporeal substances.

#### CHAPTER II

### ARGUMENTS ON THE REALITY OF CORPOREAL SUBSTANCE

The focus of this chapter will be to establish the reality of corporeal substance. I contend that Leibniz's ontology is more full-bodied and flexible than the Phenomenalist's austere landscape portrays it. Since corporeal substances are often analyzed in terms of bodies, aggregates and phenomena, these will receive considerable attention. In the first section I examine the ontological status of bodies, and how they are usually evaluated in terms of being aggregates or phenomena. The second section takes up the issue of real phenomena, and I will argue that when we examine the issue we are not led to the Phenomenalist position. Rather, Leibniz gives reasons to resist such a move. In the third section, I provide textual evidence for the reality of corporeal substance. The fourth section is devoted to examining the claim that, later in life, Leibniz abandons the doctrine of corporeal substances. These considerations provide reason to reject both Phenomenalist and Restricted Phenomenalist accounts. Even though Leibniz is concerned with phenomena, and his system has a place for them, he is not after all a Phenomenalist.

#### BODIES, AGGREGATES, AND PHENOMENA

It is a standard view that for Leibniz bodies are aggregates of substances. The ontological status of an "aggregate," however, is a bit controversial. Equally important is answering the question of what bodies are aggregates *of*. The two competing candidates for the elements of

bodily aggregation are monads and corporeal substances. In a compellingly blunt passage, Leibniz writes:

I showed that bodies are only aggregates that constitute a unity accidentally [*per accidens*], or by extrinsic denomination and, to that extent, are well-founded phenomena; that only monads (among which the best are souls, and among souls, the best are mind) are substances.<sup>1</sup>

This of course should jolt any proponent of a realist account, for it seems a strong pronouncement of the view that monads alone are substances, and bodies, aggregates.<sup>2</sup> Still, Leibniz does not say what they are aggregates of, though the context could be read as affirming that they are aggregates of monads. Adams points out that he is "commonly read" as holding this position.<sup>3</sup> And he believes, for Leibniz, "aggregates as such cannot be more than phenomena even if they are aggregates of *simple* substances or monads.<sup>44</sup> What, then, is the ontological status of the aggregate? The answer to this question will indeed determine the ontological standing of bodies. According to Adams's reading, there are only monads, or simple substances, and he uses this in his analysis of aggregate ontology. An aggregate is a collection of "things," and because of this, the problem of unity immediately surfaces, for aggregates, as such, can have no true unity; they are

<sup>1.</sup> Toward a Philosophy of What There Actually Is and Against the Revival of the Qualities of the Scholastics and Chimerical Intelligences, (1710-16?), in Essays, 319.

<sup>2.</sup> Leibniz here seems to plainly state that only monads are substances (and he defines "monad" in this context as a soul or mind). But what at first seems to end the debate can be seen in a number of ways. For example, in other passages which we will look at, he denies that souls are substances. At times he seems to refer to corporeal substances as monads, and at other times as *simple* substances. The best way to make sense of this wide range of seemingly contradictory opinions is to see that he does not in the above passage deny that other things besides souls are substances. Souls are "the best," but this does not preclude more "materialistic" substances from also existing, e.g., corporeal substance. He can also be seen as perhaps talking loosely about the nature of substance, and pointing to the ultimate irreducible foundations of composite substances. A full treatment of these issues, however, will be held off until later chapters.

<sup>3.</sup> Adams, Leibniz, 241.

<sup>4.</sup> Ibid., 242.

not "things" but collections of them—and in swift reductionist fashion, we can only find monads as the elements of collections. Since everything "is logically or metaphysically constructed" from monads, aggregates are (therefore) these logical constructs, and they "exist in the mind" as all such constructs must.<sup>5</sup> All "aggregation" takes place through arranging the furniture of the mind. It is in this way that bodies are, fundamentally, phenomena. Indeed, Leibniz states:

So it seems that in philosophical strictness the body does not deserve the name of substance, a view which seems to have been Plato's, who says that there are transient beings which never subsist longer than a moment. But this point needs a fuller discussion, and I have still other important reasons for refusing to bodies the title and name of substance in a metaphysical sense. For to say a word about this, a body is not a true unity; it is only an aggregate, which the Scholastics call a being *per accidens*, a collection like a herd. Its unity comes from our perception. It is a being of *reason* or rather, of *imagination*, a *phenomenon*.<sup>6</sup>

This is an important passage, since as Loemker suggests, Leibniz is "reaffirming his phenomenalism" right at the time of his correspondence with Des Bosses.<sup>7</sup> The Des Bosses correspondence is significant, and we will look more closely at it; but for now, we need only note two things: 1) Leibniz states that bodies are phenomena; and 2) a commitment to the unity of bodies being phenomenal is not *ipso facto* a commitment to Phenomenalism (e.g., he also talks of them as aggregates in this passage). Nonetheless, the emerging puzzle is that bodies are seemingly both aggregates of substances as well as phenomena. How can this be? Adams reconciles the two theses by saying they have different ontological standing. Perhaps it is a matter of emphasis. Bodies *as aggregates* of substances are a "close ontological kin to sets," and have their being in the

<sup>5.</sup> Ibid., 246.

<sup>6.</sup> Conversation of Philarète and Ariste, Following a Conversation of Ariste and Theodore, Ca. 1711, in Papers and Letters, 623.

<sup>7.</sup> Ibid., 628

mind.<sup>8</sup> But it is a mistake to think the members of a set have the same properties as the set itself. For example, the property of being multicolored belongs to the set of primary colors, yet not the members of the set.<sup>9</sup> In similar fashion, a body is like a set, having properties different from that of the substances that constitute the set. The set itself, however, is never external to the mind—though the members are all external, since these members are other mind-like substances. Bodies as aggregates *of substances* have a different, deeper ontological foothold. But these aggregates cannot themselves become substances. Leibniz writes that "no ordered principle [*rien de reglé*] will ever be found for making a genuine substance of many beings by aggregation."<sup>10</sup> Adams takes this as an indication that there are no real corporeal substances; there are only monads and their perceptions. He writes:

Leibniz's theory of bodies is reductionist, and in reductionist philosophy, being a logical or metaphysical construction out of ultimately real things is a different ontological status from that of the ultimately real things.<sup>11</sup>

Bodies exist in the mind, and are "reduced" to simple substances as their ultimate elements, but in such a way that the phenomena have an *elevated ontological status*. These elements are real, while bodies are phenomena ("real phenomena," which we will examine shortly). Monads form bodies, and Adams argues that this aggregation of monads is "based on the way that the substances, or their bodies, are perceived."<sup>12</sup> Perceiving is prior to aggregation, and is the reason for it, forming

<sup>8.</sup> Adams, Leibniz, 245.

<sup>9.</sup> I owe this example to a conversation had with John O'Neal.

<sup>10.</sup> Given marginally in *The Leibniz-Arnauld Correspondence*, ed. and trans. by H. T. Mason (Manchester: Manchester University Press, 1967), 101; quoted in Adams, *Leibniz*, 249.

<sup>11.</sup> Ibid., 245.

<sup>12.</sup> Ibid., 249.

the web of logical relations "uniting" monads to form bodies and corporeal substances.

Supporting evidence for Adams's claim comes from a comment Leibniz makes to Des Bosses:

And aggregates themselves are nothing but phenomena, since things other than the monads making them up are added by perception alone, by virtue of the fact that they are perceived at the same time.<sup>13</sup>

For Adams this means that perception brings about aggregation, supplying the principle of unity

to a body. This may strongly suggest a world of only monads and perceptions. But it is significant

that a handful of lines above Adams's citation, Leibniz lays out what I consider the heart of his

theory of corporeal substances:

An aggregate, but not a composite substance, is resolved into parts. A composite substance only needs the coming together of parts, but is not essentially constituted of them, otherwise it would be an aggregate. It acts mechanically, since it contains primitive or essential forces and derivative or accidental forces.

It is the echo of monads, which, from its nature [*ex sua constitutione*], once posited, requires monads, but does not depend on them. The soul is also the echo of external things, but yet it is independent of external things.

Since neither monads nor partial, composite substances taken apart from the whole composite substance are the active essence [of a composite substance], the composite substance can be eliminated, leaving behind the monads, or other ingredients, and *vice versa*.<sup>14</sup>

Here is the crux of Leibniz's doctrine of corporeal substances, occurring in the same letter in

which he affirms that aggregates are nothing but phenomena. All previous talk of bodies being aggregates and phenomena does not slow Leibniz down in the least: he still insists there are corporeal substances (what he at times refers to as composite substances). These are no mere aggregates, and cannot be simply explained away as such. A corporeal substance has no parts, and therefore it can qualify as an *unum per se*, one in itself. They do not depend on monads, yet

<sup>13.</sup> Leibniz to Des Bosses, 29 May 1716, Essays, 203.

<sup>14.</sup> Ibid.

require them. Discussion of bodies and aggregates would then seem to leave corporeal substances unaffected, since Leibniz distinguishes them from aggregates (and, therefore, from phenomena). Perhaps most interesting is that in the last sentence he says, "composite substance can be eliminated, leaving behind the monads, or other ingredients, and *vice versa*." *Vice versa*? Truly an unexpected phrase to find at the end of a sentence "reducing" corporeal substances to monads. What does Leibniz mean? He is not fully clear; but it seems that, in some "reductionist" manner, monads and corporeal substances are coeval (this issue will be expanded upon later).

Nonetheless, Adams understands a corporeal substance as being "composed of a monad and the organic body of that monad . . . . The organic body is itself an aggregate, and hence a phenomenon."<sup>15</sup> These bodies, which are phenomena, depend on the "spatial appearances of the bodies."<sup>16</sup> That is, a body is in space, and space is ideal or in the mind of the perceiver as relations, hence a body (or its construction) is fully identified as a phenomenon. Accordingly, we could say that each monad has its own private epic movie playing, and each movie is harmonized with every other; and through these stories the monads appear to one another. These appearances in the stories are the bodies of monads.<sup>17</sup> They are intentional objects belonging to the scientific story of nature.<sup>18</sup> Adams maintains that a corporeal substance is something like an aggregate of monads corresponding to these appearances, and thus would not be real in any strong ontological sense. The soul would then be the dominant monad in the aggregate, and therefore, it would be a

<sup>15.</sup> Adams, Leibniz, 250.

<sup>16.</sup> Ibid.

<sup>17.</sup> Adams, "Phenomenalism," 226.

<sup>18.</sup> Ibid., 218.

substance.<sup>19</sup> Corporeal substance would roughly be the principle of aggregation for a body, in the sense that it is a logical relationship underlying phenomena. Adams notes, however, that his account is not definitive and other interpretations are open.<sup>20</sup> In the following sections I will take up Adams's challenge, and develop an alternative analysis.

### TRUE BODIES AND REAL PHENOMENA

Our focus now must shift to what Leibniz says about phenomena, since this is so much at the center of the Phenomenalist's account. Is the body, then, the appearance of a monad and fully in the mind (in the same way that a set is), even though its elements are *external*? Remarkably, Leibniz never seems to say that bodies are the appearances of monads, even though he says they are phenomena.<sup>21</sup> However, not all phenomena are equal. Leibniz is careful to distinguish between what is real and what is imaginary, and this would seem to support the Phenomenalist—so, we cannot broad-brush and say that bodies are "merely" phenomena. They are *real phenomena* (or at least some of them are) and thus have an elevated metaphysical status, over and above what

<sup>19.</sup> See Adams, Leibniz, 275

<sup>20.</sup> Adams notes: "Those who seek a less phenomenalistic reading of Leibniz might wish to find a construction of corporeal aggregates that is independent of such phenomenal properties of bodies. One approach would be to suppose that monads are aggregates together on the basis of similarities among their perceptions. In a broad enough sense of 'similarity', this is surely correct, but the question is, Which similarities are relevant?" Ibid. The basis of my answer to Adams's challenge is to show that the harmony which results in corporeal substance *is sufficient for* its unity. It is the harmony or unity among passive and active forces that result in form and matter, body and soul. Passivity and activity are not *phenomenal* properties, and thus their coming together can result in *true* unity. Of course, all monads are in varying degrees of harmony with each other, but this does not lead to monism, since the harmony of a body and soul, when it results from a single point of view, is qualitatively different from, say, the harmonious interaction of bodies.

<sup>21.</sup> Adams makes note of this. Leibniz, 230.

is imaginary. How, then, do we perceive the difference between real and imaginary things, if all we have are appearances? Leibniz treats the issue at length in the essay, appropriately titled, *Distinguishing Real from Imaginary Phenomena*. Perhaps the very fact that Leibniz thought it important to distinguish the real from the imaginary would be evidence of his phenomenalism; but as will become evident, a close examination does not bear out this conclusion.

In Distinguishing Real from Imaginary Phenomena, Leibniz says a being can be known to be real either through *conceiving* (which is of concepts) or *perceiving* (which involves phenomena). Real phenomena conform to the natures of other phenomena, are vivid, coherent, supported by sensory experience, agree with the experiences of other people, and are predictable.<sup>22</sup> These criteria are meant to help us judge "which phenomena *should* be seen as real" (emphasis mine).<sup>23</sup> A real phenomenon, then, is grounded in the actual harmony of appearances, as they are ordered according to natural law (which springs from the agreement among monads).

One striking fact about this essay is that Leibniz nowhere claims that "bodies" and "real phenomena" merely mean the same thing. The possibility that bodies are *more* than phenomena is left open. Consider that Leibniz begins the essay by discussing how we know if a thing *actually* exists. He then says, "Just as being is revealed through a distinct concept....so existence is revealed through a distinct perception."<sup>24</sup> Phenomena "can be accepted without question," and need no demonstration; yet later he emphasizes that bodies cannot be demonstrated to exist. That is: bodies *cannot* be demonstrated and phenomena *need no* demonstration. Is this a discrepancy for

<sup>22.</sup> Distinguishing Real from Imaginary Phenomena, (1690?), in Papers and Letters, 363-364.

<sup>23.</sup> Ibid., 364.

<sup>24.</sup> Ibid., 363.

the Phenomenalist, pointing to a distinction between phenomena and bodies? Perhaps not; perhaps Leibniz means that phenomena are basic, in that we start with appearances from which we can distinguish what is real from what is imaginary. Illuminating this matter, he writes:

We must admit it to be true that the criteria for real phenomena thus far offered, even when taken together, are not demonstrative, even though they have the greatest probability; or, to speak popularly, that they provide a moral certainty but do not establish a metaphysical certainty, so that to affirm the contrary would involve a contradiction. Thus by no argument can it be demonstrated absolutely that bodies exist, nor is there anything to prevent certain well-ordered dreams from being the objects of our mind, which we judge to be true and which, because of their accord with each other, are equivalent to truth so far as practice is concerned.<sup>25</sup>

Leibniz thus calls attention to a relationship between the criteria for real phenomena and establishing the existence of bodies. Criteria, however, cannot be used for demonstrating that a phenomenon is real. He then says that the existence of bodies "thus" cannot be demonstrated through any argument. We can deny, without contradiction, that a phenomenon is real or a body exists. So based on the comparison he draws between real phenomena and the existence of bodies, we may justifiably read Leibniz as equating the two. However, he conspicuously stops short of affirming this. Furthermore, since he talks of well-ordered dreams as being "equivalent to truth," he seems to draw a distinction between that which is merely well-ordered, and bodies. On the Phenomenalist account this is peculiar, given that organized and harmonious appearances simply *are* bodies. As I will try to show, it is significant that he says well-ordered dreams are "equivalent to truth." Writing of the limitation of perception for establishing "metaphysical certainty," Leibniz writes:

<sup>25.</sup> Ibid., 364.

Nor is the argument which is popularly offered, that this makes God a deceiver, of great importance. At least no one will fail to see how far it is from a demonstration having metaphysical certainty, for we are deceived not by God but by our own judgment, asserting something without accurate proof. And though a great probability may be involved, nevertheless God, in offering us this probability, is not therefore a deceiver. For what if our nature happened to be incapable of real phenomena? Then indeed God ought not so much to be blamed as to be thanked, for, since these phenomena could not be real, God would, by causing them at least to be in agreement, be providing us with something equally as valuable in all the practice of life as would be real phenomena.<sup>26</sup>

Appearances do not provide metaphysical certainty, since it is at least conceivable that we are "incapable of real phenomena." This is a curious phrase, since it is not immediately obvious what he means by "incapable." He can, perhaps, mean that we are not able to produce them. Or perhaps he means that our nature cannot have appearances, in that only material objects can have appearances, and if our nature is immaterial, then appearances of any sort are impossible.<sup>27</sup> In either case, however, God is no deceiver when he creates us to think some perceptions are real. It might not even be possible for God to create beings "capable" of real phenomena. Given these sorts of options for what Leibniz means by "incapable," it is easy to read one's own theory into the meaning. We must for now resist this temptation.

Still, Leibniz can be construed as giving the following chain of reasoning, which is friendly to the Phenomenalist: 1) we are, in fact, capable of real phenomena. 2) Yet all we have is moral certainty (not the certainty of demonstration) in regard to real phenomena. 3) Without demonstration it is conceivable that this is all we are capable of. 4) But even if this is all we are

<sup>26.</sup> Ibid.

<sup>27.</sup> Another possible interpretation might be to take "capable" of real phenomena as being able to investigate in such a way as to verify the reality, or not, of a given perception. But I do not think this interpretation is plausible, given that Leibniz says in this passage that "these phenomena could not be real." Our verification of reality is therefore not the issue—the issue is whether there are real phenomena or not.

capable of, God has not deceived us and we are still justified in trusting our perceptions. Construing Leibniz in this manner requires that *if* we are incapable of real phenomena, then the perception of a real phenomenon is different—perhaps radically different—from what we *now* perceive as real. Either there is a fundamental ontological gap between what we actually perceive and a real phenomenon, or there is simply no such thing as a *real* phenomenon.

