

Leibniz and the Fardella Memo

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Sommaire

De nombreuses études récentes ont mis en doute l'interprétation traditionnelle de Leibniz comme idéaliste depuis, au moins, la composition du *Discours de métaphysique* (1686). En particulier, dans un nouveau livre Daniel Garber affirme qu'entre la fin des années soixante-dix et la fin des années quatre-vingt-dix Leibniz soutient une doctrine réaliste selon laquelle le monde créé est peuplé de substances corporelles étendues. En tâchant de prouver sa thèse, Garber fait appel à un document écrit en 1690 où Leibniz, en répondant à une objection de Michelangelo Fardella, nie que les corps sont composés d'âmes, déclare que les âmes sont des formes substantielles, et affirme que les corps sont composés plutôt de substances. Selon Garber, ceci montre qu'alors Leibniz croyait que les corps étaient composés, non pas de substances simples, mais de substances étendues possédant des âmes. Ici je tâche de montrer que, bien au contraire, le document mentionné (ainsi que deux autres associés avec celui-ci) soutient l'interprétation traditionnelle de Leibniz comme idéaliste en 1690.

Introduction

In his recent book, *Leibniz: Body, Substance, Monad*, Daniel Garber argues that in the period stretching roughly from the late 1670s to the late 1690s “Leibniz had not yet come upon the monological metaphysics that will characterize his later years,” and that what one finds in this period instead is “a metaphysics grounded in corporeal substance, extended unities of matter and form.”¹ In the course of presenting his argument for this claim, moreover, Garber appeals to a document that has come to be known as the “Fardella memo” (A VI, 4 B, 1666-71), a text of 1690 in which Leibniz can be found responding to some objections made against his views by the Cartesian scholar Michelangelo Fardella. In particular, Garber observes that we find Leibniz claiming in this text that a body is not composed of souls, but of substances, and that “the soul, properly and accurately speaking, is not a substance, but a substantial form or the primitive form existing in substances, the first act, the first active faculty.”² And this claim, Garber argues, shows that at this

¹ Daniel Garber: *Leibniz: Body, Substance, Monad*, Oxford - New York 2009 (hereafter: *Leibniz: Body*), p. xix.

² A VI, 4 B, 1670: “Anima autem propria et accurate loquendo non est substantia, sed est forma substantialis seu forma primitiva inexistens substantia, primus actus, prima facultas activa.” The translation is quoted from: G. W. Leibniz: *Philosophical Essays*, trans. by R. Ariew and D. Garber, Indianapolis – Cambridge 1989 (hereafter: AG), p. 105.

point in his philosophical career Leibniz was not an idealist, but instead believed in the existence of extended corporeal substances; for it shows that, according to Leibniz, “bodies are made up of corporeal substances that are not *themselves* souls but which *have* souls.”³

Garber’s discussion of the Fardella memo in his book is rather brief, but he there refers his reader to an earlier article of his in which he discusses this text at greater length.⁴ Some caution is required when we turn to what he says in this article, however. For here Garber holds that, in the bulk of his correspondence with Arnauld, Leibniz espoused a sort of “weak realism,” more specifically, the view that corporeal substances exist, but only as organized and substantially unified collections of monads.⁵ In his book, by contrast, Garber holds that in the 1680s and 1690s (and so during his correspondence with Arnauld) Leibniz espoused a more robust realism, according to which corporeal substances exist as genuinely extended entities that aren’t reducible to simple substances or monads. What’s more, although Garber’s article makes the case that in the Fardella memo Leibniz has in mind corporeal substances when he claims that bodies are aggregates of substances, rather than aggregates of souls, it nonetheless expresses—surprisingly—some doubts about whether the memo should be understood as a rejection of idealism. It may well be, Garber cautions, that in the memo Leibniz was primarily concerned to argue against the Cartesian conception of body as pure extension, and that he did not have a stable position on the issue of idealism when he wrote it.⁶ In his book, however, Garber makes no mention of this possibility and shows no qualms about taking the memo as firm evidence against idealism in Leibniz’s thought at the time of the memo’s composition.

These differences notwithstanding, Garber’s earlier article on the Fardella memo is worth considering as a supplement to his discussion of the memo in his book, for although the article sounds a note of caution that is not echoed in the later work, it also presents a couple of arguments for the conclusion that Leibniz has in mind corporeal substances when he claims in the memo that bodies are aggregates of substances, rather than aggregates of souls.

³ Garber: *Leibniz: Body*, p. 92. See also: Robert Sleigh, Jr.: *Leibniz and Arnauld: A Commentary on Their Correspondence*, New Haven 1990, p. 100, and Pauline Phemister: *Leibniz and the Natural World: Activity, Passivity and Corporeal Substances in Leibniz’s Philosophy*, Dordrecht 2005, pp. 91-9.

⁴ For the reference, see Garber: *Leibniz: Body*, p. 90, n. 127. The article referred to is Daniel Garber, “Leibniz and Fardella: Body, Substance, and Idealism” (hereafter: Fardella), in: *Leibniz and his Correspondents*, ed. P. Lodge, Cambridge 2004, pp. 123-140.

⁵ Garber, “Fardella”, pp. 134-5.

⁶ Garber, “Fardella”, pp. 137-8.

I shall therefore discuss these arguments in the present paper, since my aim here is to argue that Garber's conclusion is mistaken. I shall be arguing, more specifically, that a careful reading of the Fardella memo actually undermines Garber's claim that Leibniz advocated a robust sort of realism during the 1680s and 1690s, especially when read in conjunction with two other short texts (A VI, 4 B, 1672-4) that the editors of the Academy edition have published, together with the Fardella memo, under one and the same heading ("*Communicata ex disputationibus cum Fardella*")—and this not unreasonably, since these two texts seem to contain further reflections on that objection of Fardella's which prompts Leibniz to declare that bodies are not aggregates of souls, but aggregates of substances.⁷

In fact, I shall be arguing here that, although one brief comment at the very end of one of the two short texts might be taken to suggest that Leibniz was open to the possibility of recognizing corporeal substances, understood as substantially unified collections of simple substances, still, his stated view in the Fardella memo and its associated texts is that bodies are aggregates of simple substances. For, like Robert Adams, I take it that the substances out of which Leibniz understands bodies to be aggregated are simple or spiritual, and that when Leibniz denies that bodies are aggregates of souls, his claim is informed by the view that, strictly speaking, a soul is not itself a simple substance, but a simple substance's entelechy or primitive active force, which constitutes a substance only in conjunction with the simple substance's prime matter or primitive passive force.⁸

