On Unity, Borrowed Reality and Multitude in Leibniz

Samuel Levey, Dartmouth College

Abstract

In this paper I argue that what has been called Leibniz’s “aggregate argument” for unities in things in fact comprises three quite distinct lines of argument, with different concepts being advanced under the name ‘unity’ and meriting quite different conceptual treatment. Two of those arguments, what I call the Borrowed Reality Argument and the Multitude Argument, also appear in later writings to be further elaborated into arguments not just for unities but for simples. I consider the arguments in detail. I suggest that one of the two, the Borrowed Reality Argument, is philosophically more promising and has the stronger evidence for being central in Leibniz’s thought as he argues for the existence of simple substances.

Introduction

Leibniz repeatedly argues for the existence of what he calls ‘unities’ in things, the real beings out of which the world must be made up. His patterns of argument for this thesis resemble one another across the texts, striking similar themes about the need for beings that are not just heaps, aggregates or multitudes but true unities. All this invites assimilation, and scholars have mostly not tended to stress the differences in the formulations of Leibniz’s “aggregate argument” for unities.¹ In this paper I propose that Leibniz in fact has three quite distinct lines of argument at work, involving markedly different ideas and advancing different concepts under the name ‘unity’. None of the three amounts to an argument for simple substances in its basic form, but for two of them we find, in Leibniz’s later writings, supplemented versions strong enough to imply that the unities whose existence they posit are also simples.² I shall examine those two arguments and their supplemented forms in detail and contend that one is more promising than the other in philosophical terms. This more promising argument, as it turns out, is also the one with the firmest textual evidence for being central in Leibniz’s thought as he promotes his case for simple substances.
1. Principles of Unity

The first line of argument to be pulled apart from the others in our inquiry is also the earliest of the three to emerge in Leibniz’s papers, appearing already by the winter of 1678-9, in his *Conspectus libelli elementorum physicae* (“Conspectus for a little book on the elements of physics”) where he argues for the existence of incorporeal forms in bodies thus:

Now there follows the subject of incorporeals. [...] Here therefore is to be treated the subject of the soul, and it must be shown that all things are ensouled. Unless there were a soul, or a kind of form, a body would not be a being, since no part of it could be assigned which would not again consist of further parts, and so nothing could be assigned in body which could be called *this something* or *some one thing*. (A VI,4,1988/Ar 233f.)

An incorporeal soul or a kind of form is posited to be a principle of unity, so to speak, in virtue of which a body can be “some one thing” despite consisting of many parts. Without such an incorporeal principle of unity, no body could be a being—that is, there could be no bodies at all.

Those brief lines in *Conspectus libelli* leave a number of points unexplained, e.g. why it is that every part of a body must consist of further parts, why division into parts might prevent a body from being some one thing, why it is an incorporeal soul or form rather than some material principle that must be supposed to secure the unity of a bodily being, etc. Nonetheless to Leibniz’s readers the sketched reasoning will be familiar, as it encapsulates the argument he defends at length in many places and over many years for the existence of substantial forms in bodies (cf. A VI,4,1464, A VI,4,1506, GP II,58, GP II,71-72, GP VII,444). The argument—which we may call the ‘Principles of Unity Argument’—has attracted scholarly attention, and for present I shall offer only a few summary remarks.

The Principles of Unity Argument targets the Cartesian account of corporeal substance according to which bodies consist of extension alone. Its point is, first, to show that the Cartesian account is absurd because it makes the existence of bodies unintelligible, and, secondly, to open the crucial ground for his own rival account. Leibniz shares with his Cartesian opponents the premise that every body is always divided into further bodies and the premise that (at least some) bodies are beings or substances. By highlighting the ancient idea that truly to be a being, or a substance, something must be some one thing, and noting that being divided into parts poses at least a *prima facie* challenge to being some one thing, Leibniz...
ON UNITY, BORROWED REALITY AND MULTITUDE IN LEIBNIZ

exposes the poverty of the Cartesian account. It has nothing to offer to make sense of the unity of a single body, no way to say that a body is truly even a being at all. Or, if not quite nothing, it has only the resources of extension—mainly forms of contact or conjoinment or common motion—which Leibniz pillories with clever examples. For instance, against the suggestion of Antoine Arnauld that a marble tile might count as a substance even with only the mechanical connection of its parts to unite it, Leibniz writes:

Suppose that there were two stones, for example the diamond of the Great Duke and that of the Grand Mogul. One could impose the same collective name for the two and call them a pair of diamonds although they are far apart from one another; but one would not say that they constitute a substance. More and less do not make a difference here. Even if they were brought nearer together and made to touch, they would not be substantially united to any greater extent. And if, after they touched, one were to join them to another body capable of preventing their separation—for example, if they had been set in the same ring—all this would make only what is called *unum per accidens*. For it is as by accident that they are required to perform the same motion. Therefore I hold that a marble tile is not a complete single substance any more than the water in a pond with all the fish it contains would be, even if all the water and all the fish were frozen, or any more than a flock of sheep would be, even if the sheep were all tied together so that they could only walk in step and so that one could not be touched without all the others crying out. (GP II, 76/LA 94)

Other favorite examples of things that fail to add up to a single substance despite their physical bonds: a circle of men holding hands, a bundle of sticks, a pile of stones, the Dutch East India Company and all its officers, a house, a ship, a chain, an army, and so on. The imagined unity of such things is nothing more than an artifice of the mind, something that can be imposed even upon “all the Roman Emperors,” despite the fact they never even exist together at a single time, merely by their being “considered together” in one thought (A VI, 4, 627). None of these supposed things is a true being or substance in its own right, however, and for them Leibniz will prefer the term ‘aggregate’ in order to mark the contrast.

So the Cartesian account, by allowing nothing more than extension in bodies, lacks the resources for securing the unity of bodies and hence the existence of bodies as beings. If the corporeal world contained only what the Cartesian account provides by way of principles of unity—contact, conjoinment, common


99
motion, etc.—it would contain nothing at all. If any bodies are to be substances, there must be more to the corporeal world; this something more, the incorporeal principle of unity in bodies, is what Leibniz calls ‘soul’ or ‘form’. About the existence of forms in bodies, Leibniz describes himself as having been “convinced of it finally, as against my will” (GP II, 58), and this is the very line of argument that forced him to his anti-Cartesian, even anti-modern, conclusion.

Distilling the key premises out of the Principles of Unity Argument—though, alas, losing its luster in the process—we might offer:

1. Something is a substance only if it is truly one or a unity.
2. Every body has parts.
3. Anything that has parts can be a unity only if it has a principle of unity.
4. Nothing that consists of extension alone has a principle of unity.

From those premises, two consequences follow in quick succession:

5. A body is a substance only if it has a principle of unity,

and, therefore,

6. A body is a substance only if it does not consist of extension alone.

In virtue of this line of argument, which he articulates in the 1678-9 Conspectus libelli and repeats with clarity of expression across many texts until at least as late as a 1694 letter to Antonio Alberti (GP VII, 444), Leibniz holds that there are bodily substances only if there are incorporeal principles of unity in them, i.e. souls or forms. And to yield Leibniz’s precise conclusion that there are in fact such incorporeal souls or forms, a preliminary premise also needs to be spelled out, what we might call premise (0): Some bodies are substances. I take this to be presupposed in context when Leibniz gives his Principles of Unity Argument, something he assumes to be agreed by disputants to the debate about the nature of corporeal beings rather than something he pointedly asserts, though in some places it is made explicit as well.

The ideas the argument trades on are responses to familiar metaphysical questions. Under what conditions do some things compose a further thing? When are objects truly parts of a whole rather than just so many separate things in a heap?
Leibniz’s answers, while amounting to metaphysical claims, are hardly esoteric. Not just any bunch of things form something further that is a single thing in its own right. Single objects do not consist of parts that are scattered around in disparate places, for instance. Merely regarding many things together in a single thought or calling them by a single name isn’t enough to make them constitute some one thing. More questionable are his claims to the effect that there is no difference between scattered objects and intact ones, between those held together only in the mind and those that are conjoined by inseparable bonds—that these are only differences in degree if we allow only physical facts about their connection. Still, Leibniz’s examples are effective at eliciting intuitions that will favor his view: an individual man is truly some one thing, but a circle of men holding hands is not; an individual sheep is truly one thing, a flock is not.

What matters for our purposes, however, is not to adjudicate this line of argument but to see what it principally involves. The key elements here are ideas about the making of one thing out of many and about the conditions under which that unity is achieved (or not). Note also that the Principles of Unity Argument does not seek to prove that there are unities. It assumes this—it assumes as a premise that some bodies are substances and that any substance is a unity in the sense of truly being “some one thing”—and seeks to prove that there must, therefore, exist incorporeal principles of unity for them.6

I belabor those last points because it can be easy to conflate this line of Leibniz’s argument with another closely associated but quite different one that also appears in his texts, sometimes even side by side with the first, and which also concerns the composition of material things. Let us turn now to this second strand of thought.