If the phenomena we *do* perceive are not real, Leibniz suggests that what God has given us is equally as valuable by "causing them at least to be in agreement." This raises an important issue. Adams thinks that this means Leibniz is "constantly aware of the epistemological vulnerability of the full ontology" he holds, namely his phenomenalism.<sup>28</sup> And this is purportedly why Leibniz worries about distinguishing real from imaginary appearances. Adams suggests that Leibniz uses "real' in a stronger and weaker sense in expressing different aspects of a fairly constant" system, and this would coincide with a "weak sense of 'true'."<sup>29</sup>

The first problem with this account is that the issue Leibniz puts on the table is whether there are real phenomena at all. He does not, per Adams's suggestion, differentiate between strong and weak senses of 'real' and 'true'. Leibniz says up front that such phenomena would *not* be real. They would not then be true, but God would guarantee that they would be just as good. To read Leibniz as using 'real' in a strong and weak sense requires a prior commitment to a Phenomenalist interpretation. It is interesting that the possibility Leibniz admits of (that there might be no real phenomena) is similar to Phemister's critique of the Phenomenalist. She points out that they burden Leibniz with a difficult, if not unreasonable, thesis:

<sup>28.</sup> Adams, Leibniz, 259.

<sup>29.</sup> Ibid.

The spatially extended body, by this account, is at best a phenomenal object; the result of a confused perception of what is in reality a logical grouping of unextended monads. It is difficult, on this reading, to regard the extension of the body as sufficiently real to allow a description of the universe in terms of extended physical bodies to be even partially true.<sup>30</sup>

According to Phemister, the account given by the Phenomenalist has Leibniz explain bodies in a way that is hard to see as "even partially true." What we perceive is not only confused, but false, if these perceptions are in reality only clumps of logical relations. But Leibniz says here that if there are no real phenomena we are nonetheless *not* deceived. Perhaps, then, what Leibniz says in this essay can be seen as a response to Phemister's objection, that is (contrary to Phemister) what appears is as close to the truth as can be attained.

But of course, Leibniz does not say that what appears is not true. He suggests that it is possible that there are no real phenomena, that is, that it is possible we are "incapable of real phenomena." A great deal then seems to rest on what is meant by "incapable of real phenomena." If we are *incapable*, Leibniz says, what God has given us is sufficient and equally valuable. What he has given us, in lieu of "real phenomena," is agreement, that is, a harmony of phenomena. Agreement is for the phenomenalist the basis for a phenomenon being real rather than imaginary. How can phenomena that are "at least . . . in agreement" be anything but real phenomena? The Phenomenalist can respond by pointing out that if what we perceive are real phenomena, then "agreement" is the key to distinguishing them. But if what we perceive is not real, then agreement is not the key—there *is no* key, since there are no real phenomena. If the distinguishing characteristics Leibniz gives of real phenomena (vividness, harmony, etc.) do not constitute real phenomena, then what do they pick out? Look at the live oak outside your

<sup>30.</sup> Phemister, "Compound Bodies," 60.

window. Is it a real phenomenon? It is *only if* you are "capable of" real phenomena. The question, then, is not the harmony or agreement of our appearances (since there can be agreement in phenomena even if none of them are real), or how well they conform to experiences and internal coherence—the issue Leibniz explores is whether any phenomena *are real in the first place*. And this, I believe, points to something beyond or "outside" of phenomena, to what constitutes their reality. Or to put it another way: the agreements of phenomena do not make them *real*, since phenomena could be said to agree whether they are real or not (since God would give us agreement even if we are incapable of such a reality).

And that is the nagging difficulty for the Phenomenalist. For if there are no real phenomena, then there are no bodies, since bodies simply are real phenomena. But why would Leibniz even doubt whether there are bodies if they *simply are phenomena that are in agreement and harmony*? It seems rather easy to say that those phenomena which are "in agreement" are bodies, and to end it there. Yet Leibniz forces the issue, acknowledging that it is conceivable for no phenomena to be real. In other words, on the phenomenalist reading, when Leibniz says there is a possibility we are "incapable of real phenomena," he is actually saying it is possible that we are "incapable of perceiving real bodies." But what would this mean? Would it mean that there are no bodies, or that we are incapable of perceiving them? The latter seems unintelligible on the phenomenalist reading. For assume that there are bodies but we *cannot* perceive any of them. This would imply that what appears are in fact not bodies at all. Furthermore, if these unperceivable bodies exist they would need to be composed of *some* phenomena—perhaps, for example, *petites* 

*perceptions.*<sup>31</sup> This, however, is of no help. *Petites perceptions* are not imperceptible, but *insensible*. They are, for Leibniz, the confused appearances in the bodies that we actually perceive (so they presuppose that bodies are already perceived). It is possible to perceive them (i.e., perceive them more clearly) simply by whipping out a microscope. However, this possibility contradicts the assumption that bodies *cannot* be perceived. So the phenomenalist appears committed to the position that it is metaphysically possible that there are no *bodies*.

As Phemister points out, for the Phenomenalist, bodies are in reality (or at bottom) logical groupings of substances. But then, does Leibniz really mean to ask, *what if there are no logical groupings*? These logical relations would of course be among minds and perceiving substances. It is noteworthy, however, that Leibniz's "epistemic doubt" in this context does not involve doubting the existence of other minds, since he writes, "now we must examine those things which do not appear but which nevertheless can be inferred from appearances."<sup>32</sup> He then promptly establishes the existence of other minds; so his doubt is not of the solipsistic variety. For the Phenomenalist, this doubt is really about the *metaphysical certainty of the logical relations of these minds*. But the Phenomenalist's interpretation makes little sense, since Leibniz *argues* for a logical relation between appearances and other minds—it is the nature of appearances which *confirms* the existence of minds. The reading that seems to make the most sense of Leibniz's question is that he thinks of bodies as more than a logical network among minds. Bodies have a reality to them that is neither phenomenal nor simply logical in nature. So I think Leibniz really is suggesting that even if there are no real phenomena, we still can fall back on the *Phenomenalist thesis*, which God

<sup>31.</sup> Preface to the New Essays (1703-1705), in Essays, 295-297.

<sup>32.</sup> Distinguishing Real from Imaginary Phenomena, in Papers and Letters, 365.

will ensure to be as accurate as possible. Phemister's point is therefore well taken. If the Phenomenalist's account holds, it is in the end not entirely true—it would be as close to a true picture of reality as we can get. Phenomenalism is not Leibniz's preferred theory of reality, but a bullet he is willing to bite, *only* if he must. If there are real phenomena (and Leibniz insists that this is a moral certainty) then we need not bite the Phenomenalist bullet. But if there are no real phenomena, what we have are akin to well-ordered dreams, which are equivalent to truth.

At the end of *Distinguishing Real from Imaginary Phenomena*, Leibniz, in complete Leibnizian fashion, takes off in another direction:

Concerning bodies I can demonstrate that not merely light, heat, color, and similar qualities are apparent but also motion, figure, and extension. And that, if anything is real, it is solely the force of acting and suffering, and hence that the substance of a body consists in this (as if in matter and form). Those bodies, however, which have no substantial form, are merely phenomena or at least only aggregates of the true ones.

Substances have metaphysical matter or passive power insofar as they express something confusedly; active, insofar as they express it distinctly.<sup>33</sup>

As before, Leibniz does not say phenomena are simply bodies, but that certain bodily qualities, e.g., extension, motion, heat, are properly phenomena (or "apparent"). What is real (he says "if anything is real" in bodies—he qualifies his claim about the reality of bodies because of the previous doubt he voices) is the force of acting and suffering, by which he refers to the active and passive aspects of a substance. These are, he says, the "substance" of a body as the matter and form. But then, he talks of bodies that "are merely phenomena" because they "have no substantial form" (what he elsewhere calls soul or entelechy or active force). They are aggregates of "the true ones." An aggregate of the true *what*—substances? Bodies? Phenomena? Leibniz, as far as I can tell,

<sup>33.</sup> Papers and Letters, 607.
never talks of phenomena as aggregates.<sup>34</sup> He must therefore mean either substances or bodies. The *true ones* are aggregates of *real* elements, brought together with a substantial form. An aggregate of *true ones* not united by a substantial form is a phenomenon. Whatever Leibniz has in mind as the elements of these aggregates, the *true ones* are no mere aggregates, or else they would be phenomena—and as aggregates they would be bodies without substantial form. So, the meaning of the passage seems to point to a *true one* being a body with a substantial form.

Of course, the context might support a reading of "true ones" as substances. In either case—whether substances or bodies are members of these aggregates—Leibniz is looking beyond phenomena to the foundations of aggregation. There is also an important question about the status of bodies when they have substantial forms. On the phenomenalist reading, bodies are phenomena *because they are aggregates*. Leibniz here says that bodies without substantial form are aggregates. This implies something easily overlooked: *bodies*, not aggregates, have *substantial forms*. If a body has a substantial form it is henceforth not simply an aggregate: it is *a* body. And if they are not aggregates, according to the phenomenalist reading, they are not phenomena, since the argument for why all bodies are phenomena is that they are all aggregates. We therefore have the provisional conclusion that in this essay, which is devoted to differentiating between real and imaginary phenomena, Leibniz implies that some bodies are not *only* phenomena. And a body with a substantial form is, by its very nature, a corporeal substance. In support of my reading of this passage, we can turn to the correspondence Leibniz has with Arnauld:

<sup>34.</sup> In other words, while Leibniz seems to hold that aggregates are phenomena, I do not think he holds the obverse, that phenomena are aggregates.

If the body is a substance, and not a mere phenomenon, like the rainbow, or a being unified by accident or by aggregation, like a heap of stones, it cannot consist in extension, and we have to conceive of it as having something like a substantial form, which in some way corresponds to the soul. Almost despite myself I have finally been convinced of this, after having earlier been very far from it.<sup>35</sup>

As we have seen elsewhere, Leibniz is very clear about there being bodies that are aggregates. But notice here that he does not begin by saying: If body is substance. Instead, he says, if the body is a substance, and not a phenomenon, then it has a substantial form. He does not seem to sweep all bodies into this formulation, but he calls attention to *individuated* bodies. Perhaps, it might be suggested, Leibniz compares "mere phenomena" with "real phenomena," and therefore, the Phenomenalist may say that he illuminates only the difference between real and imaginary phenomena. But this is implausible, for three reasons. (1) I have found no evidence that when Leibniz says "mere phenomena" he means "imaginary phenomena." In this context, "mere phenomena" could refer to the category of phenomena itself, or to something ephemeral (consider his illustrating example: the rainbow). However, (2) in this context he implies a body with substantial form is neither a mere phenomenon nor an aggregate, which makes it seem as though he lists the possible *phenomenalistic* explanations, in order to say, "but I am not talking about these things." So even if we were to interpret "mere" as "imaginary" phenomena, it would seem that "real phenomena" would naturally coincide with bodies of aggregation. He could be seen as talking of something that is neither a mere nor real phenomenon. And as already mentioned, (3) nowhere in Distinguishing Real from Imaginary Phenomena does Leibniz fully identify bodies with real phenomena. It is beyond doubt that Leibniz argues for real phenomena, but

<sup>35.</sup> Leibniz to Arnauld, 4/14 July 1686, Texts, 113.

when he carefully reviews the issue, he does not say real phenomena *are* (organic or living, and not merely aggregate) bodies. Real phenomena, he says, are vivid and predictable, cohering with all other observations. As Adams points out, real phenomena are what belong to a *scientific* account of nature. Leibniz here talks empirically, giving criteria for what will count as part of this story. But he distinguishes substantial bodies from this mechanistic picture, since these are neither aggregates nor mere (i.e., *only*) phenomena. Some bodies, then, are not defined only extensionally, but substantially, having a substantial form. That is, all bodies are perhaps extensional, but not all are substantial. What he points to, I believe, is the reality of corporeal substances (which can be understood both extensionally and substantially).

## THE REALITY OF CORPOREAL SUBSTANCES

Based on this evidence, it has not been established that bodies are, in fact, more than real phenomena. But what has been noted is enough to establish at least a foothold for the position that bodies are anchored in something deeper and external to phenomena. Indeed, Leibniz states that organization is not enough to account for individuality.

Organization or configuration alone, without an enduring principle of life which I call 'monad', would not suffice to make something remain numerically the same, i.e., the same individual.<sup>36</sup>

It takes more than the agreement (i.e., organization) of phenomena, to account for individuality. An enduring principle of life is needed, and he identifies this as relating to

<sup>36.</sup> New Essays on Human Understanding, ed. and trans. by Peter Remnant and Jonathan Bennett (Cambridge: Cambridge University Press, 2nd printing 1997), 232.

substance (which is beyond phenomena). He uses the word "monad" to describe this principle (this may seem a variance from his normal usage, but I believe this merely indicates his true position, as will be discussed later). Nonetheless, the Phenomenalist has other arguments. There are various and sundry passages in which Leibniz writes more explicitly of the relation of bodies and phenomena. For example,

As matter itself is nothing but a phenomenon, but well founded, resulting from monads, it is the same with inertia, which is a property of this phenomenon.<sup>37</sup>

If matter is "nothing but a phenomenon," it may well be asked how bodies can be *more* than phenomena. Elsewhere, Leibniz writes:

Extension and motion, as well as bodies themselves (insofar as only motion and extension are placed in bodies) are not substances, but true phenomena, like rainbows and parhelia.<sup>38</sup>

Matter itself, he says, is nothing but a well-founded phenomenon. But taken as a conceptual object, matter is a well-founded phenomenon.<sup>39</sup> Bodies, he tells us, are true phenomena, and not substances, insofar as motion and extension *are in* them. What Leibniz does not say here is that bodies are, in an *unqualified* sense, true phenomena, since he couches the claim in reference to motion and extension. Consider again the phrasing: *insofar as only motion and extension are placed in bodies, they are not substances.* He means, I take it, that bodies considered *only in virtue of* motion and extension are not substance, but true phenomena. What else might bodies have? Entelechies. Souls. Substantial forms. To further make the point:

<sup>37.</sup> Die philosophischen Schriften von Gottfried Wilhelm Leibniz, vol. III, ed. by C. I. Gerhardt (Berlin: Weidmansche Buchhandlung, 1875-1890), 636; cited in Adams, "Phenomenalism," 222.

<sup>38.</sup> Primary Truths 1689, in Essays, 34.

<sup>39.</sup> It is because he indicates "matter itself," which I believe is equivalent to what he elsewhere refers to as "mass," or that which is formless.

[Size, extension and motion] are qualities or predicates which partake of the phenomenal, as do colors and sounds; although they contain more that is distinctly knowable, they too cannot sustain a final analysis, and therefore since extended mass considered without entelechies consists only of these qualities, it is not a corporeal substance, but a pure phenomenon, just as the rainbow. . . . I accept, of course, that we can give the name 'one' to a collection of inanimate bodies even if no substantial form connects them, just as I can say 'there is *a* rainbow', 'there is *a* flock'; but that is a phenomenal unity or a unity of thought, which is not enough to constitute what is real in phenomena. But if we take for the matter of corporeal substances not a formless mass, but secondary matter, which is the multitude of substances the mass of which is that of the body as a whole, we can say that those substances are parts of that matter, in the way that those which make up our bodies form the parts of it. For just as our body is the matter and our souls are the form of our substance, so it is with other corporeal substances.<sup>40</sup>

There are four things of relevance. First, this seems a strong endorsement of the reality of corporeal substance. Second, he talks of matter, and secondary matter, which will become important later in the discussion. And third, mass, without an entelechy, is a pure phenomenon (this suggests a distinction between 'matter' and 'mass' that will become important later). Fourth, he says: "a phenomenal unity or a unity of thought . . . is not enough to constitute *what is real in phenomena*" (my emphasis added). It is important to realize that what is real, for Leibniz, is substance. This suggests that substance is the objective content of phenomena. He writes to Arnauld:

You object, sir, that it could be of the essence of body to have no true unity; but then it would be of the essence of body to be a phenomenon, bereft of all reality, like a well-ordered dream. For phenomena themselves—such as the rainbow, or a heap of stones—would be completely imaginary if they were not composed of beings which have true unity.<sup>41</sup>

Leibniz does not deny that some bodies may be phenomena, but he denies that a phenomenon provides a body with an essence. Bodies, accordingly, can have or are composed

<sup>40.</sup> Leibniz to Arnauld, 9 October 1687, Texts, 131-32.

<sup>41.</sup> Leibniz to Arnauld, 30 April 1687, Texts, 124.

from true unity. Without true unities phenomena would be completely imaginary, like a wellordered dream.<sup>42</sup> Perhaps we can say that substance, or true unity, is the objective content of phenomena; but it does not follow that Leibniz's understanding of bodies is only phenomenalist. What follows is that we perceive bodies in terms of phenomena and objective content, since he identifies bodies in some way with true unity (thereby distinguishing them from phenomenal unity). Since Leibniz does hold there to be true unities, he is here affirming that phenomena are ontologically grounded. "Phenomena," then, can either mean what appears (but the *content* of phenomena is the true unity of other beings), or the perceived unity of what is in fact real.<sup>43</sup> In other words, phenomena can be regarded as the perceived unity of "things" or as the perceived unity among *other phenomena*. Understood in these terms, there is no inconsistency between them. At times what is perceived will be a true unity, and at times what is perceived will have phenomenal unity. *Things* are not phenomenal, but real, and even within a phenomenal unity

<sup>42.</sup> Note how this ties in with the discussion of Distinguishing Real from Imaginary Phenomena.