The Fardella Memo

We know that Leibniz was in Venice during February and March of 1690, that he met the Franciscan friar and Cartesian philosopher Michelangelo Fardella there, and that he explained some of his metaphysical views to the Italian scholar. Indeed, the Fardella memo, which is dated March 1690, opens with the following comment by Leibniz:

I communicated several of my metaphysical thoughts to the Reverend Michel Angelo Fardella of the Order of Friars Minor, because I saw that he combined meditation on intellectual things with an understanding of mathematics, and because he pursued truth with

⁷ Garber reports that the manuscripts of these two texts are bound together with the manuscript of the Fardella memo in the Leibniz Archives in Hannover (Garber: "Fardella", pp. 128-9). Garber himself doesn't discuss the two texts in this article, on the grounds that they "don't really add anything to" his "story" (Garber, "Fardella," p. 129). He doesn't discuss them in his book, either. By contrast, Donald Rutherford thinks that Garber's reading of the Fardella memo is undermined by a consideration of these two texts. See pp. 168-70 of Donald Rutherford: "Leibniz as Idealist," in: *Oxford Studies in Early Modern Philosophy* (2008) 4, pp. 141-90. To my mind, Rutherford is right about this.

⁸ Robert M. Adams: *Leibniz: Determinist, Theist, Idealist*, New York - Oxford 1994, pp. 274-7.

great ardor. And so, after he grasped my views, he wrote out certain propositions at home to remember them in order to master what he heard from me, along with objections, which, it so happens, he sent to me for my examination.⁹

In the immediate wake of this introductory note, we find, in Leibniz's handwriting, a proposition concerning God's predetermination, followed by the statement of an objection that is explicitly said to be from Fardella ("Dubium R. Patris"). This is in turn followed by a "declaratio" in which Leibniz addresses Fardella's concerns. Next, we find a second proposition, which takes the form of a brief sketch of Leibniz's conception of the pre-established harmony, including his view that each substance mirrors the entire universe by virtue of perceiving it confusedly. In its wake, Leibniz notes that no "objection was made against this proposition"¹⁰ and suggests that this may be because the friar took his objection to the first proposition to apply to this second one as well. Finally, Leibniz comes to a third "proposition," which is actually a survey of several related claims that Leibniz makes about bodies and their relations to substances, together with several arguments offered in support of these claims. Whether this "proposition"—or either of the previous two—is Fardella's own account of what Leibniz had earlier told him is unclear; it may instead be Leibniz's summary of what he had told Fardella in conversation, which he chose to include in the memo in order to offer some context for the objection that follows it.

The account of Leibniz's views on body begins with a brief argument for the conclusion that "a body is not a substance, but an aggregate of substances." The argument begins with the claim that being divisible is incompatible with being a substance, since substances are unities whereas divisible things are pluralities. Granted this, and the claim that *every* body is divisible into smaller bodies, it follows that bodies, assuming they exist, are not substances, but aggregates of substances, i.e., infinite multitudes. Thus, the account continues, bodies can only exist if substances do, every substance being something to which true unity belongs. Moreover, since being divisible necessarily involves being a plurality, the substances out of which bodies are aggregated must be indivisible. That is, being a true unity involves being indivisible. Therefore, if there were no indivisible substances, there would be nothing outside the mind that answers to our perceptions of bodies:

⁹ A VI, 4 B, 1666: "Communicavi R^o. Patri Mich. Fardellae Ordinis Minorum cogitationes meas Metaphysicas complures, quod eum cognitioni Matheseos rerum quoque intelligibilium meditationem ad-junxisse, et magno veritatem ardore prosequi viderem. Ipse igitur percepta sententia mea sibi domi propositiones quasdam literis consignavit memoriae causa, ut quae a me audierat complecteretur, ad-junctis dubitationibus, quae ita habent, ut ipse mihi ad examinandum communicavit." The translation is from: AG 101.

¹⁰ A VI, 4 B, 1668/AG 103.

“bodies would not be real, but appearances only, or phenomena like the rainbow, every basis of composition having been taken away.”¹¹ However, the account goes on to caution, this is not to say that indivisible substances are parts of bodies; they are instead “essential inner requisites” (*requisitum internum essentiale*), for a part must be of the same kind as the whole to which it belongs, and the substances out of which bodies are aggregated are altogether different in kind from bodies. In the same way, a point is not a “compositive part” (*pars compositiva*) of a line, but it is necessarily required for the existence of a line.

What’s more, the account continues, it follows from all of this that I am an indivisible substance, the permanent and constant subject of all my actions and passions, or that, in a human being, there is an incorporeal immortal substance distinct from the body, the latter never remaining the same because of a continual change in its parts. The union of soul and body in a human being, moreover, consists wholly in the non-causal connection that obtains between the two by virtue of the pre-established harmony. Created substances generally exercise no causal influence over each other. Moreover, what’s true of human beings is likely true of plants and animals as well, so that they too probably have immortal souls, as human beings do.

This summarizes the remarks that precede the statement of Fardella’s objection to “proposition 3.” The objection itself reads as follows:

With respect to a multitude of stones, *A, B, C*, stone *A* or *B* or *C* must be understood first. But it is not the same with a soul, which does not constitute a body with other souls. And it seems that there is some difficulty in this piece of reasoning: ‘There are bodies in the universe aggregated from substances. Therefore, it is necessary that there be something which is a single indivisible substance.’ For this would be legitimately inferred to follow if this unity intrinsically composed an aggregate as a part of the same kind. But this one substantial thing does not intrinsically constitute the aggregate, nor is it some portion [of it]; it is rather understood to be essentially altogether different [from the aggregate or body]. In which way, then, is it required in order for this aggregate to subsist?¹²

¹¹ A VI, 4 B, 1668: “Hinc, nisi dentur substantiae quaedam indivisibiles corpora non forent realia, sed apparentiae tantum seu phaenomena sicut Iris, sublato quippe compositionis fundamento.”

¹² A VI, 4 B, 1670: “Pro multitudine lapidum *A, B, C* debet prius intelligi lapis *A* vel *B* vel *C*. At non idem est in anima quae cum aliis animabus non constituit corpus. Et videtur aliquid difficultatis esse in hac ratiocinatione. Dantur in universo aggregata substantiarum corpora. Ergo datur necessario aliquid quod sit unica indivisibilis substantia. Etenim tunc consequi legitime inferretur, si haec unitas intrinsice tanquam pars huiusmodi aggregatum componeret. Nam hoc unum substantiale non constituit intrinsece aggregatum, nec est portio aliqua, sed omnino essentialiter diversum intelligitur. Quomodo igitur requiritur ut subsistat hoc aggregatum?”