2. Borrowed Reality

In a draft of a letter to Arnauld, Leibniz cleanly states his Principles of Unity Argument:

But once that is granted [viz., that bodies are substances], I believe that one can infer that bodily substance does not consist of extension or divisibility; for you will grant me that two bodies which are at a distance—for example, two triangles—are not really one substance. But now let us suppose that they come together to form a square: can merely being in contact make them into a substance? I don’t think so. But every extended mass can be considered as
made up of two, or a thousand, others. Extension only comes from contact. Thus you will never be able to find a body of which we can say that it is truly one [une] substance. (GP II, 71-2/LA 88)

This is familiar by now: with only extension in bodies, there can be no such thing as a body that is truly some one thing. The lines that immediately follow continue to attack the Cartesian idea that body consists in extension alone, but pivot to take up a rather different line of argument:

It [i.e. a body] will always be an aggregate made up of many [plusieurs]. Or rather, it will never be a real being, since the parts that 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. (Ibid.)

If a body is not truly one substance, then it can only be an aggregate. But this is absurd if it is to be generally true for all bodies. Under the assumption that all bodies are aggregates, no body will be a real being at all. Why not? Because aggregates “have only as much reality as there is in their ingredients.” The problem is a vicious regress. Aggregates need to get their reality from their ingredients, but those ingredients are only further aggregates that likewise need to look their ingredients for reality to offer, and so on. If nothing is reached that has its own reality to contribute, then for any supposed body you like, it will “never be a real being.”

By contrast with the Principles of Unity Argument, the difficulty here is not that no body can be a unity unless there is some principle that binds its many parts together into a single thing. Rather, it is that if all bodies are only aggregates, then there will be no real beings to be the ingredients of bodies in the first place. When Arnauld suggests that he sees no problem in supposing that there are only aggregates, Leibniz spells out his counter-argument this way:

I believe that where there are only beings by aggregations, there will not even be real beings; for every being by aggregation presupposes beings endowed with a true unity, because it obtains its reality from nowhere but that of its constituents, so that it will have no reality at all if each constituent being is still a being by aggregation; or one must yet seek another basis to its reality, which in this way, if one must constantly go on searching, can never be found. (GP II,96/LA 120)

Here the “true unity” Leibniz speaks of is playing a different theoretical role. The question is not whether the bodily substance, containing many parts, is unified by an incorporeal soul. The question is whether it has its own reality originally
or whether it only “obtains” its reality from ingredients that are in some way prior to it. Aggregates are not original possessors of reality; they obtain whatever reality they have from their constituents. True unities, on the other hand, are not likewise dependent. If there are only aggregates and never true unities, then there will never be reality forthcoming for an aggregate to “obtain” but only an endless regress of dependency without any basis for support.

So the notion of unity at stake in this argument is that of a being that does not need to obtain its reality from prior ingredients. Leibniz sharpens this line of argument for the existence of such “true unities” in later writings, most notably in letters to Burcher de Volder:

I have undertaken to prove that there are these things [viz., unitates] from this: because otherwise there would be nothing in bodies. First, what can be divided into many consist of many or are aggregates. Second, whatever are aggregates of many things are one only on account of the mind, and they have no reality except what is borrowed [mutuatam], that is, <the reality> of the things from which they are aggregated. Therefore, third, what can be divided into parts have no reality unless there are in them these things which cannot be divided into parts. Indeed, they have no other reality except that of the unities which are in [them]. (Letter to de Volder, 31 May 1704. GP II,261/translated in Rutherford (1990))

Here we find a somewhat starker phrasing of the way aggregates depend upon their ingredients: aggregates “borrow” (or “derive”: mutuor) their reality from them. This concept of an aggregate’s having only borrowed reality is central to the argument, and we shall call this line of thought Leibniz’s ‘Borrowed Reality Argument’.

In a subsequent letter to de Volder, a month later, Leibniz recaps the Borrowed Reality Argument, pressing harder on the idea that it is absurd for there to be no reality which is not borrowed:

Anything which can be divided into many (actually existing) things is aggregated from many things; and a thing which is aggregated from many things is not one except mentally, and has no reality except that which is borrowed [mutuatam] from its constituents. From this I have already inferred that there are therefore indivisible unities in things, since otherwise there will be no true unity in things, nor any reality which is not borrowed. And that is absurd. For where there is no true unity, there is no true multitude. And where there is no reality except a borrowed one, there will be no reality at all, since it must in
the end belong to some individual subject. (30 June 1704. GP II,267/translated in Rutherford (1990))

By ‘pressing harder’ here I mostly mean ‘insisting’. But plainly it is becoming clearer to Leibniz that this claim about borrowed reality is the leading point of the argument, as he seeks to drive it home to de Volder. And we shall take care to consider its merits shortly. Still, the other premises in the argument are hardly idle, and it is worth sorting them out.

Let us draw on both of the two letters in isolating the three key premises of the Borrowed Reality Argument, since the clarity of Leibniz’s formulations varies slightly across them. The first two premises follow their statements in the letter of 31 May 1704; the third is crafted from the letter of 30 June.

(1) Whatever can be divided into many things consists of many things, i.e. is an aggregate.
(2) Aggregates borrow their reality from their constituents.
(3) It’s absurd that there be no reality that is not borrowed.

From those premises, this conclusion can be derived:

(4) Whatever can be divided into many things has constituents that are not aggregates.

Taking the label ‘unity’ now for things that are not aggregates—which, again, is precisely the role that the Borrowed Reality Argument defines for that term in its contrast with ‘aggregates’ in the relevant texts—we can say that Leibniz’s conclusion is that whatever can be divided into many things has constituents that are unities. Or more briefly: aggregates presuppose unities.

Premise (3) carries the main burden of the argument, and deciding its merit will require evaluating whether an unending regress of borrowing is vicious, a rather delicate issue. But considerable work is also done in the first two premises, which are less innocuous than they might appear. We shall begin with them.

Premise (1) both defines ‘aggregate’ as something that consists of many things and assigns this status to whatever can be divided into many things. ‘Consists of’ and ‘can be divided into’ are more than just casual descriptors. Colloquially, ‘consists of’ may suggest merely something’s being made of certain things. But given the claim of premise (2) that aggregates borrow their reality from their
constituents, I think we must understand ‘consists of’ to be a fairly strong relation of reducibility or of the exhaustiveness of the contribution of the ingredients to the thing that consists of them. Roughly, if $x$ consists of the $y$s, then there is nothing more to $x$ than the $y$s. (More carefully: the intrinsic properties of $x$ are entirely determined by, or grounded in, the intrinsic properties of the $y$s and their arrangement and relations to one another.) Once the nature of the $y$s and the relations among them have been characterized, there is nothing more to say about the nature of $x$. I believe it is in something like this sense that Descartes says that body consists of extension alone. Extension is the whole nature of body, and there’s nothing else to it, period. Such an understanding of ‘consists of’ is strong enough to underwrite the borrowing claim of premise (2); if $x$ consists of the $y$s, then certainly $x$ borrows its reality from the $y$s. There’s nothing more to it than the $y$s, and so no other source or reservoir of reality for it to possess.

This strong reading of ‘consists of’ in turn puts pressure on the meaning of ‘can be divided into’. Not just any conception of dividing something into many things will automatically imply that what is divided has its nature utterly exhausted by those things into which it is divided. For instance, an oak tree might be divided into its atomic elements by a nuclear blast, but there might yet have been more to the oak than those atoms; the vital activity in which they participate, for example, or the evolutionary lineage that led up to its genesis might be thought to make essential contributions to its nature. A philosopher who embraces the idea of a whole that is “more than the sum of its parts” might yet allow that such a whole can be divided into many things in some sense (say, it could be cut into a thousand pieces), though its nature might just be utterly lost in the process. How could something be such a whole? Maybe there’s a little magic in the connection of the parts, or in the history of their conjoinment. Maybe there’s some magical extra ingredient that is not a part of it and so does not appear in the books when considering just the sum of the parts.

Fortunately, a positive theory isn’t required for our purposes at the moment. Nor need we insist on the correctness of the idea of a whole that is more than the sum of its parts for any particular case. It’s enough simply to see that the notion of divisibility required by premise (1) will need to be circumscribed in order for it to be most plausible. ‘Can be divided into many things’ will pick out the class of things whose division into many things does not subtract anything essential to the nature of what was divided. What appears to be lost when something of this sort is divided into many things will have to be counted as only illusory, with
the change its undoing involves being just a rearranging of things rather than the end of something’s existence. Perhaps a sandcastle is no more than just so many particles of sand arranged in a certain fashion, so nothing is truly destroyed when the surf washes it away. Philosophers of course will disagree about what falls into this class. Leibniz, it seems, would include a circle of men holding hands or a flock of sheep, but not the individual men or sheep. Descartes would include every corporeal thing whatever. In any case, it is this understanding of ‘consists of’ and ‘can be divided into’ that will make premises (1) and (2) jointly plausible, and using Leibniz’s terminology, the things that meet those conditions we may call ‘aggregates’.