<sup>43.</sup> Some interesting issues are raised, in these passages, on Leibniz's us of terminology. For example, he says a rainbow is a "pure phenomenon" as well as a "true phenomenon." Are these synonymous with a "real phenomenon?" An extensive textual comparison would need to be made to determine the answer. But consider that Leibniz also talks of "true unit" and "real unity," which seem the same, and are both distinguished from "phenomenal unity." If a real phenomenon is the same as a true one (and it is reasonable to equate "pure" and "true," since the rainbow is both a pure and a true phenomenon), then whether a phenomenon is real or not will (perhaps) be connected to Leibniz's theory of truth. And we could try to understand the nature of phenomena in terms of truth conditions (which will perhaps indicate a correspondence to that which is external to phenomena). If, however, real and true phenomena are different, then I believe a real phenomenon must be identified as the appearance of the body of a corporeal substance. Unraveling this complex issue is, unfortunately, too great a task for this present project.

there will be real unities, that is, real beings (it is the *unity* among real beings that is phenomenal).<sup>44</sup> Consider this oft-quoted passage (which we will return to):

It would seem, moreover, that what makes the essence of a being by aggregation is only the way of being of the things that make it up; for example, what makes the essence of an army is just the way of being of the men who make it up. That way of being therefore presupposes a substance, whose essence is not itself the way of being of a substance. So every machine also presupposes some substance in their parts of which it is made, and there is no multitude without true unities. To cut the point short, I hold as an axiom the following proposition which is a statement of identity which varies only in the placing of the emphasis: nothing is truly *one* being if it is not truly one *being*. It has always been held that *one* and *being* are reciprocal things. It is one thing to be a being, quite another to be a number of beings; but the plural presupposes the singular, and where there is no being, still less is there a number of beings.<sup>45</sup>

Leibniz holds that a phenomenon of unity is not true unity but a mode ("the way of being") of things. All modes presuppose substance. The essence of a substance is not itself a mode or way of being. The *parts* of a machine presuppose substance. True unity is what is real, the objective content of any phenomenon. Yet it does not necessarily follow from this that Leibniz's understanding of bodies is only phenomenal. One reason why the appearances of bodies involve phenomena is that they contain an infinity of substances. They are aggregates of an uncountable number of *things* and *relations*, and the perceptions of finite monads do not express infinite reality. Leibniz writes: "Every mind is like a world apart, sufficient to itself, independent of every other created thing, involves the infinite, and expresses the universe."<sup>46</sup> Each monad may contain infinity, but without distinctly perceiving it. For in perceiving a single body, if it is clearly

<sup>44. &</sup>quot;I do not say that there is nothing substantial or nothing but what is apparent in things which have no true unity, because I allow them always as much reality or substantiality as there is true unity in what enters into their composition." Ibid., 124.

<sup>45.</sup> Ibid.

<sup>46.</sup> A New System, in Texts, 234.

perceived, the entire universe would follow in all of infinite clarity. This is not possible for monads of limited perception. Hence, what is distinctly perceived is only partial, finite, and what is most distinctly perceived is what is most real in nature, namely substance, unity.

The perception of the *one* must in some way be prior to the perception of the *many* (i.e., the infinite), since we do not clearly perceive the infinite. We perceive unities which *imply* the infinite.<sup>47</sup> And bodies, as infinite collections of corporeal substances, appear in terms of qualities (e.g., colors and definite shape) that yield more complex—in fact, infinitely more complex—explanations. Real unity, however, is not merely appearance or muddled perception, since it is in the corporeal substance.

Of course, there are passages in which Leibniz seems to affirm that the unity among monads is only in the relations among their perceptions. For example, Adams cites the following:

The agglomeration of these organized corporeal substances which constitutes our body is not united with our Soul except by that relation which follows from the order of the phenomena that are natural to each substance separately.<sup>48</sup>

At first blush it may seem that Leibniz states the union of body and soul is only phenomenal. If we look closely at this statement, at least two things are apparent: first, bodies are aggregates of organized *corporeal substances* (and not monads); and second, the union he talks of here is between body (which is an aggregate of corporeal substances) and soul. There is no mention of union among monads or simple substances. There is no relation of body and soul *except through the relation* following the order of phenomena natural to all substances in the

<sup>47.</sup> Leibniz writes that "we can say in general that perception is the expression of a multitude in a unity" (Draft letters from Leibniz to Bayle, December 1702, *Texts*, 256).

<sup>48.</sup> Die philosophischen Schriften, vol IV, 573; cf. Adams, "Phenomenalism," 248.

corporeal substance. Is the unity therefore a phenomenon? The answer is not clear, since the *relation* following an order of phenomena is not obviously a phenomenon. It seems clear, however, that Leibniz is not simply reducing the union of body and soul to relations among monads. And he does not deny the union of soul and body by referring to an order of phenomena. However, on the basis of this passage Adams argues:

It may be doubted, however, whether on Leibniz's showing the dominant monad gives to the composite that it forms with the organic body a unity fundamentally different in kind from the unity of an aggregate. As Leibniz himself said, monadic domination and the unity that springs from it consists at bottom only in certain relations among the perceptions of monads . . . Aggregates, too, are united (accidentally, Leibniz says) by relations among the perceptions of monads. So at bottom it would seem that the unity of an aggregate and the unity of a corporeal substance are of the same kind.<sup>49</sup>

And so, for Adams, we here have reason to believe that the unity of a corporeal substance is really the same sort of phenomenal or logical unity we find in an aggregate. But Adams's reading of this passage requires that talk of body and soul is reducible to talk of monads relating to one another (and relating only through phenomena). The soul is a monad (and therefore a substance), and the corporeal substances of the body are simply aggregates of lesser monads. But this requires us to read "soul" as being a substance, and "body" as an aggregate of monads. Leibniz here seems to resist this reduction (or at least not give us reason to so reduce). We can alternatively read Leibniz as denying that a body and soul *directly* relate; that is, to talk of the union following only the relation of an order of phenomena can be seen as the rejection of extrinsic relations between body and soul. There are no direct external relations between them, since these sorts of relations are only phenomenal. In other words, the *union* is not found in either body or soul. A body and soul do not "come together," but for their union they depend on a deeper level.

However, the challenge for interpreting this passage seems to come down to the phrase "the phenomena that are natural to each substance separately." To which substances does Leibniz refer? Does he mean monads, or corporeal substances? His intent is unclear. If by "each substance" Leibniz means monads, then this passage may be in favor of the Phenomenalist. But if Leibniz refers to corporeal substances, then there is no full reduction of body and soul implied, and the issue of how the union follows the order of phenomena is left open to a more realist reading.<sup>50</sup>

According to the Phenomenalist, soul and body are merely (or only) the aggregation of simple substances, one of them being dominant. However, if soul is not a substance, then corporeal substance *cannot* be an aggregate of substances (and the above passage cannot be explained in these terms). And this is exactly what we find in the Fardella memo, where Leibniz seems to affirms that souls are *not* substances:

I do not say that the body is composed of souls, nor that body is constituted by an aggregate of souls, but that it is constituted by an aggregate of substances. Moreover, the soul, properly and accurately speaking, is not a substance, but a substantial form, or the primitive form existing in substances. . . . Further, although the aggregate of these substances constitute body, they do not constitute it as parts, just as points are not parts of the line, since a part is always of the same sort as the whole. However, the organic bodies of substances included in any mass of matter are parts of that mass.<sup>51</sup>

<sup>50.</sup> The issues raised by the passage Adams cites are quite complex, and I cannot go any deeper into it at this junction. However, I suggest that the unity relation following the order of phenomena is not itself a phenomenon. The order is pre-established, and somehow this *expresses*—the Phenomenalist might insist the order *determines*—the nature of the way in which substances *interact* with one another. Or to put it another way, the union of a body and soul is always and only metaphysical; it is never physical or phenomenal.

<sup>51.</sup> Notes on Fardella, March 1690, Essays, 105.

In this text he says that a body is *not* an aggregate of souls, but an aggregate of substances. Substances in a body are compared to the points in a line; the soul, however, is not a substance, but a substantial form *in* substance. It is the form of a collection of substances, which is the organic body or material mass. These substances (which he compares to points) are not parts of a body. The parts of a body are *other* bodies (since parts must be "of the same sort as the whole").

Phemister argues that this undercuts the Phenomenalist.<sup>52</sup> If a soul is not a substance—as Leibniz seems to here indicate—then it cannot be a monad. Corporeal substance, accordingly, cannot be an aggregate of monads. But I think the Phenomenalist can respond by saying Leibniz has not developed his monadology yet—that is, his doctrine of simple, perceiving windowless substances has not fully emerged. And when he later illuminates his monadology it replaces this earlier stab in the dark. The Phenomenalist is, I believe, correct, in that Leibniz *does* come to see souls as substances (and he equates them with monads). But he also seems to dither on this. For example, he sometimes says monads are souls with primitive active force, and sometimes he ignores this definition. Sometimes a soul is a substance, and in other places he denies this. Unpacking why I think Leibniz seems to do this will have to wait until chapters III and IV. Nonetheless, while I agree with some of the Phenomenalist's position, I do not find it ultimately compelling, since it requires a "replacement" of the earlier view with the later one. Yet to my knowledge, Leibniz talks of corporeal substances to the end, never seeming to recant these earlier arguments and statements. As quoted above, he writes to Arnauld in 1687:

<sup>52.</sup> Phemister, "Compound Bodies," 65-66. I am here simplifying matters, since this is only a preliminary point in a longer argument that she gives.

You object, sir, that it could be of the essence of body to have no true unity; but then it would be of the essence of body to be a phenomenon, bereft of all reality, like a well-ordered dream. For phenomena themselves—such as the rainbow, or a heap of stones—would be completely imaginary if they were not composed of beings which have true unity.<sup>53</sup>

And in correspondence with Des Bosses, roughly thirty years later, Leibniz states something that

looks as if it were lifted from his correspondence with Arnauld:

If bodies were mere phenomena, they would nevertheless exist as phenomena, like the rainbow. You say that bodies can be something other than phenomena, even if they aren't substances. I *believe* that unless there are corporeal substances, bodies are transformed into phenomena (emphasis mine).<sup>54</sup>

And again with Des Bosses:

You ask, finally, how my composite substance differs from an entelechy. I say that it differs from it only as a whole does from its parts, that is, the first entelechy of a composite is a constitutive part of the composite substance, namely its primitive active force. But it differs from a monad, *since it makes phenomena real* . . . briefly, my entire view here is derived from these two positions, that there is composite substance, *endowing the phenomena with reality* (emphases mine), and that substance cannot naturally arise or perish.<sup>55</sup>

I think this indicates his general commitments remain unchanged (even if he has picked up *additional* convictions), and he is *not* committed to a phenomenalist system. He remains concerned with "endowing the phenomena with reality," which involves the existence of bodies composed of corporeal substance. Leibniz claims explicitly that there are composites (i.e., corporeal substances, and these, not the monad, endow phenomena with reality).

Whether souls are substances or monads is not the true issue. For the argument against phenomenalism, I think it is enough to show that Leibniz does not hold corporeal substances to

<sup>53.</sup> Leibniz to Arnauld, 30 April 1687, Texts, 124.

<sup>54.</sup> Leibniz to Des Bosses, 29 May 1716, Essays, 203.

<sup>55.</sup> Ibid., 205.

be *aggregates*. Since if corporeal substances are not aggregates, then they are not aggregates of *anything*—monads included. And in fact, as we noted earlier, Leibniz writes:

An aggregate, but not a composite substance, is resolved into parts. A composite substance only needs the coming together of parts, but is not essentially constituted of them, otherwise it would be an aggregate.<sup>56</sup>

A corporeal substance (what he refers to here as a composite) is not an aggregate. What is it, if not an aggregate? If something is *real*, but it is neither an aggregate nor a phenomenon, then it can only be a substance. Corporeal substance is thus truly substance (and not substance in name alone) since it is real, but neither aggregate nor phenomenon. A body, however, when considered apart from an entelechy, is *both* a real phenomenon and an aggregate of substances.

So what position does corporeal substance play in Leibniz's metaphysics? The real phenomenon is *made real* by corporeal substance (by an aggregate of them). And the reality of a corporeal substance is not phenomenal, because it endows phenomena with reality. Furthermore, corporeal substance is not reducible to an aggregate of monads, because corporeal substances are not aggregates. I believe that these considerations support the realist position. What needs to be examined next is the claim that Leibniz abandons this view in his later years, in favor of a stark and simple phenomenalist ontology.

<sup>42</sup> 

<sup>56.</sup> Leibniz to Des Bosses, 29 May 1716, Essays, 203.

## THE LATER YEARS

Catherine Wilson urges that Leibniz drops corporeal substances in his later years, since he is forced into a corner by Des Bosses. He chooses monads and never looks back. She readily admits, however, that "it is nevertheless impossible to suppose that Leibniz held to a pure phenomenalism when he was not under severe pressure."<sup>57</sup> He is caught in a quandary because he simply does not have the conceptual resources to maintain all he wants to maintain. So he jettisons what he least cares for–corporeal substances. Wilson identifies the "nexus of conditions" culminating in this problem:

Leibniz could not reconcile the following three claims: (a) animals are real beings; (b) animals have extended, multiple bodies; (c) real beings cannot be extended and multiple. The theory of corporeal substances could take care of (a) and (b) but not (c); the theory of "metaphysical points" [monads] could take care of (b) and (c) but not (a).<sup>58</sup>

Leibniz vainly tries to unite these separate threads in a single metaphysical weave, until the hardnosed Jesuit, Des Bosses, shows him he does not have the tools. His 'ontic schizophrenia' is evident in the *Monadology* itself, Wilson suggests, "between the descriptions of monads as unextended, simple, placeless elements and the descriptions of the world as a garden or a fish pond containing creatures without limit."<sup>59</sup> His theory of corporeal substances is inconsistent with his theory of monads as "metaphysical points." An animal cannot both be a real, extended being

<sup>57.</sup> Wilson, Leibniz's Metaphysics, 194.

<sup>58.</sup> Ibid.

<sup>59.</sup> Ibid.

and "an appearance founded upon monads."<sup>60</sup> And so, as cited by Wilson, Leibniz is compelled to tell Des Bosses:

Therefore I should prefer to say that there are no substances over and above monads, but only appearances, but that these are not illusionary, like a dream . . . but that they are true phenomena, that is, in the sense that a rainbow or a parhelion is an appearance, and, in fact, in the sense that colors are appearances.<sup>61</sup>

We may immediately wonder what Leibniz means by "I should prefer." Prefer to what? To the dilemma Wilson says he is in? To a certain hypothesis he puts forth? After all, it is here that he considers the *vinculum substantiale*, and the context can be taken to read that he merely rejects *this* particular hypothesis. The phrase "I should prefer" is by no means a signpost for absolute phenomenalism. Wilson has, by this point in her analysis, relegated the issue of the *vinculum substantiale* to something "urged" on him by Des Bosses.<sup>62</sup> She argues that Des Bosses insists a monad is (for Leibniz) associated with a body, which is located in space and time. This association, however, reduces to perceptual relations, so organic bodies become redundant. For there to be organic bodies would require that there be something like a substantial bond or *vinculum substantiale.*<sup>63</sup>

But as Adams indicates, Des Bosses at times resists accepting the *vinculum*, forcing Leibniz to come to its defense.<sup>64</sup> The Jesuit seems to prefer Leibniz's "accidental or modal bonds," over the *vinculum substantiale*.<sup>65</sup> Leibniz is in fact the first to mention the substantial bond, beating Des Bosses to the punch (if in fact it is Des Bosses' intent to urge it on him). Contrary to Wilson's

64. Adams, "Phenomenalism," 252.

<sup>60.</sup> Ibid.

<sup>61.</sup> Letter to Des Bosses, August 19, 1715, Papers and Letters, 614.

<sup>62.</sup> Wilson, Leibniz's Metaphysics, 191.

<sup>63.</sup> Ibid., 192

<sup>65.</sup> Ibid.

recommendation, then, it seems Leibniz could "prefer" a pure doctrine of monads to the doctrine of the *vinculum substantiale*, if he were judging the veracity of the *vinculum* hypothesis (and not the veracity of corporeal substance in general).

Like Wilson, I believe the reason Leibniz introduces the *vinculum substantiale* is to attempt to answer a dangling question. However, I disagree with her characterization of his doubt, which she says is to reconcile the irreconcilable doctrines of monads and corporeal substances. On her account, Leibniz seems to vacillate, caught in a dilemma, unable to choose a side (until, of course, Des Bosses marches on the scene). But perhaps he is *not* caught mid-dither. Perhaps Leibniz's worry is directed elsewhere. *Why* would he entertain the notion of the *vinculum substantiale*? The intent is clear: to account for unity in composite substances (and a composite substance is not an aggregate of monads, but a body and soul).

In the letter to Des Bosses that Wilson cites, Leibniz discusses two possible meanings of "substantial," and questions whether there can be something that is neither a modification, nor a source of modification. He finds none of this really able to account for the substantiality (i.e., the unity) of corporeal substances, which leads him to make the comments Wilson cites. Leibniz thus writes:

I do not see how we can maintain the substance of a composite being, unless we want to regard substance as the result of accidents. In that case, however, I do not see how you explain participation. Therefore *I should prefer* to say there are no substances over and above monads. [italics mine]<sup>66</sup>

The substance of a composite being cannot be maintained when "substantial" is neither a modification nor a source of modification (as he questions a few lines above these comments).

<sup>66.</sup> Letter to Des Bosses, August 19, 1715, Papers and Letters, 614.

But Leibniz's concern, nonetheless, is explaining the unity of a "composite being," that is, a corporeal substance. This is no isolated anxiety. He also expresses this in a letter to Tournemine, where he talks of the Cartesian explanation of the agreement of body and soul. His doubt, then, is whether he has done a better job than the Cartesians:

My intent was to explain naturally what they [the Cartesians] explain by perpetual miracles, and I tried to account only for the phenomena, that is, for the relation that is perceived between soul and body.

But since the metaphysical union one adds is not a phenomenon, and since no one has ever given an intelligible notion of it, I did not take it upon myself to seek reason for it.

However, I do not deny that there is something having this nature. Its nature would be something almost like that of a *presence*, whose notion has also not yet been explained when applied to incorporeal things, and which is distinguished from the *relations of harmony* that accompany it, which are also *phenomena* capable of marking the *location* of incorporeal things.

After having conceived of a union and a presence in material things, we judge that there is something I know not what analogous in immaterial things. But to the extent that we cannot conceive those notions further than this, we have only obscure notions of them.<sup>67</sup>

Leibniz is clearly aware of the difficulty in explaining the union of a corporeal substance.