Notice that Fardella's objection clearly shows that he takes Leibniz to be of the view that bodies are aggregates of souls, i.e., that the indivisible substances out of which any given body is aggregated, according to Leibniz, are souls.

The first two sentences of this paragraph seem to constitute an argument against this view. But its precise import is unclear. Perhaps the argument is that, since the members of an aggregate must be understood to have some sort of order among themselves, and no such order is to be found among souls, a body cannot possibly be an aggregate of souls. In any case, the argument presented in the remainder of the paragraph is clearer. Here, Fardella seeks to undermine what he takes to be Leibniz's argument for the claim that bodies are aggregates of souls. Specifically, he claims that Leibniz's inference from the existence of bodies-as-aggregates to the existence of indivisible substances can work only if these indivisible substances intrinsically compose such aggregates as parts. But on Leibniz's view this is not the case: indivisible substances do not intrinsically constitute an aggregate, nor are they "portions"—i.e., parts, presumably—of aggregates. And this latter claim, Fardella seems to suggest, is due to the fact that indivisible substances are essentially altogether different from bodies. So, Fardella asks, what justification is there for thinking that bodies depend on indivisible substances for their existence?

Leibniz begins his response to Fardella's objection with that passage to which Garber appeals as evidence of Leibniz's commitment to a realism that rejects any sort of reduction of corporeal substances to monads or simple substances. It reads as follows:

I do not say that a 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, the first act, the first active faculty. Moreover, the force of the argument consists in this, that a body is not a substance, but substances, or an aggregate of substances.¹³

As I've said, there are good reasons to think that Garber is mistaken in his interpretation of this passage. For one thing, nothing that Leibniz says here requires that we take the substances which are said to compose a body to be corporeal substances. When Leibniz says that souls are not substances, but substantial forms or first active faculties, this pronouncement might be motivated, as

¹³ A VI 4 B 1670: "Non dico corpus componi ex animabus, neque animarum aggregato corpus constitui; sed substantiarum. Anima autem proprie et accurate loquendo non est substantia, sed est forma substantialis seu forma primitiva inexistens substantiae, primus actus, prima facultas activa. Vis autem argumenti in hoc consistit, quod corpus non est substantia sed substantiae, seu substantiarum aggregatum." The translation is from: AG 105.

Adams claims, by Leibniz's view that, strictly speaking, a soul is not itself a simple substance, but an entelechy or primitive active force, which constitutes a single substance only in conjunction with prime matter or primitive passive force. In other words, the substances which are said both to compose a body and to possess souls might be simple substances, rather than corporeal ones.

That this is indeed the case is strongly suggested by a marginal comment that appears at this point in the manuscript of Leibniz's notes on Fardella's objections. It reads as follows:

A body is not one substance, but substances, or an aggregate of substances; therefore, either there will be no substance or there will be a substance that is other than body. And either there will be nothing substantial in bodies, and so bodies will be only phenomena, or in body there are contained indivisible substances which are not in turn aggregates. But certainly those substances of which there is an aggregate constitute a body—or they 'compose' one, if someone wishes to speak so. And it is permitted by me for someone to call such things parts. But geometers give the name of part only to those constituents that are homogeneous with the whole, nor are they wont to call a point a part of a line. There is a difference between the relation of a line to points and [the relation] of a body to substances. For in intelligible lines there is no determinate division, but [only] indefinite possible ones; however, in things actual divisions have been made, and *a resolution of matter into forms established. What points are in imaginary resolution souls are in true resolution.* A line is not an aggregate of points, since in a line there are no points in actuality. But matter is an aggregate of substances, since in matter there are parts actually.¹⁴

This marginal comment is useful in a way that the "proposition" which precedes the statement of Fardella's objection is not, since we can be sure that this marginal comment was actually authored by Leibniz. It is interesting for a number of reasons. First, Leibniz claims that the substances of which bodies are aggregated are different from body. This is undoubtedly an echo of the earlier claim that these substances are heterogeneous with—different in kind from—the bodies that they constitute. (Indeed, one suspects that for Leibniz a homogeneous part of a body must itself be a body.) Second, Leibniz describes these substances as "indivisible," which might naturally be taken

¹⁴ My emphasis. A VI, 4 B, 1670-1: "Corpus non est una substantia, sed substantiae seu aggregatum substantiarum, ergo aut nulla erit substantia aut alia quam corpus. Et vel nihil substantialis inerit corporibus adeoque corpora erunt phaenomena tantum, vel in corpore continentur substantiae indivisibiles, quae non sint amplius aggregata. Utique autem substantiae illae quarum aggregatum est [constituunt] corpus, vel si ita loqui velit aliquis componunt. Et si quis talia velit partes appellare per me licet. Geometrae tamen iis tantum constituentibus quae toti homogenea sunt nomen partis imponunt, neque punctum appellare solent lineae partem. Discrimen est inter relationem lineae ad puncta, et corporis ad substantias. Nam in lineis intelligibilibus nulla est divisio determinata, sed possibles indefinitae, in rebus vero actuales divisiones sunt factae, et instituta resolutio materiae in formas. Quod puncta sunt in resolutione imaginaria, id animae in vera. Linea non est aggregatum punctorum, quia in linea non sunt partes actu. Sed materia est aggregatum Substantiarum, quia in materia sunt parts actu." A translation of this marginal comment does not appear in AG.

to imply that they are simple. Garber would likely deny this, however, since he, like Robert Sleigh, rejects any straightforward equation of simplicity and indivisibility in Leibniz on the grounds that in the correspondence with Arnauld Leibniz employs a notion of indivisibility according to which corporeal substances, understood as extended things, are indivisible.¹⁵ But that in the Fardella memo Leibniz does take the indivisible substances from which bodies are constituted to be simple is implied by the fact that in this passage Leibniz switches from speaking of indivisible substances to speaking of souls and forms. More specifically, Leibniz first compares the substances that compose a body to the points that figure in a line, and this, it seems, in order to illustrate the lack of homogeneity obtaining between a substance and the body in which it figures. But he then qualifies the comparison on the grounds that points are not present in a line in the way that substances are present in a body—i.e., *actually*. Points are only *potentially* present in a line, becoming actual (sc. as termini) only on the occasion of the line’s division into segments. Matter, Leibniz adds, is by contrast actually resolved into “forms,” and “what points are in imaginary resolution souls are in true resolution.”