Another potential alternative comes to view here as well. For a further way to resist the idea that what can be divided into many things consists of those things, in the strong sense of ‘consists’, is to allow a class of beings that, although divisible, are themselves prior to the parts into which they might be divided. Leibniz himself recognized this as a way of conceiving of continuous quantities such as geometrical lines or regions of space. These may be divided however one likes, but they are not results of those parts into which they may be divided; rather, the parts are the results of the divisions. In such continuous things, he thought, “the whole is prior to the parts” (A VI,3,502). In his view such continua are only “ideal beings,” not actual occupants of the natural world, so they are not counterexamples to the premises of the Borrowed Reality Argument. Yet a defender of the real existence of such continua could object where Leibniz does not, and deny either premise (1) or premise (2). That is, she could deny that anything that can be divided into parts must consist of those parts, or she could deny that whatever consists of parts borrows its reality from them. Or else she would regard the argument as circumscribed in scope, applying only to a special class of material things called ‘aggregates’ while silent about those natural bodies that are continuous quantities. Dispute with this opponent would then need to be settled in the metaphysics of the continuum, something about which Leibniz has much to say but which is mostly left in the background of his discussions of the Borrowed Reality Argument.

Two elements of Leibniz’s thought we have been only brushing past need clearer mention at this point. First, Leibniz holds that bodies are not just divisible but always actually divided in a particular way. He rejects the traditional idea of infinite divisibility, associated with the continuum, that represents matter or body as in a state of suspended potentiality, indifferently divisible in an arbitrary fashion. Nature, in Leibniz’s view, has actually instituted all the divisions, leaving nothing
undone (cf. GP II, 268). Although he readily talks in terms of divisibility and what can be divided when describing body and matter in the arguments we are examining, his own position is more committed and more controversial than is always revealed.

Secondly, some presuppositions of Leibniz’s arguments concerning unity—such as his denial that any real quantities are genuine continua—issue from his deep, early studies of the topic of the continuum and its composition. Those studies set the stage for his subsequent thought about matter and substance in many respects, and much of his attack on the Cartesian concept of body as extension is rooted in his analysis of the continuum. Echoes of this can be heard, for instance, when he characterizes the (Cartesian) idea of bodily substance as “consisting of extension or divisibility” (GP II, 71-2), in effect a continuous magnitude. Likewise, Leibniz’s denials that matter can ultimately consist of mathematical points or atomic bodies—which we shall encounter in his arguments shortly below—are reflections of his studies of the continuum. He has profound reasons for rejecting such views of substance, matter and its composition, not all of which are clearly advertised in his discussions of unity. The present lines of argument focusing on unity, in fact, seem gauged to highlight ideas in metaphysics that are more straightforward and do not require his audience to take up the esoteric topic of the continuum and his complex analysis of it. Perhaps for this reason he offers only the briefest and most indirect references to the continuum in his discussions of these years. Having commented on those topics elsewhere, and for clarity of focus here, I shall sidestep the labyrinth of the continuum in this paper. Still, it is worth bearing in mind that Leibniz regarded the “lack of the true conception of the nature of substance and matter” exemplified by the Cartesian position (among others) as leading to “insurmountable difficulties” concerning the composition of the continuum, “difficulties which should properly be applied to the overthrow of those very positions” (GP VI,29/H 52-3). The difficulties concerning unity, while certainly capable of being directly stated in their own terms, are, for Leibniz, something drawn up out of a deeper well.

Returning now to the Borrowed Reality Argument, recall that it is directed against a Cartesian opponent, one who would be willing to say, for instance, that “in the whole of corporeal nature there are only aggregates.” Nothing about an aggregate’s borrowing its reality from its constituents is problematic by itself (assuming the idea of borrowing reality makes fair sense in the first place). But the supposition that the only things that exist are aggregates sets up an unending
regress of borrowed reality. And it is here that premise (3)—the claim that it is absurd that there should be no reality that is not borrowed—comes into play, denying the coherence of the unending regress.

Is it absurd that there should be no reality that is not borrowed? Before plunging farther ahead we should ask just what the idea of borrowing reality involves. The term ‘borrow’ is highly suggestive, and we shall rely on its suggestiveness to some degree in what follows, but the underlying Latin term is *mutuor*, which can also mean something closer to ‘derive’ and not automatically suggest a link with ideas about ownership, lending, etc. (In the letters to Arnauld the French term is *obtenir*: to obtain or acquire.) However exactly we should translate Leibniz’s terms, it is clear at a minimum that the intended relation is one of asymmetric dependency: the aggregate depends on the constituents in a way that they do not depend on it. In terms of the now-again-popular question ‘What grounds what?’ the parts ground the aggregate. They are prior to it. This links neatly to Leibniz’s long-held claim that, unlike (ideal) continuous quantities, in which the whole is prior the parts, “in something discrete,” such as an aggregate, “the whole is not prior to the parts but rather the converse” (A VI,3,520).12

Beyond this priority claim, it is less clear how to understand the idea of borrowed reality. And the answer to the question ‘Is it absurd that there be no reality that is not borrowed?’ will depend on how we interpret what is being asked. Taken in one way it may be a question about a type of reality: reality of a borrowed or derived nature that depends for its very being on being derived from something more basic, as, say, extract of malt depends on the prior existence of malt, or essence of lilac (in the perfumer’s sense) on lilacs. In that sort of case the absurdity seems straightforward. Without reality of the original type, there can be no borrowed reality. Yet the question may instead be about a kind of “access to” reality. Some beings are borrowers, some are lenders, though what is borrowed or lent need not be different in type, just as I might borrow or lend a lawnmower. Might there be no reality that is not borrowed, understood in this way?

Suppose I have no lawnmower of my own but I seek to borrow one from a neighbor. My neighbor reports being in the same boat as myself, with no lawnmower of her own to lend but with access to a further neighbor down the street from whom to seek a lawnmower. Suppose the same is true for everyone in the neighborhood, and there is no looking to outside suppliers. Can I coherently claim to have access to a lawnmower here? The prospects seem bleak. Suppose we make explicit the “unendingness” of the network of borrowing. Does that help? It
certainly does not seem to help if we imagine all the houses arranged in a circle, so that the inquiry eventually comes back around to me from the other side. Nor does it seem to help if we are all on an infinitely long street so that there is always someone else further down to ask. Indeed, prospects appear bleak however things are arranged, unending or not, if everyone is just a borrower.

Still, if it is obscure how in this story any lawnmower could be forthcoming, it is not yet obviously contradictory to suppose that there is a lawnmower with no original owner that is just passed around. The network of borrowing relations will be powerless to explain how it is that the neighborhood manages to have a lawnmower at all. But I don’t yet see a logical inconsistency. Perhaps the situation is “absurd” without being contradictory. Consider that if the scenario made sense then there could also be two such neighborhoods, one of which is in possession of a lawnmower and another just like it in all respects except that it has no lawnmower. While I can cut the grass with my borrowed machine, my counterpart is just out of luck. The difference seems inexplicable. Although Leibniz does not appeal to a principle of sufficient reason in defending the idea that it’s absurd for there to be no reality that is not borrowed, it may be tempting at this point to do so on his behalf. Why is true that I am, but my counterpart is not, able to obtain a lawnmower? Don’t say, “Because my neighborhood, unlike his, is in possession of a lawnmower”: that is the same fact we are trying to explain. If we are not to rest leaving it as an unanswerable question, then it seems that Leibniz is right to say that “one must yet seek another basis to its reality, which in this way, if one must constantly go on searching, can never be found” (GP II, 96). Loading more borrowers into the domain, however they are networked together, does nothing to identify the source of the reality of the whole.

Of course, the analogy is imperfect. Lawnmowers are external to those who lend or borrow them, whereas aggregates are borrowing from their own internal constituents. I am less convinced that a compelling case of “internal” borrowing is to be had to make the endless regress obviously vicious. But this may be only because it is harder to know just how to formulate the conditions in such a way that it is both the case that the aggregate is clearly borrowing and that what it borrows and the lenders themselves are entirely internal to the aggregate. Might I myself borrow reality from my own parts? The idea of ownership gets in the way here: “They are my own parts, after all, so in what sense do I borrow from them?” Again, though, this may be a distraction, as we could reformulate the question in terms of derived reality and avoid the idea of ownership. I am uncertain how to
answer the question whether I derive my reality from my parts. Or, if this is a bad example because presumably I am not an aggregate but a unity for Leibniz, then let the question be whether, say, my car derives its reality from the reality of its parts—where this is *more* than just the idea that the parts are prior to the whole, more than the idea that it depends on them in a way that they do not depend on it. If there is not more to it than just priority or grounding, defenders of the coherence of an endless regress of derived reality might be in a better position to rebut the charge of absurdity. It is not quite so obviously absurd that A might be grounded in B, and B might be grounded in C, and so on *ad infinitum*, with no bottom-most, ungrounded ground. For it is not just obvious that grounding ultimately requires ungrounded grounds. This seems instead to be something we write in as an extra statement, to clarify a conceptual point that ‘grounding’ might not by itself automatically imply.