He qualifies his attempt as not being metaphysically comprehensive (though it is a metaphysical union). Although he does not doubt the reality of this union (which implies that he holds corporeal substances exist); and its nature in the phenomenon is "almost like that of a *presence*." There is *presence* in phenomena, which is more than the harmony of relations, and can only be a metaphysical union.

So there is some doubt in the account Wilson provides. The fact that he mentions to Des

Bosses that he would choose a doctrine of pure monads over the vinculum substantiale does not

<sup>67.</sup> Letter to Tournemine, 1708, "Remark of the Author of the System of Pre-established Harmony on a Passage from the Mémoires de Trévoux of March 1704," in Essays, 197.

imply a rejection of corporeal substances—at most it implies that he is dissatisfied with his account of the unity of a corporeal substance. Yet the general picture Wilson sketches of Leibniz's move to phenomenalism is also, remarkably, given by Leibniz himself. In a letter to Remond, he writes:

When I looked for the ultimate reasons for mechanism, and even for the laws of motion, I was greatly surprised to see that they could not be found in mathematics, but that I should have to return to metaphysics. This led me back to entelechies, and from the material to the formal, and at last brought me to understand, after many corrections and forward steps in my thinking, that monads or simple substances are the only true substances and that material things are only phenomena, though well founded and well connected.<sup>68</sup>

On first examination this looks like the end of the story: Leibniz confesses phenomenalism. He writes that "monads or simple substances are the only true substances." It should be noted that this is written very close to when he corresponds with Des Bosses. Why, then, does he float the idea of the *vinculum substantiale* to Des Bosses, if he is already entrenched in an "only simples are substances" ontology? After all, the purpose of the *vinculum* is to unify corporeal beings. It is Leibniz who urges the notion, and not Des Bosses. But this fragment written to Remond ostensibly flattens the very hope of extant corporeal beings, and with it, the intelligibility of even suggesting the *vinculum substantiale*. One potential reconciliation of this dilemma is that Leibniz introduces the *vinculum* as a diplomatic gesture towards a friend who holds different beliefs. In other words, he humors Des Bosses shows some resistance to the notion. And if the above passage is taken as a statement of full-blown idealism—that only simples are substances—we run into an

<sup>68.</sup> Letter to Nicolas Remond, 1714-15, Papers and Letters, 655.

<sup>69.</sup> Adams notes that this is perhaps the majority view, and he gives a battery of reasons for why it cannot be maintained. Adams, "Phenomenalism," 250-254.

inconsistency, since in this very correspondence he *also* writes: "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*."<sup>70</sup> As Glenn Hartz notes, *unum per se*, one in itself, strikes at the very core of Leibniz's metaphysic of substance.<sup>71</sup> There can be no doubt that Leibniz here affirms that a unity of soul and organic body *is substance*. If we are to avoid attributing an inconsistency to Leibniz, we must say that something has gone wrong with the interpretation. Hence, when he says, "simple substances are the only true substances," he means, as I see it, that simple substances are the absolute or fundamental level, from which composite substances derive. The notion of there being two substances, one more fundamental than the other, is certainly not foreign to Leibniz. He opens *The Principles of Nature and of Grace Based on Reason* with the following pronouncement:

Substance is a being capable of action. It is simple or compound. Simple substance is that which has no parts. Compound substance is a collection of simple substances, or monads. Monas is a Greek word signifying unity or that which is one. Compounds, or bodies, are pluralities, and simple substances—lives, souls, and spirits—are unities. There must of necessity be a necessity of simple substances everywhere, for without simple substances there would be no compounds. As a result, the whole of nature is full of life.<sup>72</sup>

It would seem Leibniz holds there are both simple and compound substances. Indeed,

Leroy Loemker says that in this passage (in fact all through *The Principles of Nature and Grace*) Leibniz's "phenomenalism is not made explicit."<sup>73</sup> I would contend that this is because he is not a phenomenalist. He states—and rather plainly, I might add—that there are compound substances,

<sup>70.</sup> Letter to Remond, 1715, Die philosophischen Schriften, III, 657; cited in Glenn Hartz, "Why Corporeal Substances Keep Popping Up in Leibniz's Later Philosophy," British Journal of the History of Philosophy, 6/2 (1998): 195.

<sup>71.</sup> Hartz, "Why Corporeal Substances Keep Popping Up," 195.

<sup>72.</sup> The Principles of Nature and of Grace Based on Reason, 1714, in Papers and Letters, 637.

<sup>73.</sup> Ibid., 641.

and *this is the reason why* we must affirm that there are simple substances. He does not argue from the reality of unities to pluralities, but as far as I have been able to tell, he always makes the opposite case, moving from pluralities to the reality of unities. And so, the argument for Restricted Phenomenalism that Wilson supports is difficult to maintain. Leibniz does not, in his later years, seem to cast off his ontological commitment to corporeal substance. And if he does not adopt phenomenalism in the "later years," then he is not generally to be thought of as a phenomenalist as a mature philosopher.

## CHAPTER III

## A FINAL ARGUMENT

There is one more argument I want to discuss, which will be effective against both the Phenomenalist and Restricted Phenomenalist. It has to do with the connection between simple substances, substantial forms, and corporeal substances, in terms of how, and when, Leibniz argues for them. I will provide reasons why the doctrine of simple substances does not stand alone, but leans upon the older and deeper commitment to corporeal substances. His case for simples, in other words, is a result of his acceptance of corporeal substances.

The argument for Phenomenalism rests, in part, on the view that Leibniz comes to think corporeal substances are untenable. One important reason for this is that anything built from simple substances could not be anything more than an aggregate. Simples have no parts, only contain perceptions and appetites, and are the sole element of things. Therefore, corporeal substances cannot be substances at all, for they would essentially be aggregates, or phenomena. As Adams writes:

Given his doctrine that "there is nothing in things except simple substances, and in them perception and appetite", there is no way for the unity of a corporeal substance to be anything over and above the system of relations among perceptions of simple substances. But aggregates, too, are united by relations among the perceptions of substances...So on this line of thought it might seem that the unity of a corporeal substance is of the same kind as the merely accidental unity of an aggregate.<sup>1</sup>

Again, we see the centrality Adams places on the claim that there are only simple substances. The objection he notes, however, is quite weighty. If there are corporeal substances,

<sup>1.</sup> Adams, Leibniz, 293.

they must somehow arise from monads. But there can be no unities outside of monads. How, then, can there be corporeal substances? Leibniz must have seen this, and therefore must have rejected the doctrine of corporeal substances (so, at any rate, the Phenomenalist may argue). The doctrine of simple substances leaves no room for composite substances.

There are two separate issues that need to be investigated. The first will be the subject of the next chapter, which is giving an account of unity in the corporeal substance. The second is that his doctrine of simple substances trumps the doctrine of corporeal substances, leaving Leibniz no choice but to discard the latter. So, for example, he writes at the beginning of the *Monadology*:

And there must be simple substances, because there are composites; for the composite is nothing but a collection, or *aggregatum*, of simples.

Now, in that which has no parts, neither extension, nor shape, nor divisibility is possible. And so monads are the true atoms of nature; in a word, the elements of things.<sup>2</sup>

Well-known statement like this have traditionally been seen as evidence for the Phenomenalist position. There is a jag in this account, however, since Leibniz arrives at simples by first acknowledging composites. Also, he does not here say composite *substance*, but "composite," and this is immediately compared with an aggregate.<sup>3</sup> In fact, he seems to accept the existence of composite substances, i.e., corporeal substances, before developing a doctrine of simples. Samuel Levey mentions that in the decade from 1679 to 1689 Leibniz scarcely mentions simple

<sup>2.</sup> Leibniz, Texts, 268.

<sup>3.</sup> Compare this passage with the following, from *Principles of Nature and Grace:* "Every simple substance, or individual monad, which forms the centre of a composite substance (an animal, for example) and the principle of unity, is surrounded by a mass made up of an infinity of other monads which constitute the body. . . . *This body is organic*" (Ibid., 259). When he talks of composites, he refers to aggregates; yet composite *substance* is compared with an animal, or that which has a body.

substances at all.<sup>4</sup> It seems he begins turning to them roughly around 1690 (when his correspondence with Arnauld came to an end). Evidence of this turn is found in a memo made of a conversation he had with Michel Angelo Fardella:

There are an infinity of simple substances or creatures in every particle of matter; and matter is composed from these, not as parts, but as from constituent principles, or immediate requisites, just as points are essential ingredients of the continuum yet not parts.<sup>5</sup>

In the same collection of notes, Leibniz also writes:

Unless there are certain indivisible substances, bodies would not be real, but would only be appearances or phenomena (like the rainbow), having eliminated every basis from which they can be composed.<sup>6</sup>

After 1690 these sorts of passages become more and more common, as he appears to be working out his doctrine of simple substances—his 'monadology', which is so familiar in the later years of his life. But before this, in the previous decade, he says very little about simple substances. He argues for something a bit different: extant corporeal substance and substantial forms.

Leibniz is generally recognized as having accepted substantial forms *no later than* 1679 (much earlier than his monadological doctrine). As Robert Adams makes note, the date of Leibniz's "momentous decision" to resuscitate substantial forms was discovered by Robinet, when he made a comparison of two documents, one of them addressed to Duke Johann Friedrich, who died in late 1679 (the reasoning is that Leibniz would not likely have penned a letter to a dead

<sup>4.</sup> Levey, "Leibniz and Idealism."

<sup>5.</sup> See Gottfried Wilhem Leibniz: Sämtliche Schriften und Briefe (Berlin: Deutschen Akademie der Wissenschaften zu Berlin, 1923-), VI, 4, 1473; cf. Levey, "Leibniz and Idealism."

<sup>6.</sup> Texts, 103.

duke). Adams therefore puts Leibniz's acceptance of substantial forms in the summer of 1679.<sup>7</sup> Richard Arthur, however, disagrees (he thinks Adams is trying to maintain that Leibniz flirted with phenomenalism before accepting substantial forms), and Arthur believes that Leibniz reintroduces substantial forms as early as the winter of 1678.<sup>8</sup> In any case, it is clear that Leibniz has forms firmly embedded in his philosophy by the time he corresponds with Arnauld (which ranges from 1686 to 1690). I believe that it is his doctrine of substantial forms that brings him to a doctrine of simples.

How does he come to a doctrine of substantial forms? The answer has to do with his reaction to Descartes. Cartesian dualism is (roughly) the view that there are two substances: mind, which is essentially a "thinking thing", and matter, which is essentially extended. This picture of reality focuses much of the debate in the seventeenth century; a debate which turns on the problem of how these two substances interact, *if* they do, and whether dualism is in fact intelligible. Mind and body are *essentially* different things, with a seemingly unbridgeable gap between them. This renders their interaction or integration difficult to fathom. It is this picture of reality with which Leibniz wrestles. He attacks Cartesians in a number of ways, but his general strategy seems to be threefold: (1) *extension* cannot be the essential attribute of a substance; (2) *thinking* is too narrow to account for the myriad substances with which nature overflows; and (3) dualism cannot adequately ground physics.<sup>9</sup> Nature is not dualistic, but rather a plenum of

<sup>7.</sup> Robert Adams, Leibniz: Determinist, Theist, Idealist (New York: Oxford University Press, 1994), 236.

<sup>8.</sup> The Labyrinth of the Continuum: Writings on the Continuum Problem, 1672-1686, trans., ed., and with an introduction by Richard T. W. Arthur (New Haven: Yale University Press, 2001), 416.

<sup>9.</sup> This last point is only briefly touched on, since it would take us too far into the relation of motion with primary an derived forces, and how these relate to space and time, etc.

individual substances, all essentially acting and perceiving. *Perceiving* (and not *thinking*) is the common trait of substances: minds or rational souls that belong to the City of God; entelechies or animal souls, which are not reflective and not able to apprehend moral laws; and finally those lower forms that are active forces, expressing the universe (but not doing much more than that). He mentions to Arnauld:

It is perhaps more surprising that I deny what nevertheless seems so clear—the action of one corporeal substance on another. But others have already denied it, and we should consider it more a play of the imagination than a distinct conception. If the body is a substance, and not a mere phenomenon, like the rainbow, or a being unified by accident or by aggregation, like a heap of stones, it cannot consist in extension, and we have to conceive of it as having something like what is called substantial form, which in some way corresponds to the soul. Almost despite myself I have finally been convinced of this, after having earlier been very far from it.<sup>10</sup>

Leibniz's solution to the inadequacies of Cartesianism is in substantial forms. Substantial forms bring unity to bodies, that is, they make bodies complete beings. He "cannot conceive of any reality without a true unity."<sup>11</sup> This is central to his project of bringing together body and soul, as well as giving an ample foundation for physics. Very simply, there can be no interaction or *coming together* of form and matter if they are essentially different substances. There must then be an essential similarity. Take, for example, what Leibniz considers to likely be the *highest* substantial form: mind. There must be a similarity between the mind and the body, or else there can be no interaction of any sort (without invoking the pineal gland, perhaps). Therefore, the body itself is composed of other "lesser mind-like" substances; and so on down into the deeps of reality, on and on into merely perceiving (i.e., merely expressing) things which underlie. Like the

<sup>10. 4/14</sup> July 1686, Texts, 113.

<sup>11.</sup> Leibniz to Arnauld, 30 April 1687, Texts, 124.

myth that the world actually rests on the back of a turtle—but here we find there are turtles all the way down.

This is the answer he works out in response to Cartesianism; but he develops his case as a *reductio* of the Cartesian concept of bodily substance. Descartes writes in *Principles of Philosophy* that "every place is full of bodies."<sup>12</sup> Reality is a plenum; there are no voids, just a fullness, with a churning motion of the parts occupying this full universe. Descartes writes that because of this motion:

What happens is an infinite, or indefinite, division of the various particles of matter; and the resulting subdivisions are so numerous that however small we make a particle in our thought, we always understand that it is in fact divided into other still smaller particles.<sup>13</sup>

Leibniz finds this reasoning sound, and he follows Descartes in holding that reality is actually divided into smaller and smaller parts. But then he critiques Descartes by denying that a body can truly be a substance. His debate with Arnauld is dominated by the question of what does, in fact, count as a substance. As previously cited, Leibniz writes to Arnauld:

To cut the point short, I hold as axiom the following proposition which is a statement of identity which varies only in the placing of the emphasis: nothing is truly *one* being if it is not truly one *being*. It has always been held that *one* and *being* are reciprocal things. It is one thing to be a being, quite another to be a number of beings; but the plural presupposes the singular, and where there is no being, still less is there a number of beings. . .<sup>14</sup>

Here is the bedrock understanding of being. Whatever is one being is substance. On this point,

Leibniz is adamant. And so if bodies are no more than the parts that compose them, and these

<sup>12.</sup> Descartes, *The Philosophical Writings of Descartes*, vol. I, trans. by John Cottingham, Robert Stoothoff and Dugald (Cambridge: Cambridge University Press, 1985; reprint, 1999), 237.

<sup>13.</sup> Ibid., 239.

<sup>14.</sup> Leibniz to Arnauld, 30 April 1687, Texts, 124.

parts are actually composed of parts, then there cannot be any bodies. In other words, if a thing that is built from the bottom up is infinitely divisible, it cannot ever be *real*, since it would only be a collection of collections—but for collections to have any ontological standing, they must be contain real things. So if there is anything real in bodies at all, there must be real things that are not collections. In short, there must be things that have true unity. On the Cartesian account, extended substance would not even be substance. For there to be aggregates, there must be true unities that can enter into aggregates. There must be things that cannot be divided, or there would be no end to it, and nothing at all would be real. Whatever brings unity to extended bodies, if there is such unity, would need to come from something other than what is extended.

One common answer given in the seventeenth century was that there must be material atoms, 'corpuscles', and these are the end-points of all bodily analysis. They have a definite shape and hardness to them, and their hooked and jagged shapes (which they were hypothesized as having) enable them to enter into composites.<sup>15</sup> Bodies are therefore built from these irreducible pebbles. Leibniz rejects material atoms, however, since if extension is the essential trait of matter, then there cannot be a definite shape to it. And if there is no definite shape, there can be no smallest material atom that can join with any other. He writes, "In fact, we can say there is no precise fixed shape of a body because of the actual subdivision of its parts."<sup>16</sup> Not only will a body

<sup>15.</sup> Cf. "Instead of explaining the properties of bodies in terms of their substantial forms, the mechanist explains their properties in terms of the size, shape, and motion of the tiny corpuscles that make them up. And so, the heat of fire may be explained in terms of the speed with which the parts of its constituent corpuscles move or their pointy shapes, and the wetness of water may be explained in terms of the eel-shaped particles of which it is made, whose shape allows them to slide past one another, etc." (Daniel Garber and Jean Baptiste Rauzy, "Leibniz on Body, Matter and Extension," *Supplement to the Proceedings of the Aristotelian Society* 105/3 [May 2005], 26.)

<sup>16.</sup> Texts, 119.

not have a definite shape, but it is itself something divisible (since it has no shape), and therefore, cannot be a smallest particle (since it has parts).<sup>17</sup> What would the *sufficient reason* be for the indivisibility of this physical, extended atom? He concludes that "*atoms of matter* are contrary to reason."<sup>18</sup> Yet, there still must be some things with true unity, or there would be nothing at all. And so, the true unities cannot be essentially extended material (which is the definition of matter that Descartes gives). "True unity" is, for Leibniz, just another way of saying substance. It logically follows, he thinks, from Aristotle—it is not a *that* without being a unity, a *one* thing, otherwise it would be a collection of other things "accidentally" brought together.<sup>19</sup> So there must be substances, i.e., true unities, and these cannot be essentially extended, as the Cartesians claim. He writes to Arnauld:

You will never find a body of which we can say that it is truly a substance: it will always be an aggregation of many substances. Or rather, it will never be a real being, since the parts which make it up face just the same difficulty, and so we never arrive at real being, because beings by aggregation can have only as much reality as there is in their ingredients. From this it follows that the substance of a body—if they have them—must be indivisible, and it doesn't matter whether we call that a soul or a form . . . Extension is an attribute which could never make up a complete being; and we could never get from it any action or change.<sup>20</sup>

For a body to be a real being, there must be something indivisible. Otherwise, there is

only a being by aggregation, which can never be more than what is in the aggregate-so if a body is

a real being, there must be something more to it than aggregation. There must be something

<sup>17.</sup> Another problem is that if "material atoms" all have the same shape, and they are all the same on the *inside*, then there is nothing to distinguish one from another.