Here, then, is a fairly strong indication that Leibniz understands the substances out of which bodies are aggregated to be simple or incorporeal. Leibniz’s talk of souls here, moreover, is not all that surprising for anyone who takes his position in the Fardella memo to be that bodies are composed of simple substances, for the identification of a soul with a simple substance seems natural enough. (The same cannot be said for the claim that Leibniz is instead espousing the view that bodies are composed of genuinely extended corporeal substances.) For when Leibniz repudiates the view that bodies are aggregates of souls, and does so, it seems, on the grounds that souls are not substances, he prefaces the latter claim with a fairly strong qualification: “properly and accurately speaking” (*proprie et accurate loquendo*), Leibniz says, the soul is a substantial form rather than a substance. And this qualification leaves open the possibility that in a loose sense, we can speak of the soul as a substance, according to Leibniz, and conversely, can speak of the entire simple substance or monad as a soul. Certainly, in his later writings, Leibniz equivocates in precisely this way when it comes to the word “soul.” For example, in a letter of 20 June 1703 to De Volder Leibniz is careful to distinguish the soul or entelechy from the entire monad,¹⁶ but in the

¹⁵ Garber: *Leibniz: Body*, pp. 84-6; Sleigh, pp. 106-10.

¹⁶ GP II, 252/AG 177.

Monadology of 1714 he is prepared to call monads—or at least those monads that have memory and distinct perception—souls.¹⁷

That Leibniz understands bodies to be aggregates of simple substances is also supported by the following consideration. On Garber’s reading, when Leibniz declares that bodies are not aggregates of souls, we are to understand this denial as motivated by Leibniz’s view that the indivisible substances that are aggregated to form a body are extended corporeal substances. The problem with this, as Robert Adams has argued,¹⁸ is that on Garber’s interpretation it is hard to see why Leibniz would liken the relation that obtains between a body and the indivisible substances that make it up to the relation that obtains between a line and the points that are (potentially) present in it. Certainly the comparison is more apt if the indivisible substances at issue here are simple. Indeed, it’s not at all obvious that extended corporeal substances differ in kind from bodies in the way that Leibniz takes his indivisible substances to differ in kind from bodies.

In fact, the situation for Garber’s view is actually worse than this, for in the remainder of the memo, Leibniz both (i) grants that animals, understood as bodies endowed with souls, are homogeneous with, and parts of, matter or body, and (ii) denies that animals, so understood, are substances at all. Consider the following passage:

Therefore, either there is no substance, and so no substances, or there exists something other than body. Furthermore, although an aggregate of these substances constitutes a body, still, they do not constitute [a body] in the way a part does, just as points are not parts of lines, since a part is always homogeneous with its whole. However, the organic bodies of substances included in some mass of matter are parts of this mass. Thus in a fishpond there are many fish; and the humour of each fish is in turn like a kind of fishpond in which other fish, as it were, or animals of a different kind, make their home; and so on to infinity. [...] But whether an animal can be said to be a part of matter, as a fish is a part of a fishpond, and cattle are part of a herd, is something that must be considered. And truly if an animal is conceived as a thing having parts, that is, as a divisible and destructible body endowed with a soul, I concede that it is a part of matter, since every part of matter has parts; but I do not concede that it is a substance or an indestructible thing. The same goes for the human being. For if a human being is this very I, he cannot be divided or perish, nor is he a homogeneous part of matter. But if the name ‘human being’ is understood of that which perishes, a human

¹⁷ GP VI, 610/AG 215. Cf. Phemister, p. 96. Perhaps the synecdoche involved in Leibniz’s use of the word “soul” to refer to a simple substance is not surprising, given the fact that Leibniz, as Robert Adams suggests (see Adams, pp. 393-4), understands a monad’s prime matter not to be something real and positive, but rather the essential limitedness of the monad’s capacity to receive perfection (the limitedness of the monad’s “receptivity” for perfection), which limitation, according to Leibniz, explains both the confusion in a monad’s perceptions and, in the case of human minds, the possibility of sin even before the Fall. See GP VI, 119-21/H 140-2; GP VI, 383/H 384; GP VI, 210/H 228; GP VI, 602-3/AG 210.

¹⁸ Adams, p. 275.

being will be a part of matter; but the former indestructible thing will be called soul, mind, I, which is not a part of matter.¹⁹

Here, immediately after repeating the claim that the indivisible substances out of which a body is aggregated do not count as parts of a body because they differ in kind from body, Leibniz claims that the organic body of an animal, by contrast, can truly be said to be a part of some body or mass of matter. Indeed, Leibniz adds, this is actually the case, for just as there are many fish in a fishpond, so also are there many animals in the humour of a single fish, and in the humour of each such animal there are in turn more animals, and so on, to infinity. A little bit later in the passage, moreover, Leibniz raises the question of whether an animal can be a part of matter, and his answer takes the form of a disjunction, inasmuch as animals can be understood in either of two ways. The first disjunct is: “if an animal is conceived as a thing having parts, that is, as a divisible and destructible body endowed with a soul, I concede that it is a part of matter; but I would not concede that it is a substance or an indestructible thing.” The second disjunct is framed in terms of human beings, after Leibniz implies that the foregoing claim about animals holds also of human beings. Specifically, he says that if a human being is identified with its soul, then it is indivisible and imperishable, and not homogeneous with matter.

The clear implication here is that Leibniz is prepared to identify an animal with its soul or substantial form, in which case it is true to say that an animal is “indivisible and imperishable” — i.e., a substance. But an animal, so understood, is not homogeneous with matter and (given the homogeneity requirement for parthood) not a *part* of matter or body, either. In other words, an animal, understood as a single soul or form, satisfies the description that Leibniz gives of the indivisible substances which constitute a body on his view. The same cannot be said of animals, understood as bodies endowed with forms, however, for Leibniz explicitly states in this passage that

¹⁹ A VI, 4 B, 1670-1: “Ergo aut nulla datur substantia, adeoque nec substantiae, aut datur aliquid aliud quam corpus. Porro etsi harum substantiarum aggregatum constituat corpus, non tamen constituunt per modum partis, quia pars semper toti homogenea est, eodem modo ut puncta non sunt partes linearum. Interim corpora organica substantiarum in aliqua materiae massa inclusarum, sunt partes hujus massae. Ita in piscina insunt multi pisces; et humor cujusque piscis rursus est quasi piscina quaedam in qua velut alii pisces aut sui generis animalia stabulantur; et ita porro in infinitum. [...] An vero dici possit animal esse partem materiae, uti piscis est pars piscinae, armentum gregis, considerandum. Et vero si animal concipiatur ut res habens partes, id est ut corpus anima praeditum, divisibile, destructibile; concedam esse partem materiae, cum omnis materiae habeat partes; sed non concedam esse substantiam neque rem indestructibilem; idem est de Homine. Nam si homo sit ipsum Ego, neque dividi neque interire potest, neque pars est materiae homogenea; sin hominis appellatione intelligatur id quod perit; homo erit pars materiae; illud vero indestructibile dicetur Anima, Mens, Ego, quod pars materiae non erit.”

animals, so conceived, are parts of matter, which presupposes that they do not differ in kind from matter or body and that they are not to be identified with the substances out of which bodies are aggregated on Leibniz's view.²⁰

Needless to say, the fact that Leibniz here denies that animals, understood as bodies endowed with souls, are substances is a problem not only for Garber's reading of the Fardella memo, but also for his larger thesis that in the 1680s and 1690s Leibniz advocated "a metaphysics grounded in corporeal substance, extended unities of matter and form". To judge from what Leibniz says here, on his view the divisibility of an animal's body prevents it from being a substance, which must be indivisible.