A parallel here might be the addition of the Axioms of Regularity—sometimes called the ‘Foundation Axiom’—to the other axioms of ZF set theory.\(^{13}\) Even with the idea that the elements of a set are prior to it, something more needs to be added to generate the full-blown “iterative” conception of set that will imply Regularity and thus exclude non-well-founded sets (e.g., sets whose members have members, which themselves have members, and so on *ad infinitum*).\(^{14}\) The mere idea that elements are prior to sets does not by itself imply “first” elements or sets, or rule out endless regresses of membership. The “something more” that would yield such an implication is codified in Regularity. Likewise, I suspect that Leibniz’s *mutuo* and *obtenir*—‘borrow’ or ‘derive’ and ‘obtain’—are adding something important to the Borrowed Reality Argument beyond the notion of priority, and not just stylistic flair. If it is absurd for there to be no reality that is not borrowed, then it seems that for *x* to borrow or derive its reality from the *ys*, there must be something more to this relation than merely the fact that the *ys* are prior to *x*. Until this something more can be sharply captured, and clarified especially for the case of “internal” borrowing, it will remain unclear whether Leibniz’s argument is successful in showing that aggregates require unities with unborrowed reality.

Let me offer an opinionated, conditional conclusion. If the idea that some beings borrow their reality from their constituents is accepted—and this assumes that the extra content of ‘borrow’ that goes beyond mere priority can suitably captured—then I am inclined to agree with Leibniz about the need for some reality that is not borrowed. Following his lead, it then seems best to say that for an aggregate one must seek “another basis” for its reality, that is, some basis other
than just more aggregates. At some point a non-aggregate ingredient in things, some source of unborrowed reality, must be involved. This is what Leibniz calls, in this context, a ‘unity’.

Notice that ‘unity’, as defined by the argument, does not automatically require incorporeality or mind-likeness or unextendedness, etc. A unity cannot be an aggregate, but as we observed before, this is a limited restriction. As Leibniz himself observes in discussing the argument, a range of options is left available in interpreting the nature of the indivisible constituents of aggregates:

One must therefore necessarily arrive either at mathematical points, from which certain authors make up extension, or at Epicurus’s and M. Cordemoy’s atoms (which you, like me, dismiss), or one must acknowledge that no reality can be found in bodies, or one must finally recognize certain substances in them that possess a true unity. (G II 96/LA 121)

Leibniz has his own reasons for rejecting mathematical points and atoms (springing from his analysis of the continuum), and the same reasons as everyone for rejecting the claim that no reality can be found in bodies. (Even in his most idealistic moments Leibniz is no friend to the idea that the world of bodies is purely an illusion.) But those reasons are all strictly additional to what the Borrowed Reality Argument itself establishes.

Nor, it should be noted, does ‘unity’ automatically require simplicity. The argument’s conclusion is compatible with a unity’s containing many parts. We can claim that a man or sheep is a unity, so long as we don’t allow that it consists of many things in the strong sense of ‘consists of’ required by premise (1) of the argument. Leibniz himself holds that a man has an incorporeal principle of unity—his soul—in virtue of which he is a unity and not an aggregate, despite containing many parts:

[M]an…is an entity endowed with a genuine unity conferred on him by his soul, notwithstanding the fact that the mass of his body is divided into organs, vessels, humours, spirits and that the parts are undoubtedly full of an infinite number of other corporeal substances endowed with their own entelechies. (GP II 120/LA 154)

From all this it will also follow that a man is not divisible into many things in the relevant way, despite being “divided into organs, vessels, humours, etc.” And that is exactly Leibniz’s position: a man, like any true unity, is naturally indivisible, in the sense of ‘can be divided into many things’ required by premise (1). As Leibniz is careful to say, it is not the man but only ‘the mass of his body’ that is divided.
into parts. The body, apart from the soul, is not a unity and lacks the special indivisibility possessed by a man. Still, this sort of indivisibility does not mean that a man is like an immutable fortress. An indivisible being of this sort may gain or lose parts over time but, because of its genuine unity, remain “strictly the same individual” (GP II 120). More radical changes are possible too. A man may be severed limb from limb. His corpse may rot after death or be burned to ash. But, according to Leibniz, the man himself is not in fact destroyed in the process; instead (somewhat incredibly, it must be admitted), the man shrinks into a very tiny, folded-up form, complete with organs and so on, that escapes our attention, not unlike minute embryonic organisms before their observed generation. Likewise for any living being that appears to be destroyed in death (cf. GP II, 99-100, 122-124; GP VI, 601-602; GM III, 553, 561).

Leibniz’s “diminution” theory of death is not a necessary consequence of the view that a composite being—i.e. something with many parts—can qualify as an indivisible unity in the relevant sense. One could hold, perhaps more modestly, that a composite unity cannot be divided into many things just by holding that its division into many things would mean the utter loss of its nature, a real case of ceasing-to-be, and not a mere rearrangement of smaller parts, no mere washing away of a sandcastle. And that idea is not so strange. Although the death of a friend, say, may involve the dissolution of her body, the change that occurs may be more than the mere repositioning of atoms; something real is lost too, the friend herself. Again, the point is not to insist on this picture or any particular theory that would try to support it. It is just to show that denying the divisibility of a composite object in the relevant sense of ‘can be divided into many things’ need not imply the indestructibility or everlastingness of the indivisible object. Some account must be offered to reconcile the appearance of the destruction of composite beings with the hypothesis of their indivisibility, as prescribed by the Borrowed Reality Argument, and Leibniz’s own is just one among many possible alternatives.

So we see some of the contours of the Borrowed Reality Argument. Its premises, properly understood, are defensible, if the basic idea of borrowing reality is itself acceptable. Taken as a whole, the argument rules out the possibility that the corporeal world consist only of aggregates. If there are aggregates, there must also be unities. In fact, given the strength of the claim that aggregates consist of unities, the aggregates can be dispensed with in favor of the unities, which are the real beings. But as far as the argument itself is concerned, those unities could be
either simples or composites, so long as they are not divisible into many things. It is a relatively small set of constraints that the argument establishes, and it allows many possible models. The Cartesian account of corporeal beings, however, is not one of them.

It is also worth pausing to note the contrast between the Borrowed Reality Argument and the earlier Principles of Unity Argument. The Borrowed Reality Argument concludes that there must be unities. The Principles of Unity Argument instead takes that claim as a premise, in fact a specific version of it, namely, that some bodies are substances, i.e. unities; its conclusion is that there must be something incorporeal to serve as the principle of unity for unities that are composites. The Borrowed Reality Argument, by itself, is silent about whether the corporeal world contains any incorporeal ingredients. The two arguments can be neatly woven together to make a powerful case for a radically anti-Cartesian account of the corporeal world. If the corporeal world contains beings that can be divided into many things—as is agreed on both sides in this dispute between Leibniz and his Cartesian opponents—then in corporeal nature there must be incorporeal ingredients, namely, souls or forms. (That assumes a few other premises Leibniz mentioned before, also shared by his Cartesian opponent: there are no material atoms, and bodies are not composed from mathematical points.) In the letters to Arnauld, where it seems clearest that Leibniz has it in mind to advocate for a theory of composite, corporeal substance, that is exactly how he himself weaves the two arguments together. In later writings where it seems that a theory of simple substance is preeminent instead, the two appear to come apart, the thread containing the Principles of Unity Argument seeming hardly visible at all, while the one carrying the Borrowed Reality Argument continues forward in a prominent role of its own.

3. Multitude

There is a third key argument concerning unity that occurs in Leibniz’s texts, and it too requires some care in order to be distinguished from the others. The idea of the argument is very simple. If there are many things—what Leibniz sometimes call ‘multitudes’—then there must also be beings which are single things, or, to introduce yet another use for the term, unities. Obviously this seems close to the Borrowed Reality Argument in its move from many things to unities, and it too first occurs in the letters to Arnauld. But the ideas and inferences are different,
involving no appeal to the concepts of “divisibility” or “consisting of” or “borrowing reality.” It is rather more narrowly logical in character, though it is not without metaphysical content and consequences. Let us consider its first and most famous statement, prompted by Arnauld’s assertion that there may be many things without any of them being unities. Leibniz writes:

[T]here is no multitude without true unities. To be brief, I hold this identical proposition, differentiated only by the emphasis, to be an axiom, namely, that what is not truly one being is not truly one being either. It has always been thought that ‘one’ and ‘being’ are reciprocal. Being is one thing and beings are another; but the plural presupposes the singular, and where there is no being still less will there being many beings. What could be clearer? (GP II,97/M 121)

Little needs to be added to this crystal of thought, and I have belabored the details already elsewhere, so for the moment let me offer just a few remarks. The argument proceeds from two premises. First, the reciprocity of ‘being’ and ‘unity’:

(1) Something is a being if and only it is a unity.

Second, “the plural presupposes the singular”:

(2) If the xs are many, then there exists a y such that y is one of the xs.