<sup>18.</sup> New System, Texts, 149.

<sup>19.</sup> Cf. Metaphysics Z 1028b1-35 and 1029a1-30, The Complete Works of Aristotle: The Revised Oxford Translation, vol. 2, ed. by Jonathan Barnes (New Jersey: Princeton University Press, 1984), 1624-5.

<sup>20.</sup> Leibniz to Arnauld, 28 November/8 December 1686, Texts, 116.

indivisible. Does "indivisible" entail "simple"? The answer is not clear.<sup>21</sup> If it does, then Leibniz does not seem to have been aware of the connection in his correspondence with Arnauld. The indivisible substances are identified as *substantial forms*, and they are to account for the unity we find in real bodies—without them bodies would only be aggregates. He tells Arnauld, 30 April 1687:

If the view I have-that substance requires a true unity-were based only on a definition which I had made up contrary to standard usage, it would be only a 'dispute about a word'. . . But quite apart from the fact that ordinary philosophers have taken the word in more or less the same way, distinguishing between *unum per se* and *unum per accidens*, substantial forms and accidental forms, imperfect and perfect mixtures, natural and artificial things, I take things at a higher level, and, leaving aside language, I believe that where there are only beings by aggregation, there will not in fact be any real beings. Any being by aggregation presupposes beings endowed with true unity, because it derives its reality only from that of the things which make it up. It will therefore have no reality at all if every being of which it is composed is itself a being by aggregation, for whose reality we have to find some further basis, which in the same way, if we have to go on searching for it, we will never find. I agree, sir, that 'in the whole of corporeal nature there are only machines' (often animated ones), but I do not agree that there could be 'only aggregates of substances'. . . if there are aggregations of substances, then necessarily there must also be true substances from which all those aggregations result.<sup>22</sup>

"Unum per se" is a Scholastic term often used by Leibniz, and here he tells us exactly what he means to imply: substantial form. As Christia Mercer notes, the Scholastics distinguished between unum per se and unum per accidens, wherein the former is derived from the nature of the substance

<sup>21.</sup> I believe that for Leibniz the difference comes from Scholastic thought, in that God is a simple being. The doctrine of simplicity implies that the attributes of God all collapse into one another (e.g., omniscience and omnipotence are identical in God). Simplicity, then, can imply something that indivisibility does not. And so simple substances perhaps mirror God's simplicity. This allows the simple substance which has no parts, to be at once a soul, an entelechy, an active force, perceiving, etc. Thus all the aspects of reality that Leibniz wants to explain can be explained through an infinitude of *simple* substances, which implies much more than indivisibility. Nonetheless, I will argue that unity is the primary concept of reality, and that this in turn suggests simples.

<sup>22.</sup> Leibniz to Arnauld, 30 April 1687, Texts, 123.

itself. As to *unum per accidens*, Leibniz holds this to be a "phenomenal unity," an aggregate.<sup>23</sup> It was common in seventeenth century German philosophy to hold that every substance has being (*ens*) and every being is *unum per se*, one in itself; that is, unity is derived from within, from its own being. And it is this reasoning which Leibniz wholeheartedly accepts.<sup>24</sup> A true unity is *unum per se*, which is a unity that is not accidental. What Leibniz does not seem to mean by "*unum per se*" is simple substance (at least in this context). Body, then, is merely an aggregate, *unum per accidens*, if it lacks a soul.

I accept that a body on its own, without a soul, has only a unity of aggregation; but the reality which it still possesses derives from the parts which make it up, and which retain their substantial unity because of the countless living bodies which are contained within them.<sup>25</sup>

A unity of aggregation is only based on external denomination, like a heap of stones. Without the soul, there is only a collection of bodies: but each of these bodies will be substantially unified. He further writes: "if there are aggregates of substances, then necessarily there must also be true substances from which all those aggregations result."<sup>26</sup> These substances found in aggregates are the reason he concludes that there are substantial forms. In an illuminating passage, he says:

For I believe I have shown that there must be entelechies if there are corporeal substances; and if we accept these entelechies or these souls, we have to recognize their ingenerability and their indestructibility.<sup>27</sup>

And so, we have the clear structure of his argument. Contrary to the Cartesians, an aggregate

must at some point be an aggregate of things with real unity. Otherwise, there is no aggregate. The

<sup>23.</sup> Leibniz to Arnauld, 9 October 1687, Texts, 131.

<sup>24.</sup> Christia Mercer, "Leibniz and Sleigh on Substantial Unity," Leibniz: Nature and Freedom, 66.

<sup>25.</sup> Leibniz to Arnauld, 30 April 1687, Texts, 126.

<sup>26.</sup> Ibid., 123.

<sup>27. 9</sup> October 1687, Texts, 133.

real unities of these aggregates are corporeal substances. And if there are corporeal substances, there must also be substantial forms. In addition, these forms must be indestructible, and cannot be generated by any natural means. Elsewhere he says, "the substantial form of the body is indivisible."<sup>28</sup> Bringing much of this argument together, he writes:

I can say at least that if there are no corporeal substances of the kind that I have in mind, then bodies will only be true phenomena, like the rainbow. Because not only is a continuum divisible to infinity, but every part of matter is actually divided into other parts . . . And since that goes on and on in the same way, you will never arrive at something of which you can say it is a true being until you find animated machines, the substantial form of which produces a substantial unity which is independent of the external union of contact. And if there are none, it follows that except for man there is nothing substantial in the visible world.<sup>29</sup>

Without a stopping point, bodies would only be true phenomena (which implies that some bodies are more than true phenomena). These stopping points are corporeal substances, which he identifies as animated machines. The substantial forms of these machines produces a unity independent of external forces. And if there are no substantial forms, then nothing in the visible world would be real. They are the ingenerable and indestructible sources of unity. The substance having genuine unity—i.e., having a substantial form—is a corporeal substance, since this is what is made one by the form. But how do they confer unity? Leibniz solemnly admits that "we will never find anything systematic which can make a true substance out of beings by aggregation."<sup>30</sup> But in answer to this challenge (a challenge Arnauld pressures him with) he says:

I reply that it is the animated substance to which the matter belongs that is truly one being, and the matter taken as a mass in itself is only a pure phenomenon or well-founded appearance, as also are space and time. It does not even have the fixed and precise

<sup>28. 28</sup> November/ 8 December 1686, Texts, 117.

<sup>29.</sup> Ibid., 118-119.

<sup>30. 30</sup> April 1687, Texts, 127.

qualities which could make it pass as a determinate being, as I have already suggested in my previous letter. For shape itself, which is the essence of a bounded mass, is never exact and strictly determinate in nature, because of the actual division to infinity of the parts of matter. There is never a sphere without irregularities, no straight line without curves mixed in with it, no curve of any finite nature which is not combined with a different one. . . . I could say the same thing of size and of motion, namely that they are qualities or predicates which partake of the phenomenal, as do colours and sounds; although they contain more that is distinctly knowable, they too cannot sustain a final analysis, and therefore since extended mass considered without entelechies consists only of these qualities, it is not a corporeal substance, but a pure phenomenon, just like the rainbow.<sup>31</sup>

A Phenomenalist, looking at the first sentence of this passage, could interpret it as evidence that bodies are purely phenomenal and "animated substances" are not corporeal. The sentence (considering it apart from the rest of the passage for the moment) is ambiguous. It is not clear what Leibniz means here by an "animated substance," since he can be read as drawing a line, with substance on one side and the matter on the other as a pure phenomenon. I think this is incorrect. Consider that there is a difference between "animated" and "animating." The latter would be the substantial form, and the former a corporeal substance. Leibniz says that the matter "belongs" to the animated substance, which could either imply an external relation, as when we say that a house or car belongs to us, or an internal (perhaps *substantive*) relation, as when we might say that a particular thought was "my idea." Note that he writes:

I could not say exactly whether there are true corporeal substances other than those which are animated . . . . if you ask me about the sun, the globe of the earth, the moon, trees and similar bodies, and even animals, I could not say with absolute certainty whether they are animated—or at least whether they are substances—or whether they are simply machines or aggregations of several substances.<sup>32</sup>

<sup>31. 9</sup> October 1687, Texts, 131-2.

<sup>32. 28</sup> November/ 8 December 1686, Texts, 118.

Corporeal substances are "animated" by souls or entelechies. And "there is no soul without an animated body."<sup>33</sup> The body and soul together are a corporeal substance. Also consider:

As for corporeal substances, I hold that mass, considering only what is divisible in it, is a pure phenomenon; that every substance has a true unity in metaphysical rigour, and that it is indivisible, ingenerable, and incorruptible. All matter must be filled with substances which are animated, or at least alive.<sup>34</sup>

I also agree that all substantial forms and all substances are indestructible and ingenerable  $\dots$  They could therefore never come into existence except by an act of creation.<sup>35</sup>

Corporeal substances are *animated* substances. When considering *only* what is divisible in mass (that is, when we look with our Cartesian eye) we are right to say it is pure phenomenon. But when we consider the metaphysical foundations, mass is a true unity if it is animated by a substantial form. Leibniz is thus distinguishing between 'matter' and 'mass', where the latter is considered formless. Hence he writes in the above passage that "matter taken as a mass in itself is only a pure phenomenon," but that *matter belongs* to that which is "truly one being." In this context, it is matter that belongs to a corporeal substance, and mass that is phenomenal. As he writes in the same passage, "it is the form that gives determinate being to matter."<sup>36</sup> And in a marginal note he did not include in the letter to Arnauld, he says:

If we take as the matter of corporeal substance, not its mass without forms, but a secondary matter which is the multitude of substances whose mass is that of the whole body, it can be said that these substances are parts of this matter, as those which enter into our body are parts of it. For as our body is the matter and the soul is the form of our substance, it is the same in this respect with other corporeal substances.<sup>37</sup>

<sup>33. 9</sup> October 1687, Texts, 134.

<sup>34.</sup> Ibid., 135.

<sup>35. 28</sup> November/ 8 December 1686, Texts, 117.

<sup>36.</sup> Leibniz to Arnauld, 9 October 1687, Papers and Letters, 343.

<sup>37.</sup> Ibid., 350.

Matter belongs to a corporeal substance, and mass does not. As Loemker notes: "Mass is not equivalent to matter but is a quantitative measure of inertia, or materia prima as experienced in materia secunda," that is, mass is the primary matter contained in secondary matter.<sup>38</sup> Leibniz writes, "Primary matter is mass itself, in which there is nothing but extension and antitypy or impenetrability."<sup>39</sup> Primary matter is elsewhere defined as a resistance or the ability (force) of being acted upon.<sup>40</sup> Considered to be that which is acted upon or *formed* to become something, mass in itself is not a thing, but a *lump* to be formed by an entelechy. Mass is nothing but extension, which is to say, it is not a real being in itself, but can provide the "stuff" to be formed. If Leibniz had meant "belongs" to refer to an extrinsic relation, implying that the matter belonged to the animated substance the way in which my clothes belong to me, then he would have used the term "mass." Since he clearly distinguishes between matter and mass; and it is mass, not matter, which is considered to be phenomenal, we ought to conclude that "belongs" is meant in the sense of "the body of a corporeal substance." And this implies unity and form, rather than phenomenon. So in answer to Arnauld's question on how the many, that is the matter, become one through the substantial form, Leibniz answers that the matter does not become one in itself. Rather, what is truly one being is the animated substance "to which the matter belongs." And this is a corporeal substance. The "animated substance" is neither the body nor the entelechy, but both taken together.

<sup>38.</sup> Ibid., 451.

<sup>39.</sup> Letter to Jacob Thomasius, 20/30 April 1669, Papers and Letters, 95.

<sup>40.</sup> Specimen Dynamicum, in Texts, 156.

And matter is filled with animated substances, i.e., corporeal substances. The bodies of these corporeal substances are likewise filled. A form *animates* matter (the action of animation is the constitutive difference between a mere mass and an individuated body), the result of which is an *animated* substance. So bodies are collections of form-matter amalgams; and the bodies or matter inside these collections break down in similar fashion. But notice that we never get to mere *matter* or unsubstantial *stuff*. We only find more animated substances. So the picture Leibniz gives us is of forms animating aggregates of embodied forms, which are in turn aggregates of embodied forms—there are forms unifying and underling forms all the way down. Cartesian matter, then, when resolved fully, yields nothing but forms. These are both mortar and block of the world. They are the unity and diversity of nature. What they build, in this omni-layered ontological portrait, are corporeal substances.

What, then, is the ontological status of forms? If they could be destroyed by natural means, then what they unified would not constitute true unities. And if they were not in some way substantial, then they could not impart substantiality to anything. They must be at least as real as that which they reify. This implies that forms must also be *substances*—otherwise they could not produce substances. And so the substantiality of forms follows from his resolution of matter into forms.<sup>41</sup> This is why I believe Leibniz considers forms to be substances.

However, we noted earlier that in his Fardella memo Leibniz denies that souls are substances; he insists, rather, that they are substantial forms (which would imply that forms are not substances). This tension can be explained if we see Leibniz as being in transition, as it were,

<sup>41.</sup> Ibid., 350.

as he deals with the pressure put upon him by Arnauld. Arnauld pushes him to answer for the unity of corporeal substances, and he is here beginning to form what I consider his "mature" answer to the question. In the Fardella memo (written at the end of his correspondence with Arnauld) he says souls are not substances, but substantial forms; yet in this same memo (as we also noted earlier) he says simple substances are in all things. A soul is not a substance, because then, a corporeal substance *would have a substance as a part*. But substances are neither parts of things nor have parts themselves. Therefore, a soul (which is by definition an element or first principle of a corporeal substance) *cannot* be a substance; yet he still must identify it with simple substance. This tension will be the subject of the next chapter. And it is plausible that what we find in the Fardella memo is Leibniz working out his explanation, identifying substantial forms with simple substances, as he apparently does later, in 1695, when he writes in the *New System*:

I saw that these forms and souls had to be indivisible, like our minds . . . But this truth reintroduced all the great difficulties about origin and duration of souls and forms. For, since every *simple substance* which has a genuine unity can begin or end only by a miracle, it follows that they can come into being only by creation and end only by annihilation. So I had to recognize that (with the exception of souls which God intends to create specially) the constitutive forms of substances must have been created with the world and must always continue to exist.<sup>42</sup>

And even later in the Monadology:

We could give the name *entelechy* to all simple substances or created monads . . . If we want to call anything that has *perceptions* and *appetites* in the general sense that I have just explained a *soul*, then all simple substances or created monads could be called *souls*.<sup>43</sup>

And so Leibniz seems to say that substantial forms are simple substances. But there are

two questions that arise: (1) what is Leibniz's argument for simple substances, and (2) what

<sup>42.</sup> Ibid., 146.

<sup>43.</sup> Ibid., 270.
connection is there between substantial forms and simple substances? As to the first question, Levey notes that Leibniz never really articulates an argument for simple substances apart from the existence of composite, or corporeal, substances.<sup>44</sup> Consider again his opening comments to the Monadology, that "there must be simple substances, because there are composites."45 His supporting evidence, then, is linked to there being corporeal substances. The doctrine of substantial forms accounts for corporeal substances. And it appears that his doctrine of simples expands upon the theory of substantial forms.<sup>46</sup> In later years he speaks with brevity, saying all things are reducible to simple substances. But it must be considered, that as late as 1714, Leibniz writes that "each monad, together with its own body, makes up a living substance."<sup>47</sup> Passages like this must be either ignored or contorted to fit the stark landscape of the Phenomenalist. The living substance is something other than the monad. This obviously does not preclude or displace the reasons for why he first establishes the doctrine of simples–but rather, supports it. There is no evidence, as far as I have detected, that Leibniz discards the carefully argued position of his "middle years." But the Phenomenalist would seem to require this. The Phenomenalist's picture is that Leibniz's doctrine of simple substances replaces his corporeal theory (or alternatively, he is said to never seriously have thought about corporeal substances). What we do see, all the way to the end of his life, are the twin themes of simple and corporeal substances. The Phenomenalist

<sup>44.</sup> For the argument I present in this section, I am indebted to Samuel Levey's paper, "Leibniz and Idealism," which helped clarify the structure of the argument.

<sup>45.</sup> Texts, 268.

<sup>46.</sup> Levey, "Leibniz and Idealism."

<sup>47.</sup> Principles of Nature and Grace, in Texts, 260.

who advances the argument for simples, opposing them to corporeal substances, has got it wrong. That *there are corporeal substances* is the first premise in the argument for simple substances.

#### CHAPTER IV

#### THE UNITY OF CORPOREAL SUBSTANCE

A "substance requires a true unity," and as we have seen, one of the major blocks to accepting corporeal substances in Leibniz's system is that there seem to be no resources available for explaining how they can be true unities.<sup>1</sup> This is what Levey calls the "problem of construction," and in this chapter I will attempt to show how Leibniz can account for this unity.<sup>2</sup> The challenge is to give an account, and to do this we will need to more closely examine some (differing) concepts of the monad. From this I will attempt to show how simples and composites are both, in a sense, monads. The source of similarity, I believe, is in the notion of *unity*, and this will help to solve the riddle of the union of a corporeal substance, as well as to explain how soul both is, and is not, substance. This solution will involve an integration of what I take to be the main themes of Leibniz's metaphysics, that of the unity and harmony of nature. As he says with regard to the agreement of body and soul:

It is this mutual relationship, arranged in advance in each substance in the universe, which produces what we call their communication, and which alone constitutes *the union of soul and body*. And in this way we can understand how the soul has its seat in the body by an immediate presence, which is as close as could be, since the soul is in the body in the way in which unity is in that resultant of unities which is multiplicity.<sup>3</sup>

I take this passage as a fundamental component in understanding Leibniz's vision of nature. A corporeal substance is, in the end, the harmony of its elements; yet this nonetheless

<sup>1.</sup> Leibniz to Arnauld, 28 November 1686, Philosophical Texts, 123.