The reader will have noticed the ellipse in the previous quotation. In the Fardella memo, the following passage appears between the two portions of the quotation that are separated by this ellipse:

Therefore there are substances everywhere in matter, as points [are everywhere] in a line. And just as there is no portion of a line in which there are not infinite points, so also there is no portion of matter in which there are not infinite substances. However, just as a point is not a part of a line, but a line in which there is a point [is such a part], so also a soul is not a part of matter, but a body in which it exists [is such a part].²¹

Notice that this passage appears immediately after Leibniz explains that in the humour of each fish there are other animals, and that in the humour of each such animal there are in turn more animals, and so on, to infinity. Here, Leibniz infers from this that there are therefore "substances everywhere in matter, as points [are everywhere] in lines." But given Leibniz's subsequent claim that an animal, understood as a body endowed with a soul, is not a substance, the substances at issue here cannot be the animals whose organic bodies were just said to admit of being parts of some mass of matter. That is, when Leibniz claims that every animal's body contains other animals within it, his conclusion that there are therefore substances everywhere in matter must be informed by the thought that where there is an animal, so also is there a soul or substantial form. The latter must be the substances that are said to be "everywhere" in matter.²²

²⁰ Cf. Phemister, pp. 97-9.

²¹ A VI, 4 B, 1671: "Ubique igitur in materia sunt substantiae, ut in linea puncta. Et ut nulla datur portio lineae, in qua non sint infinita puncta, ita nulla datur portio materiae in qua non sint infinitae substantiae. Sed quemadmodum non punctum est pars lineae, sed linea in qua est punctum, ita quoque anima non est pars materiae, sed corpus cui inest."

²² Cf. Phemister, pp. 92-3.

Indeed, notice that Leibniz likens the substances that are everywhere in some portion of matter to points that are everywhere (though only potentially) in lines. And having done this, he then likens souls to points: just as a point is not a part of some line, Leibniz says, though a line in which that point figures can be a part of another line, so also a soul is not itself a part of matter, though a body that contains this soul can indeed be a part of some portion of matter. In other words, we here find Leibniz switching once again from talking of substances to talking of souls, and this in such a way as to suggest that the substances which are not parts of matter, on his view, just are souls.²³

Before leaving the Fardella memo, it is worth asking the question of how exactly Leibniz's claims and arguments in it address the concerns articulated in Fardella's objection. Remember that what Leibniz says in the memo is prompted by the following objection from Fardella. The inference that Leibniz makes, Fardella says, from the fact that bodies are aggregates, to the conclusion that there are indivisible substances, can work only if these indivisible substances intrinsically compose bodies in the way that parts compose a whole. But, Fardella continues, an indivisible substance, or soul, cannot intrinsically constitute a body in this way, given the fact that a part must be homogeneous with that whole of which it is a part. So why, Fardella asks, does the existence of bodies commit us to the existence of indivisible substances? In what sense do bodies depend for their existence on substances of this kind?

Thus, Fardella, who not unreasonably takes Leibniz's indivisible substances to be souls, understands Leibniz to be of the view that bodies are aggregates of souls. And it is precisely this view that Leibniz repudiates at the outset of the passage with which we're concerned. But the question that arises here, as we've seen, is this: Does Leibniz repudiate the view because he understands the indivisible substances out of which bodies are composed to be extended corporeal substances, rather than simple or immaterial substances? Or does he repudiate it because, although he holds that bodies are composed of incorporeal substances, he rejects the view that souls themselves are simple substances, holding instead that souls are aspects or components of simple substances, i.e., things that simple substances *have*?

When considered in its entirety, Leibniz's answer strongly suggests that the latter is the case. For even though Leibniz denies, at the outset of his response, that bodies are aggregates of souls, he clearly doesn't think that this suffices as an answer to Fardella's objection. For shortly after

²³ Cf. Phemister, pp. 95-7.

claiming that souls are not substances, but rather substantial forms, Leibniz concedes that, on his view, although an aggregate of indivisible substances constitutes a body, these indivisible substances themselves do not constitute a body in the way that parts constitute a whole, since they are not homogeneous with the body or whole. But, Leibniz also seems to want to insist, this lack of homogeneity does not prevent them from constituting a body. In other words, it seems that Leibniz does not deny or abandon the view that makes his inference from bodies-as-aggregates to indivisible substances problematic for Fardella (i.e., that indivisible substances are not parts of, because not homogeneous with, bodies), as Garber's reading of the memo might naturally be taken to suggest (since, on Garber's view, the claim that bodies are not aggregates of souls, but aggregates of substances, is the centerpiece of Leibniz's response to Fardella²⁴). Rather, Leibniz seems simply to deny Fardella's claim that the inference from the fact that bodies are aggregates to the conclusion that there are indivisible substances can work only if these substances intrinsically compose bodies as parts compose a whole.

Garber's Arguments

As I mentioned at the outset of this paper, in his earlier article Garber offers a couple of arguments in support of his reading of the Fardella memo. They are offered partly in response both to Adams' claim that the substances out of which Leibniz constitutes bodies are simple or immaterial, and to the further claim that when Leibniz denies that souls are substances, this is because he holds that a soul, strictly speaking, constitutes an immaterial substance only in conjunction with prime matter or primitive passive power. Adams, as I have mentioned, holds that this interpretation of Leibniz's remarks is the natural one, given his appeal to the example of a point and its relation to a line.