I cast premise (2) with the help of plural and singular variables not for the sake of anachronism of style but to bring out what I take to be the point of the premise and the concept of unity at play in the argument as a whole. (For what it’s worth, Leibniz pioneers the use of plural variables in his logic, and the phrase ‘is one of’ used in this way is borrowed directly from his writings.) If there are many beings, then there must be something that is one of those many, something that is not itself many things. And if something truly is one being, it is thereby truly a single thing, a unity: the difference, as Leibniz says, is only one of “emphasis.” The notion of unity here just is that of a single thing, as opposed to many things, something that can be a value of a singular variable of quantification, so to speak. The point of the argument is that there cannot only be multitudes within multitudes ad infinitum. Eventually any multitude must include some things each of which itself is a single thing. Putting the reasoning in the negative: no unity, no being; no being, no beings; no beings, no multitudes. The conclusion to be drawn is:
(3) There are many beings only if there exists a unity.

Or for a more natural phrase, we might say that multitudes presuppose unities.

Call this ‘the Multitude Argument’. Unlike the Borrowed Reality Argument, it is silent about whether anything must have unborrowed reality or be in any respect divisible or indivisible or be reducible to prior constituents. Those metaphysical questions, however compelling and naturally aligned with the points of the Multitude Argument, are beyond its scope. It says very little, in fact, and imposes only the thinnest logical or mathematical requirement on being. If there are any things at all, some of them must be single things. What it takes for something to be a single thing—some one thing—is a question for further metaphysical debate. The only positions definitely ruled out by the Multitude Argument are ones that would deny the idea that the concept of a single thing or unity is essential to the topic of being.

There are two forms such a denial of unity might take. One would be to get by without unity by trying to posit multitudes without single things. Against this position, I am inclined to see the Multitude Argument as correct and decisive. So long as ‘being’ is understood as implying some concept of cardinality or many-ness, I see no reasonable prospects of denying either premise. And the argument is obviously valid. (Need an intermediate premise? Try: ‘if there are $x$s such that $y$ is one of the $x$s, then $y$ is a being’. If ‘is a being’ is proxy for a quantificational term, this premise is a trivial theorem of plural logic.)

A second form of denying that being requires unity would be to deny that ‘being’ automatically implies a concept of cardinality or many-ness. Suppose we allow a non-cardinal notion of being, one that involves only a mass or measure concept instead. The tradition of recognizing the elements earth, air, fire and water—or homoiomerous magnitudes more generally—as cases of being might be seen as embracing the idea of being without unity. There may be much water but this needn’t mean that any water is some one thing. Arnauld had such cases in mind in his letters to Leibniz when he suggested that it was the nature of matter to lack unity, and (mistakenly) thought that Leibniz himself was committed to it in cases “where each part remains of the same nature as the whole, like metals, stones, wood, air, water and other liquid bodies” (GP II, 85). (In fact Leibniz thinks all these things too resolve into tiny living beings and are not truly homoiomerous.) A defender of this category of being would resist premise (1), the axiom of the reciprocity of unity and being. To rule out this idea about being,
it is not yet enough simply to insist that whatever is a being is a unity, for that presupposes the “cardinal” conception of being; other reasons would have to be marshaled.

It is notable that contemporary efforts to capture the semantics of mass terms like ‘water’, etc., typically end up adverting to an underlying scheme of singular count terms and a related background domain of entities that are readily counted as unities in the sense required by the Multitude Argument: values of singular variables of quantification. This may simply reflect the prejudices inherent in the usual devices of semantic theory. But some accounting of the semantics of mass terms is in order if the idea of being without unity is to be properly understood and articulated. Escaping from unity is not as easy as it might seem. In any case, whether there is a viable position that can coherently reject the reciprocity of unity and being, and thus resist Leibniz’s Multitude Argument, will not be resolved here. It is enough for now to see where the issue will lead.

So we see that the Multitude Argument has some metaphysical bite of its own after all, ruling out at least two positions that a metaphysician of matter might have wanted to consider. Still, those are rather radical positions, and when we turn to the more familiar landscape of “countable” objects, we should recall the modest scope of the Multitude Argument. It does not prove that multitudes presuppose simples, or indivisibles, or unborrowed realities, or possession of a principle of unity. Further premises would be required to reach consequences involving any of those concepts.

4. From Unity to Simplicity?

A quick review of the preliminary results of our inquiry will help to prepare for its next stage in which we consider how the Borrowed Reality and Multitude Arguments might be extended to yield a claim of simplicity and not just unity.

Each of the three arguments we have considered leads to a sort of “presupposition” thesis concerning unity. For the Principles of Unity Argument, the thesis was that bodily substances presupposes incorporeal forms as principles of unity. As before, this sets it apart from the two subsequent arguments because it takes the existence of its “unities”—namely, bodily substances—for granted as a premise. The existence of those unities presupposes something, specifically, forms or souls. By contrast, the Borrowed Reality and Multitude Arguments introduce unities as what must be presupposed by the existence of something else. For the
ON UNITY, BORROWED REALITY AND MULTITUDE IN LEIBNIZ

Borrowed Reality Argument, the thesis is that aggregates presuppose unities, i.e. things that are not aggregates but beings with unborrowed reality. For the Multitude Argument, the thesis is that multitudes presuppose unities, i.e. things that are not multitudes but single things. In order both to keep some distance between the different concepts at play under the single title ‘unity’ in these latter two arguments, and to identify key claims that will appear later on as lemmas in arguments for simple substances, allow me to introduce a few labeled propositions. Both are simply corollaries of the main theses of the two arguments. The first is from the Borrowed Reality Argument:

AGG Any aggregate has constituents that are not aggregates.

The second, from the Multitude Argument:

M There is a multitude only if there is something that is not a multitude.

As we have emphasized, the unities of the Borrowed Reality and Multitude Arguments are not defined by those arguments to be simples. Nor indeed does Leibniz claim that the arguments prove them to be simples. But he does seem to change his interpretation of the facts described by the Borrowed Reality and Multitude Arguments, sometime around 1700, so that it is clear that he takes those unities to be simples. This is of course consistent with those arguments, which admit different models. Of interest here is what reasons Leibniz has for adopting his later interpretation. As is widely noted in Leibniz scholarship, there is a dispute about whether this all amounts to a change of mind for Leibniz, a switch from an earlier theory of corporeal substances to a later theory of simple ones. For present purposes this vexed developmental question can be, to some extent, bracketed. At the moment I wish to focus more narrowly on the analytical question of how the Borrowed Reality and Multitude Arguments—both standing arguments of the middle years—can be supplemented to yield direct arguments for the existence of simple substance, and how good those arguments appear to be, once supplemented. But it turns out this is not too abstracted from the history. For the supplemented versions of those arguments appear to be stated by Leibniz himself in canonical late-period texts, and so are plausibly seen as important rationales for his theory of simple substances.


117
5. Multitude Plus

The first argument for simples we shall consider looks to be an extension of the Multitude Argument, and it appears in the 1714 “Principles of Nature and Grace,” article 1, where Leibniz writes:

*Compounds or bodies are multitudes;* and simple substances—lives, souls, spirits—are unities. And there must certainly be simple substances everywhere for without them there would be no compounds. (Italics added. GP VI,598/AG 207)

The italics indicate a crucial premise, one that did not appear in earlier formulations of the Multitude Argument. If the claim is that anything that is a compound—by which I take it Leibniz means something that contains many components or constituents—or a body is a multitude, then it certainly adds enough to the Multitude Argument to license the inference to the claim that the unities whose existence it establishes are simple substances. Calling the added premise ‘APM’ (for “Added Premise in the Multitude Argument”), and appealing to the corollary M of the original Multitude Argument, the new argument, which I’ll call ‘Multitude Plus’, may be briefly stated as follows:

\[
\text{M} \quad \text{There is a multitude only if there is something that is not a multitude.}
\]

\[
\text{APM} \quad \text{Compounds or bodies are multitudes.}
\]

Therefore,

\[
\text{M+} \quad \text{There is a multitude only if there is something that is a simple.}
\]

It is easy enough to elaborate the argument in full detail, but that can be confined to a note. Here we suppose that ‘simple’ means something that has no components, no constituents, and so it contrasts exactly with ‘compound’ which means the opposite. There may be a little delicacy in interpreting Leibniz’s phrase ‘compounds or bodies’ in the added premise APM, since it is not perfectly clear whether he intends to indicate equivalence or alternation. Given that Leibniz patently regards all bodies as having components, the more natural reading here is that of a clarifying equivalence, indicating what concretely he has in mind as a compound. But in any case the force of the argument would be the same so long
as all bodies qualify as compounds: the existence of compounds or bodies presupposes not merely unities but simples. (The occurrence of ‘body’ in APM also means that the argument shows these simples to be incorporeal, but we leave that aside to focus on the question of simplicity.)

One last fine worry about the interpretation of APM. It may be that Leibniz has in mind by ‘compounds or bodies’ precisely those things that he elsewhere calls ‘aggregates’, and in that case the argument would not be so sweeping in scope. For it would be consistent with the idea that some beings that have components or constituents are not multitudes—namely, those composite beings, if there are any, that are true unities and not mere aggregates, for instance, corporeal substances of the middle years. But if so—if ‘compounds or bodies’ were tacitly limited in this way to aggregates—then the argument for simples would not seem to go through, because there would be nothing in it to demand that those things which are not multitudes are simple unities rather than composite ones. (Some further premise demanding that unities are necessarily simples would be needed to close the gap.) Or alternatively, on that restricted reading of ‘compounds or bodies’, it is possible that the passage from “Principles of Nature and Grace” is not reporting an argument for simples at all, but just recapping the Multitude Argument, or something like it, together with an undefended statement of Leibniz’s belief that the multitudes are ultimately made up of simples.