<sup>2.</sup> Levey, "Leibniz and Idealism."

<sup>3.</sup> New System, in Texts, 151.

constitutes a true unity, and therefore, it is substantial. As he says to Des Bosses, "I do not deny some *real metaphysical union* between the soul and the organic body, according to which it can be said that the soul is truly in the body."<sup>4</sup> In the following, I will try to explain how Leibniz sees the nature of this union, and in the last section I will suggest the starting point of a "new system" for interpreting his metaphysics. I stress that this will only be *suggestive*, since it marks the boundary of the current project, showing an avenue of further research.

#### THREE MONADS

As we saw in the previous chapter, Leibniz takes both simple and composite substance (i.e., corporeal substance) as belonging to the same overall picture of reality. The doctrine of simple substances appears to be an expansion on the doctrine of substantial forms. Nonetheless, Leibniz insists that monads are the only elements of things; but contrary to popular opinion, Leibniz does not therefore accept phenomenalism. The body of the corporeal substance is also said to be full of monads, which are less active, less perfect, more passive, and are in turn the substantial forms for other bodies. Monads, however, are also *perceivers*, and in this way Leibniz attempts to close the Cartesian gap between mind and body. Up until this point we have granted the general orthodoxy, that monads are simple minds bereft of bodies. For the Phenomenalist, the Leibnizian monadology is a Cartesian system with the material half sheered off. In addition to reasons already provided, this interpretation is strained when it is realized that Leibniz has at least three

<sup>4.</sup> Leibniz to Des Bosses, 30 April 1709, Papers and Letters, 598.

definitions of "monad," and only one of these is a simple substance. In this section I will discuss these three definitions, and suggest a common ground among them—*unity*. This will allow for an integration of these three definitions into a more or less coherent theory, with corporeal substances at the ontological center.

It can immediately be seen how relying on the explanatory power of one notion could have appealed to Leibniz, since he has all along tried to combine the diverse elements of competing philosophies. Characterizing him as a *reductionist* is perhaps misleading, since his reduction is an attempt to blend competing views under a single explanation, using as few principles as possible. For example, Wilson notes that Leibniz made the following list of terms, composed probably between 1683 and 1685:

> Real being / apparent being (rainbow); substance / accident; unity *per se* / unity by aggregation (pile of wood); matter / substantial form complete being / incomplete being<sup>5</sup>

She observes that he has the acumen to try merging these categories. He first makes contrasts—e.g., between real and apparent being, or substance and accident—and he is left with groups of similar things, like substance and unity *per se*. There is, for Leibniz, an ontological link between the similarities he draws. His reduction is not necessarily an elimination of any category, but a *combining* of categories, which eventually allows for the formation of two basic partitions that can be understood in a number of ways—substance can be understood in terms of real being or unity *per se*, and accident can be understood as apparent being or unity by aggregation. This seems

<sup>5.</sup> Wilson, Leibniz's Metaphysics, 180-181.

to have been one of his major projects, culminating, I believe, in the concept of the "monad." It is the fruit of his labor, and (I believe) he thinks, the ultimate explanation of things. For it is in this notion that he is able to combine or explain the two primary categories. With the monad he can elucidate the singleness of the mind, the changing material world, the appearances and forms of bodies, motion, being, apparent being, and so on.

It is worth pointing out, that in the above diagram, matter is grouped on the left with real being, complete being and substance, while substantial form is placed on the right with apparent being and incomplete being. This is perhaps unexpected. The Phenomenalist might be inclined to say that he made a mistake. I believe, however, that there is a reason for this grouping, and Leibniz means exactly what we see. Substantial form, which is simple and identified with monads, is to be understood as incomplete being. Matter is complete, and is grouped with substance and real being. Consider this passage from 1698 (more than ten years later), where we find the first published use of the word "monad:"

And it is this substantial principle which is called the *soul* in living things, and a *substantial form* in others, and in so far as together with matter it makes up a substance which is truly one, or one *per se*, it forms what I call a *monad*. For without these true and real unities there would only be beings through aggregation; indeed it would follow that there would be no real beings in bodies. For even though there are atoms of substance, namely my monads, which have no parts, there are no atoms of mass, or smallest extensions . . . . Secondary matter is indeed a complete substance, but it is not merely passive, whereas primary substance is merely passive, but is not a complete substance—there needs to be added to it a soul, or form analogous to a soul; a first *entelechy*, that is a striving or primitive active force which is itself an inherent law imprinted by divine decree . . . . But a 'spirit' is not to be understood here, as it usually is, as an intelligent being, but as a soul, or a form analogous to a soul; nor is it to be understood as a mere modification, but as something constitutive, substantial, and enduring—what I usually call a *monad*, which has something like perception and desire.<sup>6</sup>

<sup>6.</sup> Nature Itself, in Texts, 217-218.

It can be seen that Leibniz here introduces almost all the major themes. He talks of substantial form, perceiving and desiring, aggregation, matter, the complete and incomplete, one *per se*, and substance. Monads are identified as true and real unities, and they are explained in terms of *resulting from* a substantial form and matter. But then he ends by saying that the *substantial form* is a monad. So monads are *also* the forms *of other monads*, when they combine with matter. He also says secondary matter is a complete *substance*; and primary substance is not *complete*.<sup>7</sup> And this is exactly what we would expect when we consider his diagram from the early 1680s. In order to be complete, secondary matter needs a soul or first entelechy. Thus, primary substance (i.e., substantial form) produces secondary matter, which is a complete substance (and it is in this that the primary substance is completed). It is this he calls a monad; but the body that is made real (this is the secondary matter) is an aggregate of substances. And so from top to bottom we are confronted with monads, playing triple-duty as matter, form, and the union of the two.

Is he merely confused? After all, Leibniz's 'monad' is usually interpreted as a simple, mindlike, immaterial substance. Clearly, the picture he gives us here is diverse, indicating there is more in this world than *simple* substances. Monads are both forms and form-matter composites. But Leibniz also has a third understanding of the 'monad':

How far a piece of flint must be divided in order to arrive at organic bodies and hence at monads, I do not know. But it is easy to see that our ignorance in these things does not at all prejudice the matter itself. . . . I do not believe that there is any minimal animal or

<sup>7.</sup> Loemker says that Leibniz misleads us when he claims secondary matter is complete substance, "since secondary matter, as matter, is phenomenal, and only the aggregated monads whose passive force is expressed as resistance or inertia are substantial." (*Papers and Letters*, 508). Indeed, I concur with Loemker; but I feel this is no more than to point out that any *thing* considered without substantial unity is not truly unified. Leibniz would undoubtedly agree that secondary matter, considered *simply in virtue of its being matter*, is phenomenal. This does not, however, contradict the claim Leibniz makes in this passage.

living being, that there is any without an organic body, or any whose body is not further divisible into more substances. Therefore we never arrive at living points or points endowed with forms.

If you have a clear idea of the soul, you will also have one of forms, for they are the same genus but different species.<sup>8</sup>

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.<sup>9</sup>

And so here introduces the notion of a complete monad, which is a soul and organic body. These are everywhere in nature. Indeed, divide a scrap of flint far enough and he does not deny that inside there are "organic bodies and hence monads." There is some identity or relation between the organic body and the monad, and he writes in *Principles of Nature and Grace* that, "Each monad, together with its own body, makes up a living substance."<sup>10</sup> The living substance to which he refers would be the complete monad; hence, a monad together with its body he calls a *complete monad*. Presumably the monad without a body would be *incomplete*, comparable to the notion of incomplete being mentioned earlier. Consider, when Leibniz discusses the union of body and soul with Des Bosses, he mentions that an entelechy with its prime matter is the soul, which *then* conjoins with mass (other such monads). He writes, "But what, you may ask, shall we say of this primary matter itself, which belongs to the soul? I reply that it is certainly created together with the soul or that the whole monad is created."<sup>11</sup> A "monad," then, can be understood as the union of form and matter. To De Volder he writes: "Properly and exactly speaking, perhaps we should not say that the primitive entelechy impels the mass of its own body but that it is merely

<sup>8.</sup> Leibniz to Bernoulli, 18 November 1698, Papers and Letters, 512.

<sup>9.</sup> Leibniz to Bernoulli, 20/30 September 1698, Essays, 168.

<sup>10.</sup> Ibid., 260.

<sup>11.</sup> Leibniz to Des Bosses, 30 April 1709, Papers and Letters, 598.

combined with a passive primitive power which it completes, or with which it constitutes a monad."<sup>12</sup> Again, a monad is seen as a composite, but one which is complete.

We can thus gather together three definitions for 'monad': (1) simple minds, souls or forms (wherein it is helpful to remember that he talks of forms as principles of life or unity, so that *form* implies *matter*), (2) a union of entelechy (or form) with matter, and (3) corporeal substances, that is, the living animal or complete monad.<sup>13</sup> On definitions (2) and (3), a monad is a complete substance. It is one *per se*, a true unity. Yet on (1) a monad is simple, since forms (whether souls, minds, or entelechies) are absolutely without parts. This seems to imply a conflict in the overall concept of a monad, since it applies to both simple and complete substances. The issue, however, can be illuminated if we turn to the notion of *unity*. This will enable a better understanding of both simple and complete substances, and will provide a way to understand his monadic concept. Leibniz gives the following measured explanation of unity to Bourguet:

When I say that unity is not further analyzable, I mean that it cannot have parts whose concept is simpler than it. Unity is divisible but not resolvable, for fractions, which are parts of unity, have less simple concepts than whole numbers, which are less simple than unity, since whole numbers always enter into the concepts of fractions. Many who have philosophized about the point and about unity in mathematics have become confused by failing to distinguish between analysis into concepts and division into parts. Parts are not always simpler than wholes, though they are always less than the whole....<sup>14</sup>

A unity, he says, is that which cannot be further analyzed into parts whose concepts are more simple that itself. It is "divisible but not resolvable." The confusion in this area (he points out) is due to not distinguishing between "analyzing into concepts" and "division into parts". His

<sup>12.</sup> Leibniz to De Volder, 20 June 1703, Papers and Letters, 529.

<sup>13.</sup> Cf. Phemister, "Compound Bodies," 71-72.

<sup>14.</sup> Leibniz to Bourguet, 5 August 1715, Papers and Letters, 664-665.

suggestion is that *even if* something has parts (in this qualified sense of 'part') it may still be a unity, *if* the parts are not more simple than the whole ("less than" and "simpler" are not the same). The parts of a unity are compared with fractions, in that they "have less simple concepts" than the whole, since they in turn seem to *imply* the whole. They presume the unity, or are entailed by the nature of the unity, hence they are not *less* simple than the whole. The fractions (or divisions) of a unity are not true parts of the unity, but are aspects or elements of the whole. Simplicity, then, is the pivotal concept in his analysis of unity.

In *Principles of Nature and Grace* he says a simple substance is that which has no parts.<sup>15</sup> Simple substances are unities, and in this context he refers to them as "completely simple."<sup>16</sup> And in the *Monadology*: "in that which has no parts, neither extension, nor shape, nor divisibility is possible. And so monads are the true atoms of nature; in a word, the elements of things."<sup>17</sup> And in a note written to (but not sent to) Arnauld, he says:

The difficulties which arise in these matters come, among other things, from the fact that we do not commonly have a sufficiently distinct concept of the whole and the part. In the last analysis, the part is nothing but an immediate component of the whole and is in some way homogeneous to it. Thus parts can constitute a whole, whether it has or has not true unity. It is true that a whole which is a true unity can remain the same individual in a rigorous sense even when it loses or gains parts, as we experience in ourselves. Thus the parts are its immediate requisites only *pro tempore*.<sup>18</sup>

Based on these passages, we may say that what has no parts is simple, and is (therefore) a unity. But the reverse does not seem to hold, since Leibniz tells Bourguet that a unity may have parts, *as long as* the parts are not simpler than the whole. And the parts of a whole are only parts

<sup>15.</sup> Texts, 258.

<sup>16.</sup> Ibid., 259.

<sup>17.</sup> Ibid., 268.

<sup>18.</sup> Papers and Letters, 350.

*pro tempore*, or "only for the time being." What is simple is unified, but what is unified is not necessarily simple. The criterion for something to count as a substance, however, is not simplicity, but unity. That which is one *per se* is a substance, since there is a reciprocal relationship between one and being. As far as I can tell, Leibniz does not give the same reciprocity to the notion simplicity (i.e., he does not say "simple" and "being" are reciprocal).

Unity is the benchmark of what is and is not substance. In the case of simplicity, there are absolutely no parts or concepts more simple that itself; while a non-simple unity may perhaps still be divided (though these divisions do not admit a further conceptual analysis of the unity). There must be simple substances (as we have seen Leibniz argue), since these are the end of the road for all analysis. Therefore, simple substances cannot themselves be analyzed.<sup>19</sup> Indeed, mirroring this distinction, we find that he differentiates between substantial forms as the building blocks, and corporeal substances as "complete substances." He writes:

a slab of marble is not a single complete substance, any more than the water in a pond together with all its fish would be, even if all the water and all the fish were frozen together  $\ldots$ . There is as much difference between a substance and a being of that kind as there is between a man and a group such as a nation, an army, a society, or a college.<sup>20</sup>

A slab of marble is not a "complete substance." The marble is compared with an army (as an example of *unum per accidens*); the army is in turn contrasted with a man—the man, however, is compared with a "complete substance." This suggests that the soul completes the body, i.e., makes it a complete substance. Souls are never without animated bodies; animated bodies are never

<sup>19. &</sup>quot;Analyzed" in this context means to be understood in terms of parts. But simples have no parts, so they cannot be 'analyzed' in this manner.

<sup>20.</sup> Leibniz to Arnauld, 28 November/ 8 December 1686, Texts, 118.

without souls. These come together naturally.<sup>21</sup> Such unifying principles are "*atoms of substance*, that is to say real unities absolutely devoid of parts . . . the absolute first principles of the composition of things, and as it were the ultimate elements in the analysis of substances (substantial things)."<sup>22</sup> They have *absolutely* no parts, and are (therefore) real unities. They are the "ultimate elements in the analysis of substances." These atoms can only be simple substances themselves, and they are the final stop in analysis.

Any *complete* substance can thus be analyzed into these absolute components. In a letter drafted to Pierre Bayle, Leibniz says that simple substances are active principles, and he explicitly mentions he follows Aristotle in calling them primitive entelechies.<sup>23</sup> And so souls, substantial forms, entelechies, atoms of substance, are all simple. These are tendencies "in all substances."<sup>24</sup> Any substance containing such a *tendency* (or a principle) is a complete substance, and these are the true unities or corporeal substances of his ontology. Secondary matter is *complete* when it has a first entelechy, which is a primitive force, or an "inherent law" imprinted by God. The fact that he identifies simple substances as entelechies is significant in this context, and the locution of "imprinting" becomes particularly interesting, since for Aristotle an entelechy presupposes the existence of matter. It informs or completes the matter, making it a *this*. Leibniz seems to follow Aristotle, then, when he talks of a first entelechy. The entelechy is the imprint on matter, which completes it, making it one being.

<sup>21. 9</sup> October 1687, Texts, 134.

<sup>22.</sup> Ibid., 149.

<sup>23.</sup> Ibid.

<sup>24.</sup> Ibid., 255.

Leibniz's mature doctrine of monads, I believe, is best captured as an ontology of true or real unities; and a real unity is a monad. This helps to establish a continuity of thought between the middle and later periods of Leibniz's development, as he preserves the notion of unity in the monad. Some monads are simple, and some are a form-matter composite (i.e., a body and soul), yet both are essentially unities. He considers the composite or corporeal substance, which he also calls a living substance or animal, a complete substance, i.e., a complete monad. On the other hand, simples are the elements of all things, since they are the ultimate stopping points in the analysis of both parts and concepts. But a simple substance, that is, a form, is incomplete without a body.

How is something that is simple *incomplete*, as if it were missing something? By the very definition of the term, something simple cannot be missing a part, so the incompleteness cannot be of this sort. A simple substance is incomplete without a body, in the sense that it is *imperfect*, a bare principle, unable to act. That which is more perfect completes that which is less perfect. And what is thus completed cannot be separated. God has created body and soul *together*. Consider:

But what, you may ask, shall we say of this primary matter itself, which belongs to the soul? I reply that it is certainly created together with the soul or that the whole monad is created. Then does not primary matter increase or decrease? I acknowledge that it does, since it is only primitive passive power.<sup>25</sup>

The primitive passive power of a monad can increase or decrease. "Primitive passive power," as we will see in the next section, corresponds to the body. And here Leibniz says it may be augmented or diminished. Consider that a body is an infinite collection of substances belonging to a soul or entelechy—any division of the body can never reduce it to a point where it is separated from the

<sup>25.</sup> Leibniz to Des Bosses, 30 April 1709, Papers and Letters, 598.

soul. Since there is no amount of chopping that can obliterate the body, it can never be severed from the soul. It can only diminish, though never utterly, for it is never less than an infinite collection. Once granted, body and soul are an un-sunderable unity.

Body and soul are linked; yet it can be seen that the term "monad" pivots on the notion of unity, which cannot be analyzed into something more simple. What is simple would be incomplete if it did not have a body. What is complete would be a mere aggregate without the soul. Leibniz's mature doctrine seems to be that form, matter and mind are all of the same cloth, but folded upon itself repeatedly, infinitely, with only differences of degree between them. Monads, or true unities, are in every nook of existence, distinguished by their differing degrees of perfection. They are flexible enough to play the diverse roles a full-bodied metaphysic requires. There are times when Leibniz uses "monad" to refer to simples *which imply unity*, and at other times to refer to unity *which implies simples*.