In response, Garber proposes that we "look at the context" of the memo, "look back at who Leibniz was talking with, and read the text as part of a conversation between Leibniz and that person, Fardella."²⁵ When we do this, Garber continues, we see that Fardella "was a Cartesian scientist, mathematician, and philosopher, educated originally in scholastic Aristotelianism."²⁶ And this is important, he claims, because when Leibniz says to such a person that the soul is not a substance, but a substantial form or first active faculty, "this is going to be understood most naturally

²⁴ Garber, *Leibniz: Body*, p. 92.

²⁵ Garber, "Fardella", p. 136.

²⁶ *Ibid.*

in terms of a traditionally Aristotelian conception of substance."²⁷ Indeed, Garber says, although it is possible to read Leibniz's characterization of the soul in a "more idiosyncratically Leibnizian way, as Adams does," still, if Leibniz's position were such as Adams describes, he would surely have explained it to Fardella in a "somewhat different way."²⁸ For Leibniz certainly recognized that his characterization of the soul would be interpreted in an Aristotelian way by Fardella, as meaning that the soul is the substantial form or first act of a *corporeal* substance. In short, Garber claims, Leibniz's exchange with Fardella here would have been pointless—hardly an effort at genuine communication—if he had meant what Adams takes him to have meant while nonetheless expressing himself in a way that he knew would be interpreted by Fardella in an Aristotelian fashion.

But this argument suffers from several problems. For one, Garber assumes that Leibniz's response to Fardella's objection was actually sent to Fardella, and in pretty much the form in which it appears in the memo. It's not at all clear to me that this is the case. Second, Garber in effect assumes that there was no priming of Fardella by Leibniz to ensure that Fardella would understand Leibniz's response on its own terms, without relying overly much on a prior familiarity with Aristotelian views and terminology. We know, however, that Leibniz had already discussed his views with Fardella before writing the memo, so it's not as though in reading Leibniz's response (assuming he did) Fardella had no independent basis upon which to interpret what he was reading. Third, even if we ignore this last point, to suggest that Leibniz's talk of substantial forms would invariably have been understood by Fardella in anything like orthodox Aristotelian terms seems unjustified. For even Descartes spoke of the human mind as a substantial form.²⁹ Such unorthodox uses of Aristotelian terminology were probably not so rare in the late seventeenth century as to lead to the expectation that anyone who used such terminology to describe his or her own position was to be interpreted as espousing an Aristotelian doctrine.

Garber's second argument appeals to the fact that Fardella himself seems to have been tempted by the view that there are no bodies (understood as extended things) existing outside of perception or thought. Given this fact, Garber argues, "when in his objection to Leibniz's proposition Fardella introduced the view that bodies were aggregates of souls, it gave Leibniz the perfect opportunity to say there was a real sense in which that was his view," assuming that that was

²⁷ Ibid.

²⁸ Ibid.

²⁹ See *Oeuvres de Descartes*, publ. par C. Adam et P. Tannery, Paris, 1877-1901, réédition Paris, 1964-1974, vol. III, p. 503, translated into English in: *The Philosophical Writings of Descartes*, trans. by J. Cottingham, R. Stootthoff, D. Murdoch (and A. Kenny, for vol. III), Cambridge, 1984-91, vol. III, pp. 207-8

indeed Leibniz's view.³⁰ The problem, Garber goes on to say, is that Leibniz did not seize the opportunity. And this, to Garber's mind, suggests that in March of 1690 Leibniz was not of the opinion that bodies are in some sense reducible to souls or simple substances.

Like Garber's first argument, this second one suffers from several problems. First of all, it assumes that Leibniz was at this time familiar with Fardella's doubts regarding the existence of bodies. But Garber gives us no reason to think that he was.³¹ Second, like his first argument, this one assumes that Leibniz's response to Fardella's objection was actually sent to Fardella in much the same form as it appears in the memo. Third, again like his first argument, this one assumes that in previous exchanges Leibniz had in no way prepared Fardella to understand his characterization of the soul as a substantial form in the way that Adams understands it. Fourth, what Garber is offering us here is simply an argument from omission. For that matter, given the findings of this paper's previous section, one might well challenge Garber's claim that Leibniz failed to reveal to Fardella that he understood bodies to be aggregates of souls or simple substances.

The Documents Associated with the Fardella Memo

The Fardella memo is the first of four documents printed in the Academy edition of Leibniz's works under the heading "*Communicata ex disputationibus cum Fardella*" (A VI, 4 B, 1666-74). The fourth and shortest of these is an excerpt from Fardella's *Universae usualis mathematicae theoria* (Venice, 1691) in which he presents a demonstration, said to be due to Leibniz, for the proposition that the part is less than the whole. It is not relevant to our discussion.

The second and third texts, by contrast, do contain material pertinent to the topic of this paper. If I have so far concentrated exclusively on the Fardella memo, this was simply to show that a careful reading of the memo itself calls into doubt Garber's reading of it. Thus, even if we ignore the second and third texts that appear along with the memo in the Academy edition of Leibniz's works—on the grounds that, for one reason or another, it is a mistake to read the memo in the light of these two other documents—we still have good reason to conclude that, when responding to Fardella's objections, Leibniz was of the view that bodies are aggregates of simple substances.

³⁰ Garber, "Fardella", pp. 136-7.

³¹ Garber mentions that in an appendix to a work published in 1691, Fardella argues that Descartes' arguments for the existence of body fail to show that it is even probable that bodies exist, and that nothing in the Bible requires that we believe in an external world of bodies (Garber, "Fardella", p. 127). But this work was published about a year after Leibniz wrote the Fardella memo.

But in fact there are good grounds for thinking that these two documents are properly associated with the Fardella memo. And, what's more, the first especially supports the reading of the memo that has been presented here in this paper. Its first two paragraphs are strongly reminiscent of what Leibniz says in the memo, and for this reason don't afford us much new material. Still, it's worth quoting them here, if only to let the reader appreciate, for him- or herself, the affinity between this document and the Fardella memo:

Body is not a substance, but an aggregate of substances. For it is clear that body is constituted from many things that are really distinct, as are a heap of wood, a pile of stones, a flock, an army, and a fishpond in which many fish swim; and each body is actually divided into many bodies contained within it.

Now, there are no substances where there isn't a substance, nor are there numbers where there are no unities, and so it is necessary that, aside from bodies, there be certain substances that are truly one or indivisible, from aggregates of which bodies are constituted.³²

Here again one finds Leibniz claiming that bodies are aggregates of substances. In the second paragraph, moreover, Leibniz seems to equate an aggregate with a mere plurality when he first affirms that a plurality of substances presupposes the existence of individual substances and then infers that, aside from bodies, there must be indivisible substances out of which bodies are aggregated.