I cannot rule out that limited reading of ‘compounds or bodies’ in this passage. Given Leibniz’s occasional proprietary use of ‘body’ as coding a contrast with ‘substance’, it is a natural one. He himself was at times inclined to regard even corporeal substances as partless in a certain respect: though their organic bodies are divided into parts, the unified corporeal substance is, somehow, nonetheless an atom (one whose only “parts” are form and matter).23 And Leibniz is not above appearing to give reasons available to a neutral inquirer while quietly importing his theoretical commitments in the use of common terms and so, in effect, talking mostly to himself. All this is possible, and if true in the present case, it would certainly dilute the interest of the passage. For the sake of our inquiry, however, I’m going to assume that the passage is intended to present an argument for simples—one that aims to give supporting grounds for its conclusion without simply presupposing it—and that it is not just obviously invalid in the way it would be if ‘compounds or bodies’ were tacitly limited to aggregates. That is, I shall for present continue to read its argument as Multitude Plus.

Multitude Plus, then, offers an argument from Leibniz that clearly reaches the
conclusion that simples exist and does so on the strength of its premises. It also establishes simples in their expected role from the later metaphysics as the elements of all things, since the argument leaves no room for anything else. Everything is either a multitude or else a simple. Multitudes are not single things and so will fail to be substances by Leibniz’s central criterion: a multitude is not “some one thing,” not a unity. Thus Multitude Plus, attached to Leibniz’s long-standing unity criterion for substance, yields the familiar thesis that only simples belong in the category of substance. That’s the upside of the argument: it so clearly links unity to simplicity. The downside of the argument, however, is that the added premise APM—that compounds or bodies are multitudes—seems too strong. All by itself it implies that everything is either a multitude or else a simple, so only simples are going to be candidates for unity. Why accept that? What happened to the middle ground of the middle years?

It should be no surprise that APM is too strong. When we recall how weak a constraint is imposed by the original Multitude Argument, it is clear that the great bulk of the metaphysical burden is falling on APM. Unlike the other premises of Multitude Plus, the content of APM is not just natively plausible on its own, or not obviously so. Nor was it always so for Leibniz in particular, who seems to have held an opposing view for much of his career. One would like to find in Leibniz some ground for explaining why APM should be accepted, or at least why he came to accept it.

Certainly there are principles of the first importance to his philosophy that will rule against the idea that just any collection of things at all can form a unity. For instance, he has profound reasons for denying that infinitely many elements can all be components in a single thing, based on his analysis of mathematical paradoxes concerning the infinite. But those paradoxes do not warrant the denial of unity to all collections, as APM would appear to do; they apply only to infinite collections. If APM were a response to those concerns, it would be an over-reaching one. (Consider the parallel: it would be as if to conclude from the paradoxes of naïve set theory that no sets exist, or that only singletons exist, when less drastic measures will do.)

Still, a weaker version of APM, a principle that said only that all infinite compounds are multitudes, would yield a dramatic metaphysical result when paired with the Multitude Argument. All bodies would be excluded from the category of substance, since on Leibniz’s account every body contains an infinity of parts. In fact Leibniz uses the infinitude of the universe and the impossibility of infinite
collections forming a single whole to deny that there could be a “world soul,” something that would make some one thing out of the infinite universe (cf. A VI,4,1509; GP VI,232).

Scholars have pointed out that a parallel argument would seem to threaten the idea that individual corporeal beings could have souls either, given their infinite division into parts.\(^{25}\) It may be possible to answer this worry on Leibniz’s behalf, but he himself does not appear to have considered it a problem. More relevant to our current concerns, Leibniz says nothing to indicate that APM, whether in a weakened version or in its full-strength one, is based on his analysis of the paradoxes of the infinite. If Multitude Plus—or even the weaker version of it that would just rule out bodies—is drawing on those ideas, it is doing so quite invisibly, and the passage from “Principles of Nature and Grace” is omitting a premise that no one could be expected to divine from Leibniz’s words.

It is not just the passage from “Principles of Nature and Grace” that seems to link the analysis of multitude to simplicity. Variants or at least signs of the Multitude Argument being associated with a doctrine of simple substances, and not just unities, appear in many texts in Leibniz’s later writings, starting around 1700. For instance, in a letter to Sophie of 12 June 1700, which may record the first clear use of ‘simple substance’ in its characteristic employment to describe a monadological theory of substance, Leibniz writes:

Everyone is agreed that matter has parts, and consequently it is a multitude of many substances, as a flock of sheep would be. But since every multitude presupposes true unities, it is obvious that these unities cannot be material, otherwise they would, again, be multitudes, and not true and pure unities, as are needed to makeup a multitude. And thus the unities are substances apart, which are not divisible, nor, as a consequence, perishable, since everything which is divisible has parts that one can distinguish there before separating them. However, since we are dealing with unities of substance, there must be force and perception in these very unities, since without that there would be no force or perception in all that which is made of them, which can only contain repetitions and relations of that which is already in these unities. And thus in bodies which have sensation there must be unique substances, or unities which have perception. It is this simple substance, this unity of substance, or this monad, which one calls soul. And consequently, souls, like all of the other unities of substance are immaterial, indivisible, and imperishable, since all destruction of substantial things can only be through dissolution. And if


121
these unities once have life, they must be immortal and always live. These unities truly constitute substances, and every unity makes up a unique single substance; everything else are only beings by aggregation or multitudes. Or better, they are accidents, that is attributes that endure or transient modes that belong to substances. (A I,18,113-14/translated in Garber (2009, p. 342)).

Multitude Plus is clearly the lead argument at the start of the passage (hints of the Borrowed Reality Argument can be detected as it goes on), and the explicit identification of “unity of substance” with “simple substance” and “monad” shows that Leibniz has this line of argument at the heart of his metaphysical analysis of substance at this moment. But still there is no clue about why there should be a forced choice between multitudes and simples, and a fortiori no evident appeal to mathematical paradox to support the claim that all compounds or bodies are multitudes.

So APM, which carries the real burden of the argument in Multitude Plus, seems to appear without fanfare and without any obvious evidence of Leibniz’s reasons for accepting it. For someone who already accepted the conclusion of Multitude Plus, APM might seem attractive. But it is hard to see what independent support it enjoys. Until we have a better understanding of what justification there is for the premise in his philosophy, I think we should see this as a significant weakness in the argument. If Leibniz has a compelling case for interpreting unities as simples, it may have to be found elsewhere in his metaphysics. For another candidate, we need not look too far, however.

6. Borrowed Reality Plus

Just as the Multitude Argument together with a new premise yields an argument for simples, so too does the Borrowed Reality Argument. And again, the model for this appears in a canonical late text, this time the “Principles of Philosophy,” i.e. the so-called “Monadology,” sections 1 and 2:

(1) The monad, which we shall discuss here, is nothing other than a simple substance, that which enters into composites; simple, that is to say, without parts. (2) There must be simple substances, since there are composites; for the composite is nothing other than a collection or mass or aggregate of simples. (1714. GP VI,607/AG 213)

The added premise for the Borrowed Reality Argument, which I’ll call ‘APBR’, is the last clause in section 2. Coupling it with the corollary AGG from the original
Borrowed Reality Argument, we have the following:

**AGG** Any aggregate has constituents that are not aggregates.

**APBR** Composites are aggregates.

Therefore,

**BR+** Any composite has constituents that are simple.

I take it that ‘composite’ means anything that has parts, so it contrasts very exactly with Leibniz’s own explanation of ‘simple’ in the same passage. Again there is delicacy in the question of just what Leibniz is claiming here. It can be tempting to read ‘composites’ as contrasting not with ‘simple’ but with ‘simple substance’, given the syntax of the line, in which case ‘composites’ might mean composite substances, real beings that are one *per se* even though having many parts. But I think that cannot be right in this case, since the assertion that composites are aggregates places composites on the opposite side of Leibniz’s distinction between aggregates and substances.

Once again the added premise is carrying important metaphysical weight, but APBR is not by itself quite so strong in its implications as APM was. True, it marks an apparent change of mind on Leibniz’s part. Where before some composites were not automatically counted as aggregates, i.e. borrowers of reality, this is now being ruled out. Still, this new premise has more to say for it, I suspect, than did APM. Composites have parts, and the claim of APBR is, in effect, that the reality of something with parts comes entirely from the reality of the parts themselves. A whole is not “more than the sum of its parts.” Unlike APM, which immediately eliminated the category of compounds or bodies in favor of multitudes,26 APBR just introduces a principle about the relation between parts and wholes, and not an obviously false one either.