In spite of what I have argued, we should note that there is textual support for the view that there are only simples, which would imply that there are no other kinds of unity. For example, he writes to De Volder that, "only simple things are true thing, and the rest are beings by aggregation and therefore phenomena, existing as Democritus put it, by convention but not by nature."<sup>26</sup> At face value this would seem to undercut my analysis of unity, but the correspondence with De Volder is rich with references to corporeal substances. It is here that he produces a crucial passage (in fact in this very letter which I have just quoted) describing the anatomy of the relations between simples and corporeal substances. This particular passage will be the focus of the next

<sup>26.</sup> Leibniz to De Volder, 20 June 1703, Papers and Letters, 531.

section, and will prove valuable in understanding the Leibnizian project with regards to the reality of corporeal substance.

We can point out that two sentences before declaring that "only simple things are true things," Leibniz says that corporeal substances are "made one" by a dominating monad.<sup>27</sup> How can corporeal substances be *one* if there are only simples? Leibniz is either entirely befuddled, or he means to imply that corporeal substances are *simple*. The third option, that he means to reject corporeal substances as nothing more than aggregates, is in my view unsupportable given the evidence in the correspondence (as well as the reasons I have already provided). I believe the most appropriate interpretation is that he identifies corporeal substances as simple, in this context at least, and this merely reinforces the view that they have real unity. He may have spoken somewhat loosely (as he does from time to time, moving from correspondence to correspondence). But if nothing else this should indicate that he seems, at least at this point in time, to consider corporeal substances as being truly one, and *perhaps* simple.

I think the interpretation that corporeal substances are simple is too strong, and Leibniz may not have ultimately thought of them in this way. However, I think it clear that they are at least true unities, and this is enough to support a more comprehensive reading of his system. Monads, understood as true unities (which are either simple or compound), are the foundation of his mature thought. And at the ontological center is the complete monad, that is, the corporeal substance. The veracity of this outcome may be questioned. After all, some very puzzling things emerge in this picture of reality. For example, how can Leibniz hold that many substances come together as one substance? This is of course one of the stumbling blocks for any reading of Leibniz committed to the reality of corporeal substances. Simply because a view is difficult or problematic, however, is no reason for saying that Leibniz does not believe it, especially if there is evidence that he does. If we refrained from attributing problematic views to philosophers, we would likely attribute little more than *modus ponens* to any thinker. And Leibniz is no shrinking violet when it comes to attacking the Gordian Knots of philosophy. In fact, he seems at times to dance on the edge of inconsistency as he grapples to bring disparate traditions in tandem. If there are problems with the view, then so be it; our next step should be to find how Leibniz addresses the difficulties.

One initial problem with taking this "next step" is that he says a created substance, in a strict metaphysical sense, has no influence over another.<sup>28</sup> The only influence monads have on each other is ideal.<sup>29</sup> He tells Arnauld that we will never find a systematic way to produce a real substance from an aggregate.<sup>30</sup> He writes to De Volder that the metaphysical union of body and soul is not a "phenomenon, and we do not have any notion of it or acquaintance with it."<sup>31</sup> He then promptly denies being able to provide an account. His denial, however, is not necessarily a

<sup>28.</sup> New System, in Texts, 149.

<sup>29.</sup> Ibid., 150.

<sup>30.</sup> Leibniz to Arnauld, 30 April 1687, Texts, 127.

<sup>31.</sup> Leibniz to De Volder, 19 January 1706, Essays, 184.

rejection of corporeal substance, since if unity is neither phenomenal nor ideal, what remains is *real* unity. It is real, though in the final analysis he is unable to (fully) explain it.

In spite of his avowed inability to settle the issue, I think Leibniz gives the basic structure of an answer. In fact, it is the very problem of interaction among substances that he says leads him gradually to a surprising idea of "very considerable attraction," which he finds gives an even *stronger* basis for the unity of body and soul.<sup>32</sup> Discussing with Arnauld how substances cannot be said to causally interact, he writes:

...each individual substance expresses the whole universe entirely in its own way and according to a certain relation, or, so to speak, in accordance with the point of view from which it regards it . . . So every individual substance or complete being is like a world apart, independent of everything else except God . . . But this independence does not rule out intercourse between substances; for since all created substances are continually produced by the same sovereign being in accordance with the same plans, and express the same universe or the same phenomena, they fit in with one another precisely. And that leads us to say that one acts on the other, because one expresses more distinctly than the other the cause or reason for the changes, rather in the way that we attribute motion to a boat rather than to the whole sea. . . . This is why, when it is a question of the union of the soul and the body, or of the activity or passivity of a mind with respect to another created thing, many people have had to agree that their direct intercourse is inconceivable. . . . There is therefore only the theory of concomitance, or of the mutual agreement of substances, which explains everything in a manner which is comprehensible and worthy of God, and which indeed is demonstrable and inevitable in my view given the proposition that we have just established. It seems to me that it also fits in with the freedom of rational creatures much better than does the theory of impressions, or that of *occasional causes*. God created the soul from the outset in such a way that standardly there is no need for any such alterations.<sup>33</sup>

The complete causal separation of each substance ensures both the freedom and unity of consciousness. But this introduces the problem of real union between body and soul, which he says is not ruled out. The mutual agreement of substances, assured by the divine plan, provides for

<sup>32.</sup> New System, in Texts, 150.

<sup>33.</sup> Leibniz to Arnauld, 4/14 July 1686, Texts, 112-113.

this. One substance is said to act on another when it more distinctly contains the reason for change than the other. If the reason that substance  $S_1$  carries out action A is found in  $S_2$  more distinctly than it is found in  $S_1$ , then we can say that  $S_2$  has caused  $S_1$  to do A. Direct intercourse does not happen, but something "worthy of God" takes place. There is a mutual agreement among all substances everywhere, with various degrees of harmony among the clarity of their reasons for acting. The theory of concomitance, Leibniz says, is more able to uphold the freedom of rational creatures. Since nothing from the "outside" actually causes a substance to act in a certain way, the rational substance is free. Each substance is the wellspring of its own activity. The alternative would be to say that something "outside" causes the action of a substance, which seems more a denial or compromise of freedom. And so, each substance follows its own laws, with all laws operating in perfect harmony, so that body and soul are united *without* causal association:

What happens to the soul comes from its own depths, without its needing thereafter to accommodate itself to the body, any more than the body does to the soul. Each one follows its own laws (the one acting freely, the other without choice), they correspond, the one with the other, in the same phenomena.<sup>34</sup>

God creates every monad, that is, every true unity, to be the source of its own activity. However, they were created also to be in perfect agreement with one another, and this produces the same effect as though they were externally communicating. From this follows the union of body and soul. But this is no mere external union. The external interaction of substances might be nothing more than accidental interaction, based on their modifications, rather than real unity. He considers his solution to be *deeper*, giving an even closer relation that amounts to an internal, prearranged unity. Thus, the unity of corporeal substance is a result of the pre-established harmony of

<sup>34.</sup> Ibid., 113.

God's plan. Simplicity is one basis for unity; harmony is the other. A harmony of simple substances results in a corporeal substance if and only if there is a single principle of life (which is what he calls a monad in his *New Essays*) dominating the collection.<sup>35</sup> Accidental unity perhaps has some of the hallmarks of true unity, but such unity is incomplete, merely a heap of independent entities.

The most basic explanation of the union of body and soul is that their mutual relation is *fixed* in the plan of God, in a faultless harmony among all the things of this world. It cannot be over-stressed that this concomitance is as fixed as any other aspect of nature, resulting from the beginning. The union does not just occur through natural processes, any more than simple substances can result from external pressures—internal principles cannot be created through external forces. Both simple and corporeal substances can only be created through Divine power. The harmony of simple substances is explained in terms of the fit between matter and form, or the passive and active aspects of simples. Each simple is the source of its own activity, so a corporeal substance would be full of independent contractors. But the harmony among the passive and active forces of these independent contractors are pre-calibrated to complete the same project. These forces do not merely interact (since direct interaction does not take place), but rather *complete* one another. And if there is one architect, say, overseeing the project, then the project is executed with real unity. So, I should imagine, we could analogize the relationship of the monads in the corporeal substance.

<sup>35.</sup> New Essays on Human Understanding, 232.

As mentioned in the previous section, when he writes to De Volder, Leibniz gives one of the more complete accounts of how he sees the structure.

If you take mass [*massa*] to be an aggregate containing many substances, you can, however, conceive in it one substance that is preeminent, if that mass makes up an organic body, animated by its primary entelechy. Furthermore, along with the entelechy, I don't put anything into the monad or the complete simple substance, but the primitive passive force, a force corresponding to [*relatus ad*] the whole mass [*massa*] of the organic body. The remaining subordinate monads placed in the organs don't constitute a part of the substance, but yet they are immediately required for it, and they come together with the primary monad in a corporeal substance, that is, in an animal or plant. Therefore I distinguish: (1) the primitive entelechy or soul; (2) the matter, namely, the primary matter or primitive passive power; (3) the monad made up of these two things; (4) the mass [*massa*] or secondary matter, or the organic machine in which innumerable subordinate monads come together; and (5) the animal, that is, the corporeal substance, which the dominating monad in the machine makes one.<sup>36</sup>

He tells us the monad contains *only* an entelechy and primitive passive force, and these seem to *complete* the monad. The primitive passive force in the dominant monad *corresponds* to the whole mass of the organic body. The body itself is composed of monads, *but not as parts*—all bodies are aggregates of corporeal substances, and the *parts* of a body are *other* aggregates. Like a threedimensional puzzle with each piece made of more puzzle pieces. The *aggregate* is the basic unit of the body. And the monads are necessary conditions for the body—they "come together" with the dominant monad *in* the corporeal substance, which he calls an animal or plant. Monads are neither parts of the body nor parts of the corporeal substance. They are as points to a line. But they are more than simply points, since monads are *active* and *passive*.

Not just any body can be animated by an entelechy. It has to be an organic machine, secondary matter, which is a mass *full* of simple substances. A body that is an organic machine is

<sup>36.</sup> Leibniz to de Volder, 20 June 1703, Essays, 177.

therefore different from a phenomenon, since it *contains* innumerable substances (phenomena don't contain substances, but are modes of them). These substances are organized in such a way that the machine is a machine all the way down to the foundations.

Now, the whole body corresponds to the primitive passive force of the dominant monad. The phrase he uses, "*relatus ad*," means roughly, *to bear or carry back*; *to report; relate*. So the passive force of the dominant monad and the body relate to each other. This is the issue he is unable to resolve, and his answer seems more a general description, rather than a full explanation. We know that he does not intend this correspondence to be an external communication, for that would reduce the whole structure to something like the interaction of marbles in a pouch (unity *per accidens*). The communion here is more intimate. And he does say that the monads *are in* the corporeal substance. The dominant monad does not have some external roost; and the soul, he writes, "has its seat in the body by an immediate presence, which is as close as could be."<sup>37</sup> The active force of the dominant monad is immediately present, and the source of unity in a body. The relation is as close as could be, as he says, and must be considered *internal* to the corporeal substance.

Leibniz writes that, "along with the entelechy, I don't put anything into the monad or the complete simple substance, but the primitive passive force." In this context he uses the term "monad" to refer to a union of an entelechy with primary passive force (prime matter), so his usage of "monad" does not denote simple or corporeal substance. What he therefore means by "monad" here is *complete simple substance*. He then says that the primitive passive force (of the complete

<sup>37.</sup> Ibid., New System, 150.

simple substance or monad) relates to (*relatus ad*) the secondary matter, which is the organic body. The union of a corporeal substance, then, comes down to the interpretation of "*relatus ad*." If this relation is "as close as could be," and is internal to the one (or unity *per se*), then I think it is reasonable to interpret "*relatus ad*" as signifying that the primitive passive force of the monad (which he says is *in* the monad) *is the organic body*. In this way, I think, Leibniz considers corporeal substance *one* substance. If it is *one* (which he affirms in this passage) then the relations of the elements that "come together" cannot be thought of as external, and are best thought of as a relation a thing has to itself.<sup>38</sup> This helps to clarify the senses of "monad" previously mentioned. A form or soul, as an element or "part" of a corporeal substance, is *not* a substance. It is a principle of life, the substantial unity of the whole. Substances are not parts of anything, and they cannot be constructed from parts. The complete monad is the coupling of an entelechy with primary matter, and the primary matter (when it is thus informed) is the organic body.

How then does this relation come about? I think the key to this lies in aggregates and points of view, since these are what will help us understand primary and secondary matter. Leibniz is, perhaps more than anyone else in the history of philosophy, devoted to unity as a primary concept, holding everything else to be aggregation. It comes down to this intense interest in unity and aggregation, as the fundamental way of explaining the relation and completion of monads and corporeal substances. I suggest that monads are dominated only in this way: insofar as they belong to an aggregate, to a mass, they can be dominated by a more perfect monad. Monads are never isolated and conquered. They naturally belong to and/or dominate aggregates. Consider that

<sup>38.</sup> Cf. Phemister, *Leibniz and the Natural World*, 39. I am indebted to Phemister for the relation between primary and secondary matter that I here introduce.

Leibniz claims we always perceive the world by means of our bodies, and the domination of a monad is always over a body.

The monad is both active and passive. The active is perception, activity, life, and the passive is primary matter, which is fallow and incomplete. Leibniz holds that primary matter is passive and separated from souls, and he writes that to say "it is merely passive is just the same" as saying that "it is separated from all activity" and "what is incomplete is the active without the passive and the passive without the active."<sup>39</sup> The soul is the active force (we could say principle) of the body; the body is the passive force (or principle) of the soul. Primary passive force is a result of the coming together or aggregation of simples. The aggregate itself (which contains simple and corporeal substances) is the passive principle upon which the soul or entelechy acts. Primary matter (or primary passive force) is (1) the "primitive force of being acted upon;"<sup>40</sup> (2) "the same in all bodies and proportional to their size;"<sup>41</sup> and (3) what is passive in the monad, the primary matter, is what is inactive from a point of view.<sup>42</sup> Furthermore:

It is *active* in so far as what can be clearly understood in it serves to explain what happens in the other; and it is *passive* in so far as the explanation for what happens in it is to be found in what is known distinctly in the other.<sup>43</sup>

A monad dominates matter, or what is passive, incomplete, and imperfect. This matter will be an aggregate of other less perfect monads, which fall within the scope of the dominating monad's point of view. But there is an emerging difficulty, since Leibniz claims that they are (or contain)

<sup>39.</sup> Leibniz to Bernoulli, Essays, 167.

<sup>40.</sup> Specimen Dynamicum, in Texts, 156.

<sup>41.</sup> Nature Itself, in Texts, 216.

<sup>42.</sup> Monadology, ibid., 219.

<sup>43.</sup> Ibid., 275.

both passive and active forces, and this primary matter (in the monad) is *everywhere the same* and *only passive from a point of view*. But how can both be true? How can something that is active (and is defined as activity) be also passive? The indication is that a monad cannot be truly passive, when we consider the monad itself, in its own right. It is fully and always active, a source of activity, never ceasing and only limited by its own native perceptions. But he clearly says that the monad is passive (even though from a point of view) and that what is passive is also to be considered matter, and incomplete. The answer that seems best to me is to understand form and matter in terms of wholes and parts, unities and aggregates. Consider:

It is only *atoms of substance*, that is to say, real unities absolutely devoid of parts, that can be the sources of actions, and the absolute first principles of the composition of things, and as it were the ultimate elements in the analysis of substances [substantial things]. They might be called *metaphysical points*; they have *something of the nature of life* and a kind of *perception*, and *mathematical points* are their *point of view* for expressing the universe.<sup>44</sup>

Yet the soul is nevertheless the form of the body, because it expresses the phenomena of all other bodies according to their relation to its own.<sup>45</sup>

Soul is the form of the body "because it expresses the phenomena of all other bodies according to their relations to its own." In other words, the form of the body is that which expresses *all* relations *other* bodies have to *its* body. So form is what individuates a body from all other bodies—it is what makes it *a* body in the first place. The form is *one* thing, in that it expresses all relations of other bodies to its body from the same point of view. So, in the same way that a substance expresses all its predicates, the soul expresses all the relations of other bodies to its body. By relating to all other bodies through the soul, the soul both distinguishes (individuates) the body

<sup>44.</sup> New System, Texts, 149.

<sup>45.</sup> Leibniz to Arnauld, 4/14 July 1686, Texts, 112-113.

from all other bodies, and unifies it, since the soul has a single point of view on the universe. The point of view *must* be (or belong to) a metaphysical/mathematical point—i.e., a simple—or else there would be no unity. It is this activity which endows numerical identity on the body. We could say that this *completes* the aggregate (in which case it is no longer 'officially' an aggregate).

A monad in an aggregate will be passive with regard to the aggregate *as a whole*. The whole is the result of a substantial form or primary active force. Monads are all active; yet they belong to a body when they are dominated by another monad with a better (i.e., more perfect) point of view. So from the standpoint of the whole body, each monad in the body is passive, and can be dominated by an entelechy. The complete aggregate (which is not a true aggregate) is a corporeal substance. A monad is therefore active in itself, without parts, the fountainhead of its own unity and efficacy; yet as an element of an aggregate the monad is passive, that is, able to be acted upon.

This is why, I believe, Leibniz talks of souls as substances, and at other times (as in the Fardella memo) he denies it. On occasion, he says substantial forms or souls are primitive active force, and he neglects his definition of the monad as primitive active *and* passive force. He can do this because a monad is, in different contexts (or from different "points of view") all of these things. I think this helps explain some of the discrepancy attributed to Leibniz.