But what Leibniz goes on to say in the immediate wake of these two paragraphs provides further evidence in support of my interpretation of the Fardella memo. In particular, Leibniz implies that the indivisible substances of the previous passage are indeed to be understood as simple or incorporeal:

The error of the material philosophers consists in this, that, having recognized the need for unity, they sought substance in matter, as if there could be some body that was really one substance. And so they sought refuge in atoms as end-points of analysis. But since every body is composed of different substances, neither does it matter whether the parts cohere or not. Besides which no ground of indivisibility in atoms can be given.

And so, since every body is a mass or aggregate of many bodies, no body is a substance. And hence substance is to be sought outside of corporeal nature.³³

³² A VI, 4 B, 1672: "Corpus non est substantia, sed aggregatum substantiarum. Constat enim ex pluribus realiter distinctis, quemadmodum strues lignorum, congeries lapidum, grex, exercitus, piscina in qua multi natant pisces; et unumquodque corpus actu divisum est in plura corpora contenta.

"Jam non dantur substantiae, ubi non datur substantia, nec dantur numeri, nisi sint unitates, itaque necesse est praeter corpora dari substantias quasdam vere unas seu indivisibiles quarum aggregatis corpora constituentur."

³³ A VI, 4 B, 1672: "Error philosophorum materialium in eo est, quod agnita necessitate unitatis, substantiam in materia quaesivere, quasi corpus ullum dari posset, quod revera esset una substantia. Itaque ad atomos confugere tanquam terminos analyseos. Cum tamen omne corpus constet ex diversis

Here Leibniz claims that philosophers who recognize the need to found their ontology on true or genuine unities are wrong to think that such unities can be found in matter, e.g., as atoms. For one thing, even a supposedly indivisible atom is a plurality of things; the fact that its parts must cohere (given its alleged indivisibility) doesn't change this fact. Second, it's far from obvious how an atom could, after all, be genuinely indivisible. Accordingly, Leibniz concludes, no body is a substance, and "substance is to be sought outside of corporeal nature."

Of course, in the light of Leibniz's view that bodies are aggregates of substances, it's hard to deny that, when he claims that substance is to be sought outside of corporeal nature, he is advocating some sort of reduction of bodies to simple or immaterial substances—which, in later years, he will refer to as "monads." As if that's not enough, in the immediate wake of the passage just quoted, Leibniz states:

Substance is something truly one, indivisible, and therefore ingenerable and incorruptible, which is a subject of action and passion; and, to put it in a word, it is that very thing that I understand when I say 'I' (*me*), which subsists while, my body being removed by parts (since my body is certainly in constant flux), I survive. No part of my body can be assigned which is necessary for my subsistence, although I am never without some united part of matter.

However, I have need of an organic body, although there is nothing in it which is necessary for my subsistence.

I understand something analogous in every animal and, to put it in a word, in each thing that is a true substance and truly one.³⁴

Here, as in the Fardella memo itself, Leibniz gives, as an example of an indivisible substance, the soul of a human being—or that to which a human being refers when he or she says "I" or speaks of him- or herself. For Leibniz explains that this I is both distinct from the body of a human being and something that persists even as the smaller bodies that go to make up a human body are

substantiis, nec referat utrum partes cohaereant an non. Praeterquam quod ratio indivisibilitatis in atomis reddi non potest.

"Itaque cum omne corpus sit massa seu aggregatum plurium corporum; nullum corpus est substantia; et proinde substantia extra corpoream naturam quaerenda est."

³⁴ A VI, 4 B, 1672-3: "Est autem substantia aliquid vere unum, indivisibile, adeoque ingenerabile et incorruptibile, quod est subjectum Actionis et passionis; et ut verbo dicam, id ipsum quod intelligo cum dico *Ego (moy)*, quod subsistit, etsi corpore meo per partes sublato, uti certe corpus meum in perpetuo fluxu est, superstito me. Nulla assignari potest pars corporis mei quae ad subsistentiam mei necessari sit, numquam tamen ego sum sine aliqua materiae parte unita.

"Interim ego corpore organico opus habeo, quanquam nihil in eo sit, quod sit necessarium ad subsistentiam mei.

"Analogum aliquid in omni intelligo animali, et ut verbo dicam in omni substantia vera vereque una."

gradually replaced by others. He also observes that although no single part of a human being is necessary for the subsistence of this I, the I is nonetheless always joined to, and requires, some piece of matter. Something similar, Leibniz adds, goes for all animals.

Now one might, perhaps, be tempted to read “substance” here as referring, not to a concrete substance, but to the substance (i.e., essence) of a genuinely extended corporeal substance. But what Leibniz has to say in the immediate wake of this passage seems clearly to rule this out. For just as he claims, in his response to Fardella’s objections, that the substances that are aggregated so as to compose bodies are not to be taken as parts of bodies, since parts are homogeneous with their wholes (A VI, 4 B, 1671), so here Leibniz states:

There are infinite simple substances or creatures in any particle of matter; and matter is composed of them, not as from parts, but as from constitutive principles, or immediate requisites, just as points enter into the essence of the continuum, but not as parts; for it is not a part unless it is homogeneous with the whole; but substance is not homogeneous with matter or body, no more so than a point is with a line.³⁵

Note, first of all, that whereas Leibniz has spoken up till now in this second document of how matter is composed of indivisible substances, here he states that matter is composed of simple substances, which must necessarily be incorporeal or immaterial. That is to say, Garber’s claim that the indivisible substances of the Fardella memo and its associated texts are genuinely extended corporeal substances is inconsistent with this passage, as Donald Rutherford has already observed.³⁶ Certainly in this passage Leibniz does indeed seem to equate indivisibility with simplicity.

Also pertinent to the question at issue here is what Leibniz says in the remainder of this, the second document classed by the editors of the Academy edition under the heading “*Communicata ex disputationibus cum Fardella.*” It reads as follows:

In every substance there is nothing other than that nature or primitive force from which the series of its internal operations follows.

From any state of a substance or its nature one can come to know the series, or all of its states past and future.

³⁵ A VI, 4 B, 1673: “*Infinite autem sunt substantiae simplices seu creaturae in qualibet materiae particula; et componitur ex illis materia, non tanquam ex partibus, sed tanquam ex principiis constitutivis, seu requisitis immediatis, prorsus ut puncta continui essentiam ingrediuntur non tamen ut partes; neque enim pars est, nisi quod toti homogeneum est, sed substantia materiae seu corpori homogenea non est; non magis quam lineae punctum.*”

³⁶ Rutherford, pp. 168-9.

Moreover, any substance involves the whole universe, and one can come to know from its state the states of other substances as well.