To be sure, in the presence of Leibniz’s other principles about aggregates—namely, the Borrowed Reality Argument and its claims that aggregates borrow reality and that it’s absurd for there be no reality that is not borrowed—powerful conclusions can be extracted with the help of APBR. Now, however, we have a wider field of premises to choose from in deciding whether Leibniz’s argument for simples includes some mistake. APBR is not doing all the work itself.
As I see it, there is really only a slight initial increase in the content of the premises in Borrowed Reality Plus relative to the original Borrowed Reality Argument. The original version proceeds from the claim that anything that can be divided into many things consists of many things, where ‘can be divided into’ and ‘consists of’ have reasonably strict interpretations. The extra detail added now just comes to this: anything that has parts can be divided into many things. That’s enough to light the fuse for the rest of the argument and reach the conclusion that there are simple substances. And at a glance, it doesn’t seem overly ambitious to say that anything that has parts can be divided into many things—divided into those very parts, for instance.

As before, however, this is not as innocuous as it appears. For ‘can be divided into many things’ does require a fairly strict reading in order to underwrite the inference to ‘consists of many things’, and further to ‘borrows its reality from its constituents’. Perhaps for anything that has parts there is some sense of ‘divisible’ in which it will also be divisible into many things. But the sense relevant to the argument is quite demanding, and so the assertion that anything that has parts is divisible in this particular way is going to be harder to defend.

Let me slow down the discussion just a bit more to make as explicit as possible the initial steps in the reasoning that will generate Borrowed Reality Plus. To reduce clutter for the next bit of exposition, I’ll introduce a few labels for concepts that Leibniz’s reasoning trades on:

- **Has Parts** $x$ has many parts
- **Divisible** $x$ can be divided into many things (parts)
- **Consists** $x$ consists of many things (parts)
- **Borrows** $x$ borrows its reality from its constituents (the many things or parts)

Even before we get to the tricky question of whether there could be something with no reality that is not borrowed, Leibniz’s argument lays out a series of putative entailments:

(a) **Has Parts** $\rightarrow$ **Divisible**  
(b) **Divisible** $\rightarrow$ **Consists**  
(c) **Consists** $\rightarrow$ **Borrows**

This underlies both APBR, i.e. the premise that composites are aggregates, and the claim that aggregates borrow their reality. Each step in the series looks independently plausible, but I think if we find ourselves reading this chain of infer-
ences as all relatively innocuous, we must also be equivocating to a degree at least at some point along the way.

I began my analysis of the original Borrowed Reality Argument by leaning on (b) and (c) in order to draw our attention to the demands of Divisible, given the implications Leibniz draws from it. Now scrutiny is falling instead on (a), noting that having parts might not automatically entail being divisible into many things in the relevant respect. So perhaps the enticing equivocation occurs between (a) and (b), shifting the standard for divisibility across the gap. To some extent, though, this is an artifact of the exposition. One could sugar coat (a) and (b) and then say the step from (b) to (c) is where some equivocation takes place, as the criteria for ‘consists of’ are quietly ramped up. That will be a matter of emphasis and I don’t mean to insist on either diagnosis.

If, like me, one is troubled by the rapid arrival of the conclusion of Borrowed Reality Plus but inclined to agree with Leibniz that it doesn’t really make sense for there be no reality that is not borrowed, I hope at least it is clear at what initial points the argument may have to be resisted. Otherwise, one faces getting comfortable either with the idea of an unending regress of only borrowed reality or else with accepting, in such short order, Leibniz’s conclusion that there must exist simple substances in all composites.

It should be remembered here that ‘simple substance’, as it is defined by the argument, is just that of a being without parts. In the context of other metaphysical principles that Leibniz embraces—such as that all bodies have parts and that mathematical points cannot be the first elements of any actual beings—the simples will turn out to be immaterial beings. But one who does not endorse those other principles is free to read this argument as a striking case for atomism that might be interpreted to show, with plausible supplementary principles, that everything reduces to fundamental particles. Recall how, in Leibniz’s own view, Epicurus or Cordemoy could accept the conclusion of the original Borrowed Reality Argument, as could someone who would make up extension from mathematical points. The same is true of this successor version. Monads of the celebrated sort are not automatically in the offering from Borrowed Reality Plus. It is, in any case, a fascinating line of thought that is not obviously incorrect exactly as it stands. And by comparison with Multitude Plus, whose central premise APM has so little to say for it independently of the conclusion it is used to reach, Borrowed Reality Plus looks to be much the more promising argument.
7. Drawing or Overdrawing the Distinction?

In the foregoing analysis I have stressed the differences between the Borrowed Reality Argument and the Multitude Argument, in both their original and their ‘plus’ forms, trying to separate the conceptual issues they address and to get a clearer measure of their respective strengths and weaknesses. With an eye on the texts, however, it might seem that I am overdrawing the distinction—drawing it more definitely and more finely than Leibniz himself understands it, at any rate. For the two arguments appear interleaved with one another often enough that it is not clear Leibniz regards them as distinct lines of thought rather than variants of one another.

Some texts are easy to parse, such as the letter to Arnauld of 30 April 1687, which contains exemplary statements of the two arguments and has the decency to present them in clear sequence on different pages (cf. GP II, 96 and 97). Other texts are more difficult, with the lines of thought so closely interwoven as to make it hard to distinguish the strands or know just which Leibniz means to be putting forward, if the arguments are intended to be different. Consider a handful of examples.

In a 1694 letter to Amable de Tourreil, which contains perhaps the latest completely clear expression of his Principles of Unity Argument, we find signs of both Borrowed Reality and Multitude as well:

All bodies are actually divided into an infinite number of parts, so that if there were nothing but extension in bodies, there would not be corporeal substance, nothing of which one could say ‘Here is truly one substance’. For all corporeal mass is an aggregate of other masses, and those of others, and so on ad infinitum. Thus bodies would be reduced to pure appearances if they had in themselves only extension or a multitude, and nothing in which there was a principle of true unity. (GP VII,444/translated in Hartz (2007))

Principles of unity, aggregates and multitudes are all in the mix here, and even if it’s easy to see that the Borrowed Reality and Multitude Arguments are just below the surface of the text, it’s not clear that they are distinguished from one another.

Likewise in a passage from the 1695 “New System of Nature,” it seems ideas from all three lines of argument (if they are three and not two or one) are interlaced:

In the beginning when I had freed myself from the yoke of Aristotle, I accepted the void and atoms, for they best satisfy the imagination. But on recovering
from that, after much reflection, I perceived that it is impossible to find the *principles of a true unity* in matter alone, or in what is only passive, since everything in it is only a collection or aggregation of parts to infinity. Now, a multitude can derive its reality only from *true unities*, which have some other origin and are considerably different from mathematical points which are only the extremities and modifications of extension, which all agree cannot make up the *continuum*. Therefore, in order to find these *real entities* I was forced to have recourse to a formal atom, since a material thing cannot be both material and, at the same time, perfectly indivisible, that is, endowed with a true unity. Hence, it was necessary to restore, and, as it were, to rehabilitate the *substantial forms* which are in such disrepute today. (GP IV 478ff./AG 139)

Plainly the trace of the Principles of Unity Argument is visible. The occurrence of the term ‘multitude’ may be a gesture toward the Multitude Argument, but the reasoning in which it is embedded is pretty obviously the Borrowed Reality Argument. So in this passage ‘unity’ or ‘true unity’ seems to be reflecting contrasts with all three opposing ideas: the idea of a not-really-unified collection or heap, the idea of something with borrowed reality, and the idea of a multitude.

Leibniz makes a notable revision to the final lines of this text, which refocuses his point somewhat to fix even more sharply on the concept of unity. Does it sort out which arguments are central?

Therefore, in order to find these *real unities*, I was forced to have recourse to a *real and animated point*, so to speak, or of an atom of substance which must include something of form or activity to make a complete being. Hence it was necessary to restore … (GP IV 478f./AG 139n193)

No, not definitely, though it perhaps reinforces the idea that Borrowed Reality is the driving argument here. For the concept of an atom—something that has no parts or is indivisible—which Leibniz stresses again in the revision is more properly the province of the Borrowed Reality Argument.

Above we looked at a letter to Sophie from June of 1700 to see a passage expressing Multitude Plus as an argument for simple substances, though with some hints also of the Borrowed Reality Argument. In a subsequent letter to Sophie, dated 19 November 1701, we seem to have another example of Multitude Plus. But this time it carries more evident signs of the companion Borrowed Reality Argument as well:

…however, every multitude must be formed and composed of an assemblage of true unities…. Now, that which has neither parts nor extension, doesn’t have any
shape either, but it must have thought and force or effort, the source of which one also knows cannot come from extension or shapes. Consequently, we must seek this source in the unities, since there are only unities and multitudes in nature. Or rather, there is nothing real but the unities, since every assemblage is only the mode [façon] and appearance of a being, but in truth it only has being insofar as it contains true unities. … From this one can conclude that there are unities everywhere, or rather, that everything is unities. (A I, 20, 74-75/translated in Garber (2009, p. 343))

The contrasts between ‘multitudes’ and ‘unities’ suggests Multitude, and if unity entails simplicity then the claim that “there are only unities and multitudes in nature” is equivalent to APM (without the entailment presupposed, the claim is just true by definition and trivial). Still, all that holds only if the key terms mean what they do in the Multitude Argument. Yet the words themselves are not unambiguous, and the claim that an “assemblage” is something that “has being only insofar as it contains unities” looks like the stamp of the Borrowed Reality Argument, and the more so since ‘assemblage’ is often an alternate for ‘aggregate’ in Leibniz’s use of those terms. So it is hard to say for certain what the intended line of thought is here.