The unity of a corporeal substance follows because monads are simple and *have no* parts, so the passive and active forces of monads are not *parts* of monads. Primitive forces of monads cannot be considered parts of *anything*.<sup>46</sup> Forces are analyzed in terms of aggregation and point of view. Aggregation and point of view are the ontological equivalents of harmony and unity. These two

<sup>46.</sup> That is, an aspect of something that has no parts cannot itself be a part.

foundational themes coincide in the corporeal substance, where the harmony of the elements results in unity. The unity of a corporeal substance is identical with the harmony of its elements. (This is one reason why I believe he actively courts the notion of the *vinculum substantiale*, since he is concerned with basing the unity of corporeal substance only in the pre-established harmony of God's plan—he wants to more fully account for the *relatus ad* of primitive force to the organic body. Nonetheless, I think this explanation is what he maintains, in spite of doubts about the project.)

The monad itself is an active force, and this is *never* a part of a body, but the active principle *of* the body. Yet the monad from the bird's-eye view is passive, if it is in a collection. In either case, the monad is not a part—the parts of bodies are collections. Since monads are simple, they can only be aspects. An analogy might be that being the "head of a household" and being "a citizen" are not parts of a person, able to be unbuttoned and removed. Similarly, perhaps, the aspects of the monads *in* the body contribute to the corporeal substance, without being parts. They "come together" in secondary matter, which then *contains* monads, and from them the active and passive force of the body is derived. And these passive and active forces in the body correspond to the primary passive and active force of a *single metaphysical point*: the dominant monad. This shows that the elements can come together as a complete substance without being parts of the substance. The mass which contains primary matter is given unity through the single point of view of a metaphysical point, the dominant monad or soul. Primary matter is everywhere the same because it is merely "that which is acted upon." Like Aristotle, it is potentiality.<sup>47</sup> For Leibniz the

<sup>47.</sup> Aristotle, Physics I and II.

potentiality (or matter) is defined in terms of other substances. As an element of a body a monad is acted upon, insofar as it belongs to secondary matter.

There is only a body and soul after the elements have come together. The compound is an irreducible unity (following the definition of unity given in the previous section), since a body without a soul is a mere aggregate, nothing more than a phenomenon, and a soul without a body is at best an incomplete simple substance, a bare principle of change. It is interesting that he confesses to Des Bosses, that souls are substances, but *not* points:

Many years ago, when my philosophy was still too immature, I located souls in points and thus thought that the multiplication of souls could be explained through traduction, since many points can be made out of a single point, as the vertices of many triangles can be made through division from the vertex of one. . . . Properties pertaining to extension are not to be assigned to souls, and their unity and multitude are not to be derived from the category of quantity but from the category of substance, that is, not from points but from the primitive force of action.<sup>48</sup>

This passage may be trying if approached from a purely Phenomenalist viewpoint, for even though Leibniz identifies souls as substance, he admits that "many years ago" he was incorrect to say they are points. Simples, however, are usually identified as metaphysical points, or atoms (he usually draws an analogy between points and lines). Because Leibniz identifies soul as primitive active force, this locates it as an aspect of a corporeal substance. Insofar as it is as substance, it cannot be identified as a part. It is only a soul when the substance is complete; but once in the unity of a corporeal substance, the monads result in a body and soul. This is crucial for understanding one role phenomena play in his system. When considering the "parts" of a corporeal substance we find that a body without a soul is not even a body. It is only a phenomenon, and therefore a body

<sup>48.</sup> Leibniz to Des Bosses, 30 April 1709, Papers and Letters, 599.

(without a soul) cannot be a part more simple than the unity. Likewise, the soul apart from the body is a mere principle or idea, or an incomplete simple, so it would have no reality. Body and soul reify one another, and taken apart they no longer exist. The parts of a corporeal substance are, indeed, no simpler than the whole to which they contribute. This is why, I believe, phenomena play such an important role in his system, since they help illuminate the true unity of corporeal substance.

#### A NEW SYSTEM?

If Leibniz does indeed hold to the reality of corporeal substances, as I have argued, then we must rethink the structure of his system. His vision of nature spans an entire range, from the Divine Author of all things, to individuals amid the smallest details of life, to the appearances of each to each in space and time, replete with color and motion. The plenum teems with vitality, fully harmonized and fully individuated. At the bottom of it all, nature is *rational*. Revealing the intricacies of this rational system, in any satisfactory manner, are beyond the scope of this project, but I think a general direction can be plotted, and a basic outline provided.

I propose that Leibniz's system can be interpreted as having three-tiers, like a three-tiered city, with corporeal substances at the ontological center.<sup>49</sup> This will allow us to account for simple substances, corporeal substances, and real or well-founded phenomena. These are all important

<sup>49.</sup> A three-tiered understanding of Leibniz has been suggested elsewhere, though with a different partitioning of the "regions." See for example, Glenn Hartz and J. A. Cover, "Space and Time in the Leibnizian Metaphysic," *Nous* 22 (1988): 493-519.

aspects of nature for Leibniz. My motivation for this three-tiered view is partly grounded in the following passage from the *New System*, where he talks of three kinds of *points*, which I think signify three levels of reality. Catherine Wilson, furthermore, notes that he uses this framework to differentiate corporeal substances from simple substances.<sup>50</sup>

It is only *atoms of substance*, that is to say, real unities absolutely devoid of parts, that can be the sources of actions, and the absolute first principles of the composition of things, and as it were the ultimate elements in the analysis of substances [substantial things]. They might be called *metaphysical points*; they have *something of the nature of life* and a kind of *perception*, and *mathematical points* are their *point of view* for expressing the universe. But when a corporeal substance is contracted, all its organs together make what to us is only a *physical point*. Thus the indivisibility of physical points is only apparent. Mathematical or substantial points really are indivisible, but they are only modalities. It is only metaphysical or substantial points (constituted by forms or souls) which are both indivisible and real, and without them there would be nothing real, since without true unities there would be no multiplicity.<sup>51</sup>

This passage (partially quoted earlier) contains a great deal of what I think Leibniz envisions to be the structure of reality. He begins with the now familiar "atoms of substance," which are "absolutely destitute of parts." These are the sources of all action and the absolute first principles of compound things. He calls them "metaphysical points," in that they are wholly indivisible real unities. I think Leibniz was deeply impressed with the "Gassendists" (that is, the "corpuscularians" who held that reality was composed of atoms and a void), since it seemed to have an important part to play in physics. He was impressed, and as usual he thought there was a great deal of truth in it.<sup>52</sup> But he eventually concludes that physical atoms make no sense (as we discussed earlier) because (1) what is physical is by nature extended, and therefore has parts, so

<sup>50.</sup> Wilson, Leibniz's Metaphysics, 186.

<sup>51.</sup> New System, ibid., 149.

<sup>52. &</sup>quot;In my youth I agreed with Democritus (and also with Gassendi and Descartes, who in this respect are his followers)." See *Specimen Dynamicum*, in *Texts*, 161.

there would be no sufficient reason for there to be a smallest physical atom having no parts; and (2) since all these physical atoms are all the same on the inside, they have no *individuality*—so it is incoherent, for (at least) these two reasons, to talk about physical atoms. His solution was to push these atoms back deeper into the foundations, rendering them metaphysical (rather than physical), and to endow them with an internal basis from which they can be distinguished. They all have the same sorts of qualities inside, in that they all perceive, and have "appetites" that allow for changes of perception. But these metaphysical atoms are distinguished from one another based on their point of view, which is dictated by what they distinctly perceive (they each perceive everything, so the difference is the distinctness of their perceptions). Point of view is in the above passage equated with the mathematical point, and it implies singularity, as well as place. It is *placed* in a body. Without bodies, there are no points of view, and without points of view there are no bodies.

My concern right now is with these three points: metaphysical, mathematical, and physical. Because of this neat division he offers, I want to follow him into a three-tiered reality, with each level having their own kind of corpuscle, as it were. Simple substances are in the foundations. As we saw above, simples naturally aggregate and complete one another, with the more perfect "dominating" the less perfect in an aggregate. The act itself brings about the unity of the corporeal substance, when there is a single point of view to which the elements of the aggregate correspond. *Only then* is this a corporeal substance, with a body and soul (otherwise the body is not even *a* body, but is merely phenomenal). This is the second level or tier of nature, in which points of view are contained in bodies, thereby producing corporeal substance. That nature is full of points of view implies that nature is full of mathematical points to which every body corresponds. And this can provide a geometric structure for the relations of bodies. On this level we do not have simple substances, but form and matter, or body and soul. The soul is the point of view of a body, and it is through the point of view (as a single perceiving force) that a body is able to relate to, and be differentiated from, all other bodies.

Mathematical points act as limit concepts—so he writes in the beginning of the *New System* that mathematical points are "the extremities of extended things, and mere modifications."<sup>53</sup> These are the limits between bodies, where one ends and another begin. Neither the metaphysical nor mathematical point can be divided, but the former is real and the latter is a mode. In contrast, physical points are real, but only appear indivisible. And so, each level of reality has its own "corpuscle," which arises from a lower level. But simple substances are absolute.

Wilson notes that metaphysical points are "less than God, but more than the infinity of the universe which it encompasses."<sup>54</sup> If it were less than the infinity of the universe (that is, the body which it makes one), it could not act, but would be passive. Leroy Loemker remarks that there are spatial correlates for the three kinds of points: "perceptual space to physical points, conceptual space to mathematical points, and the complex harmony of representational perspectives or points of view to metaphysical points."<sup>55</sup> Each level of reality can be said to have its own point, and in a manner, its own continuum. On the monadic level, the first tier of the city, are the perceivers. These are the metaphysical points. Their perceptions are not caused by anything outside of them, but are brought about by their own inner processes. These have been harmonized from the

<sup>53.</sup> New System, in Texts, 145.

<sup>54.</sup> Ibid.

<sup>55.</sup> Papers and Letters, 461.

foundation of the world, so that each perceiver is in agreement with every other. With a point of view the atoms of substance have definite yet changing relations to one another and are the souls or entelechies, the forms as well as the elements of bodies. Point of view is an individuating quality, since no two metaphysical points can simultaneously be the same mathematical point. Since point of view is differentiating, and a mathematical point is a point of view, then the mathematical point is a *limit concept*. Mathematical points, though, are not real, but relational (perhaps we may say a real relation), in that such a point is a nexus for relating to everything else. The soul or entelechy (which is what has the point of view, or mathematical point) relates its body to all other bodies. This second tier of reality—which is body and soul—arises from the relations and limits among simples. It is their harmony which results in corporeal substances.

The third tier of reality is the physical world as it is experienced and scientifically understood. It is the level of phenomena, both real and imaginary. Donald Rutherford suggests that "the category of phenomenon is for [Leibniz] one of ontology rather than psychology."<sup>56</sup> Bodies, even as phenomena, are still real (though Adams would say they are real in a "weak sense") and not simply mental constructs. Just as the phenomenalist position claims, they have an elevated metaphysical status. Thus, when Leibniz talks of phenomena, he does not mean to strip the subject of ontological standing. He is rather explaining it in ontological terms. A real phenomenon has to do with regularity, vividness, and agreement, and these are, for Leibniz, hallmarks of ontology, not psychology. This is the level of physical qualities, which are in fact the appearances of bodies. But

<sup>56.</sup> Donald Rutherford, "Leibniz and the Problem of Monadic Aggregation", Archiv für Geschichte der Philosophie 76/1 (1994): 70.

we are mistaken to say that these properties are in the objects themselves. This would undoubtedly

be a confusion of category. He writes:

A man who observes a green color in a powdered mixture no longer sees it as green when his eye is aided by an instrument but as a mixture of yellow and blue and can grasp the causes of these two colors with the use of better instruments and other observations or reasons. From these considerations it seems that no such thing [as green] exists outside of us, the phantasm of which appears to our imagination. We are commonly like boys who have been convinced that there is a pot of gold at the very end of the rainbow where it touches the earth and who run toward it in a vain effort to find it.<sup>57</sup>

In an earlier draft of this passage Leibniz wrote, "Meanwhile, we are right in saying that colors and heat are in things, when we mean by this the foundations of these phenomena."<sup>58</sup> Again, he points to something beyond the phenomena, to something that grounds the appearance, to which the appearance belongs. There are the foundations for our phenomena. Nonetheless he is concerned with the relation of physical properties to things, and his concern is that of the scientist as well as the metaphysician. As Garber notes, Leibniz is grounding color in something "metaphysically more basic."<sup>59</sup> The phenomenal level is real and constitutes an important part of nature. The regularity, vividness and motion of the world are experienced, and these are the appearances of the deeper truths of reality. The properties are not *in* things but belong to them, as all true phenomena belong to the bodies of corporeal substances.

The exact line between phenomena and substance cannot be drawn here, for it would constitute the beginning of a much bigger project; it would force an examination of the nature of space and time. This is indeed where physics and metaphysics intersect, and the primary forces and

<sup>57.</sup> Critical Thoughts on the General Part of the Principles of Descartes 1692, in Papers and Letter, 390-391. 58. Ibid.

<sup>59.</sup> Garber and Rauzy, "Leibniz on Body, Matter and Extension," 36.

derived forces of substances produce the effects of time and space-none of which are absolute but relative to the points of view of substances. Accordingly, Leibniz defines extension, space and time in the following way:

In conceiving of *extension* we are conceiving of an order among coexistences; but we should not think of it, any more than space, as though it were a substance. It is like *time*, which presents to the mind only an order of changes.<sup>60</sup>

### And again:

I hold that time, extension, motion, and in general all forms of continuity as dealt with in mathematics, are only ideal things: that is to say, that, just like numbers, they express possibilities. In the same way, Hobbes defined space as *phantasma existentis*. But to speak more accurately, extension is the order of *possible coexistences*, just as time is the order of inconsistent but nevertheless connected *possibilities*, such that these orders relate not only to what is actual, but also to what could be put in its place, just as numbers.<sup>61</sup>

Thus, in so far as space and time are the logical or mathematical orderings of real things,

they are not themselves real. They are relational, or ideal, but not "out there" (that is, not wholly apart from the perception of things). Indeed, since reality is a plenum of discrete individuals, without a void, the notion of *space* must be interpreted relationally, and not absolutely. There is no getting beyond the perceptions of things, for everything, every point and passive nook of reality, perceives. Every angle is a point of view. This secures the ontological importance of phenomena, since it obviates the need to posit some hovering Platonic Forms. The properties of bodies found in their appearances express the deeper level of real changes taking place, as all relations in the universe shift to accommodate the changing nature of one to the whole. And so for each

<sup>60.</sup> Leibniz to Bayle, 1698, Texts, 207.

<sup>61.</sup> Reply to Bayle's Note L, 1702, Texts, 252-3.

individual substance, as it shifts to harmonize with the universe, phenomena also change to account for what "lies underneath."

The ultimate line between the level of phenomena and the level of corporeal substances is caught in the mix of time and space, and I will not venture to untangle the two. Perhaps they cannot be disentwined, and we must simply think of them as parallel tracks that express the same reality. And this is what, in essence, he says: "Souls act according to the laws of final causes, through appetition, ends, and means. Bodies act according to the laws of efficient causes, or of motions. And these two realms, that of efficient causes and that of final causes, are in mutual harmony."<sup>62</sup> But of course, this pronouncement puts both sets of laws squarely in corporeal substances. Body and soul act according to different laws, yet both are contained in the same unity. Since corporeal substances unite final and efficient laws, they at once reflect the unity and harmony of God's plan, and in this sense they comprise the ontological center of his system.

<sup>62.</sup> Monadology, in Texts, 279.

# CHAPTER V

## CONCLUSION

I have tried to show that the Phenomenalist's interpretation is difficult to maintain. There is too much textual evidence to the contrary, and Leibniz does in fact hold to the reality of corporeal substances. When we analyze what Leibniz says about real phenomena, we find he does not imply that bodies are *only* phenomena. In fact, aggregates of corporeal substances are what make phenomena real, and therefore, they must have more reality than do phenomena. According to the Phenomenalist, corporeal substances are to be analyzed as aggregates of monads; but the problem is that corporeal substances are not aggregates. Since they make phenomena real, and they cannot be reduced to aggregates, they must themselves be real substances. Furthermore, the Phenomenalist position stands on the principle that only simple substances exist. However, Leibniz seems to base his commitment to simples on the prior commitment to corporeal substances. This undermines the argument for Phenomenalism.

I have also tried to give an account of the unity of corporeal substances, as based in the harmony of its elements. Leibniz defines unity as that which has no parts more simple than the whole. Corporeal substances are the union of body and soul. Yet, when we consider a body without a soul, we are left with nothing but a heap or a phenomenon (and so it is important that Leibniz stresses the difference between true unity and mere
phenomenon). The soul, when considered apart from the body, is simple but incomplete (perhaps not even individuated). Insofar as it belongs to a corporeal substance, it is a principle of life, and not truly a substance. The monads that come together in the corporeal substance do so according to their active and passive principles, in terms of aggregation and unity. These are not parts, but they result in the parts, that is, in the body and soul of the corporeal substance. If there were a way to divide the corporeal substance, to take the body away from the soul, then there would not be body over here and soul over there. There would only be aggregates of simple monads, incomplete in themselves.

This result, I think, should bring with it a new assessment of Leibniz's metaphysical system. I suggest that he can be interpreted in terms of a three-tiered model, where simple substances are the ultimate causes of things, the metaphysical points from which all composites are built. From the interaction of simples (i.e., their harmonized independent activities) result corporeal substances, as a union of body and soul—and it is body and soul that are the second tier. They require monads, yet are not reducible to them. The soul and body, however, operate under their own separate laws. This serves to put corporeal substances right at the heart of Leibniz's ontology, since they combine both final and efficient causes, and embody the two great principles of nature—unity and harmony.

Of course, there are some questions that arise from this interpretation. For example, the system I propose is a mere sketch. The nature of bodily interaction would need to be discussed at length, as well as the relationship of phenomena to bodies and corporeal substances. The intersection of physics and metaphysics, as it pertains to Leibniz's notions of primary and derived forces is crucial to cohering the phenomenal and corporeal levels of this model. There is much left unexplained, and I merely cast in outline. But something like it is needed, if what I have argued is correct.

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