Similarly, earlier I pointed to passages from a pair of letters Leibniz wrote to de Volder in 1704 as paradigm examples of the Borrowed Reality Argument. Yet in a letter of 20 June 1703, the signature “being-and-unity” axiom of the Multitude Argument—or Multitude Plus, with its assertion of simple substances—comes to the fore. And this time it seems to contrast ‘unity’ with ‘aggregate’ (rather than ‘multitude’), as if to be assimilated with the Borrowed Reality Argument:

I regard substance itself … like the ‘I’ or something similar, as the indivisible or complete monad. … And if there is nothing that is truly one, then every true thing will be eliminated. … [S]ince simple things alone are true things, the rest are only beings through aggregation, and therefore phenomena, and, as Democritus used to say, exist by convention not by nature. (GP II 251, 252/translated in Garber (2009, p. 345))

The principle of the reciprocity of unity and being is joined together with an argument about the elimination of all being and the idea that aggregates require unities, a seeming fusion of the ideas from the Multitude and Borrowed Reality Arguments.

All this is enough to make one wonder whether Leibniz is not using ‘aggregate’ and ‘multitude’ much more interchangeably, and whether the ideas and argumen-
tation are not in truth just more fluid in his thought, than my analysis would suggest. So Garber’s calling all this the ‘aggregate argument’, rather than separating out two distinct arguments as I have done, certainly has some justice.

On the charge of overdrawing the distinction between Borrowed Reality and Multitude, I suppose I should plead ‘no contest’. At least as a matter of pinpointing Leibniz’s intentions, it can hardly be denied that the elements of his thought coalesce in different ways at different moments. Readers familiar with other facets of his thought about the reality of substance—force, activity, completeness, shape, extension, etc.—will have noted passing hints of those too across the texts just surveyed and will recall how characteristic this is of Leibniz’s writings. The aim of my discussion has been largely analytical, to put as sharp a focus as I can on the clearest expressions I can find of Leibniz’s arguments and lay them open for consideration on their own terms. On this score, deciding which texts contain those clearest expressions is not separate from the judgment of what his arguments are. If I have fastened upon texts that are the most tempting to read as expressing different philosophical ideas and different forms of argumentation, I hope those ideas and arguments are worth the price of giving those texts priority. And I trust that the texts themselves—ones already highlighted by commentators if not always parsed quite so deliberately—give reasonably clear evidence that no great distortion of Leibniz’s thought takes place in distilling out the different arguments as I have done. Attention to the more fluid passages we have just reviewed should offer a corrective if one is needed.

What this brief survey does bring out, I think, is how consistently central the Borrowed Reality Argument is to Leibniz’s case for positing unities. Signs of the Multitude Argument, or Multitude Plus, are more flickering. And in cases where ‘aggregate’ and ‘multitude’ seem to be interchangeable, it seems to be ‘multitude’ that is put in the service of the Borrowed Reality Argument rather than ‘aggregate’ being assigned to the Multitude Argument. This calls into doubt whether the brief passage in article 1 of “Principles of Nature and Grace” is really intended, as I interpreted it, to express Multitude Plus, rather than Borrowed Reality Plus. If it is not, then the nice contrast between the direct argument for simples at the start of “Principles of Nature and Grace” and that of the opening sections of “Monadology” disappears, and the case for thinking that the Multitude Argument from the letters to Arnauld later evolves into Multitude Plus, with its powerful added premise APM, is whittled down to the 1700 letter to Sophie, in which the crucial premise APM is not explicit.
Myself, I still prefer to see both Multitude Plus and Borrowed Reality Plus as having continued life in Leibniz’s later thought, carrying forward the different genetic material of their ancestral forms into two canonical late documents. But if Multitude Plus is not, in the end, a rationale that Leibniz relies upon in making the case for simple substances, there is a reason not to be too disappointed. It is the weaker argument.27

Received 7 January 2013

Samuel Levey
Department of Philosophy
Dartmouth College
6035 Thornton
Hanover, NH 03755
USA
samuel.s.levey@dartmouth.edu

References

Brown, Gregory. 2005. “Leibniz’s Mathematical Argument Against a Soul of the
ON UNITY, BORROWED REALITY AND MULTITUDE IN LEIBNIZ


131
SAMUEL LEVEY


Notes

1 Garber introduced this label; see his (1985) and (2009, pp. 74-6).
2 See Levey (2003b), (2007) and (2011a) for earlier hints of this proposal.
3 Translations of Leibniz generally follow those of AG, Ar, H and LA, when available, as noted; I have sometimes modified translations without comment.
5 A VI,4,555-6,1464; GP II, 58,73,88,96-7,100-1; GP IV,492.
6 Some commentators read this argument as involving the statement that there are bodily substances only as the antecedent of a conditional, not a categorically asserted premise, and thus see Leibniz as concluding only that if there are bodily substances, then there are incorporeal forms. See Rutherford (2008) and Doggett (2010). For some defense of my categorical reading, see Levey (2008). In any case, the more cautious conditional reading suffices for the purposes of this paper. For this reason I separate the disputed premise (0) from the others in presenting the Principles of Unity Argument. Commentators divided on this point should still be able to agree to lines (1)-(6) of my formulation in the text.
7 See, for instance, *Principles of Philosophy* I 53 (AT VIII.i:25), I 63 (AT VIII.i:30-1); and II 19 (AT VIII.i:51).
8 One can adopt a view of wholes as not simply reducible to the many parts and their arrangement (thus not aggregates in Leibniz’s sense) while rejecting the slogan “the whole is more than the sum of its parts.” See Peter van Inwagen (1990, esp. 29-30) and (2006) for careful discussions of mereological sums. I count van Inwagen’s own view of wholes, as exemplified in his (1990), as an instance of a “magic in the connection” account and Leibniz’s theory of forms as an example of
a “magical extra ingredient” account—modulo, of course, the glib term ‘magic’. I have no actual example to offer of a “magic in the history” account; although some philosophers have been tempted to include historical properties in individuating entities or species, I do not know of any who appeal to this as a condition for something’s unity.

9 Cf. G IV, 491-2, G II, 298.


11 Arnauld writing to Leibniz, 4 March 1687; GP II, 87.

12 Leibniz’s example there is “number,” which he understands as an aggregate of unities, e.g., 6 = 1+1+1+1+1+1. But the same sentiment plainly applies to real material aggregates, which distinguishes them from ideal continuous quantities such as geometrical lines. Cf. A VI,3,.502; GP II, 282; GP IV, 491-2; GP VII, 562.

13 Thanks to Anubav Vasudevan for this suggestion.

14 There are other variants of non-well-foundedness, including self-membership; see Barwise and Moss (1996). For the iterative conception of set, see Boolos (1971).

15 S. Levey, (2003b), esp. 261-7; there I refer to this as the ‘unity-and-plurality argument’. I hope the new label is better.

16 See Levey (2011b).

17 Again, see Levey (2003b) for discussion and defense.

18 Thanks to Christopher Frey for this suggestion.

19 For some discussion of Leibniz and Arnauld on this point, see Levey (2003b).

20 For the classic discussion, see Cartwright (1965) and (1970).

21 In Levey (2007) I consider how the Principles of Unity Argument might be extended to yield an argument for simples.

22 The argument may be stated as follows.

1. There is a multitude—i.e. there are many beings—only if there is a being.
2. Something is a being only if it is a single being, i.e. a unity.
3. No unity is a multitude. (by definition of the terms)
4. So, there is a multitude only if there is a unity.
5. So, there is a multitude only if there is something that is not a multitude. (M)
6. Compounds (or bodies) are multitudes. (APM)
7. So, there is a multitude only if there is something that is not a compound (or a body).
8. So, there is a multitude only if there is something that is a simple (and not a body). (M+)

For discussion, see Levey (1998) and (2003a) and the Introduction to Arthur 2001.

For discussion of the issue of the world soul and its complications, and references to an extensive recent literature, see Brown (2005).

That is to say, APM directly licenses rewriting all reference to compounds or bodies into plural reference to simples.

Thanks to Christine Thomas and Jeffrey McDonough for help with many points and ideas in this paper, too many to note case by case any longer. And thanks as well, for helpful feedback, to the audience who heard an early ancestral version of this material given at the 2008 Margaret Dauler Wilson Memorial Conference in Ithaca, New York, and to members of the Early Modern Philosophy and German Philosophy Workshops at the University of Chicago, in 2012, who read and discussed a recent draft. Thanks finally to a referee for this journal for many helpful comments.