The series of different substances agree perfectly with each other, and each expresses the whole universe in its own way. And in this agreement consists the union of the soul and body, and also that which we call the operation of substances outside themselves.

The more perfect a substance is, the more distinctly does it express the universe.³⁷

Note, first of all, that Leibniz here reduces the external operations of substances to an agreement that is said to obtain among the series of states of different substances. It seems hard to deny that with this Leibniz means to deny that substances operate externally on each other, the agreement in question being an aspect of the pre-established harmony. Consistent with this, Leibniz feels the need to posit in a substance only a primitive force “from which the series of its *internal* operations follows.” The implication here is that a substance’s states are one and all internal, that is to say, perceptual—hence the claim that the more perfect the substance, the more distinctly it expresses the universe. (Certainly it’s not easy to see how a body might express the universe more or less distinctly.) Here, then, Leibniz seems to leave no room for the kinds of physical interactions that Garber attributes to Leibniz’s indivisible substances.

There are, then, very good reasons to think that in the notes on Fardella’s objections Leibniz takes bodies to be aggregates of simple substances. But one more consideration in support of this conclusion can be offered here. Note that if in fact Leibniz’s view is that bodies are aggregates of genuinely extended corporeal substances, these corporeal substances must have souls or something analogous to souls. What’s more, a soul or soul-analogue must be thought to be related to the body of a corporeal substance in one of two ways. We must either take Leibniz to be of the view that the soul is related to the body as one substance is related to an aggregate of others, as Daniel Garber thinks we should³⁸; or we must hold that the soul is related to the body in the way envisioned by what Robert Sleigh calls “the unmodified corporeal substance theory,” according to

³⁷ A VI, 4 B, 1673: “In omni substantia nihil aliud est quam natura illa seu vis primitiva, ex qua sequitur series operationum ejus internarum.

“Ex quolibet statu substantiae seu natura ejus cognosci potest series, seu omnes ejus status praeteriti et futuri.

“Praeterea quaevis substantia involvit totum universum, et cognosci potest ex statu ejus etiam status aliarum.

“Diversarum substantiarum series perfecte consentiunt inter se, et unaquaeque exprimit totum universum secundum modum suum. Et in hoc consensu consistit unio animae et corporis, itemque id quod operationem substantiarum extra se appellamus.

“Quo perfectior substantia est, eo distinctius exprimit universum.”

³⁸ See Garber: *Leibniz: Body*, p. 87.

which neither the soul nor the body of a corporeal substance is itself a substance.³⁹ The problem is that neither position is consistent with other things that Leibniz says both in the Fardella memo and in the document under consideration here. Garber's position seems straightforwardly to be ruled out by Leibniz's claim in the memo that souls are not substances⁴⁰. On the other hand, the unmodified corporeal substance theory, which, according to Sleight, informs Leibniz's notes on Fardella, is inconsistent with something that Leibniz says in the passage just quoted—namely, that the union of soul and body is to be explained in terms of the perfect agreement obtaining between the series of each and every substance's internal operations, i.e., in terms of the hypothesis of concomitance or doctrine of pre-established harmony. For if the soul of a corporeal substance is not itself a substance, as Sleight's unmodified corporeal substance theory holds, the theory of pre-established harmony cannot serve to explain its union with the body, since this theory is a theory about the apparent mutual influence of created *substances* on each other. Indeed, one might doubt whether the problem of soul-body union can even arise on the unmodified corporeal substance theory. The only option that seems left to us, then, is to conclude that Leibniz equivocates in his use of the term "soul" in the way alleged above—to refer both to a simple substance and to a mere aspect of a simple or immaterial substance.

The third document that appears in the Academy edition under the heading "*Communicata ex disputationibus cum Fardella*" is quite brief. In one of its paragraphs we find Leibniz repeating one of the claims made in the second document:

Those who established atoms saw part of the truth. For they recognized that one had to arrive at some one indivisible thing which is the basis of a multitude, but they erred in that they sought unity in matter and thought that there could be a body which was truly a single, indivisible substance.⁴¹

Although Leibniz doesn't explicitly say so, the suggestion here, once again, is that substance is to be sought outside of corporeal nature. Less straightforward is the opening paragraph of the third document, which immediately precedes the one just quoted:

³⁹ See Sleight, p. 100.

⁴⁰ Although Garber recognizes that Leibniz's claim that souls are not substances is inconsistent with the view that he attributes to Leibniz, he declares that he won't address the inconsistency. See Garber: *Leibniz: Body*, p. 92.

⁴¹ A VI, 4 B, 1674: "Qui Atomus stabilivere, viderunt partem veritatis. Agnoverunt enim ad unum aliquid indivisibile deviniendum esse, quod sit basis multitudinis, sed in eo errarunt, quod unitatem in materia quaesiverunt, credideruntque posse corpus dari quod vere sit substantia una indivisibilis."

There is a difference between the way a line is constituted from points and the way matter is constituted from the substances that are in it, because the number of points is not determinate, but the number of substances, even if it is infinite, is nevertheless certain and determinate, for it arises from the actual division of matter, and not from a possible division only. For matter is not divided in all possible ways, but with some definite proportions preserved, as a machine, a fishpond, a flock. A line is not an aggregate of points even though a body is an aggregate of substances.⁴²

Although the exact import of this paragraph isn't obvious, it might plausibly be argued that Leibniz is here concerned to identify one consequence of a difference, mentioned already in the Fardella memo, between (i) the relation that a point bears to a line and (ii) the relation that a substance bears to a body. It will be remembered that in the memo Leibniz claimed that, unlike the substances present in a body, points are present in a line only potentially, becoming actual (as termini) only on the occasion of the line's division into segments. This might well be what Leibniz has in mind here when he says that the number of points in a line is indeterminate, while the number of substances in a body is determinate, even if infinite, since the number of substances in a body arises from the actual division of matter, and not merely from a possible division. The possible division mentioned here might be that division of a line which gives rise to points. The suggestion, then, might be that the number of points in a line is indeterminate, since it is always possible to divide a line into smaller parts, whereas the number of substances in a body is determinate, since this number equals the number of parts into which a chunk of matter is actually divided.

Interesting here is the fact that Leibniz then goes on to claim that matter is not divided in all possible ways, but with certain proportions preserved, as in the case of a machine, a fishpond, or a flock. The suggestion seems to be that a chunk of matter's actual divisions are none other than its divisions into living things, the actual divisions of these living things' bodies into yet smaller living things, and so on, *ad infinitum*. Notice, however, that Leibniz makes no mention here of corporeal substances. So when Leibniz implies that the number of substances in a chunk of matter equals the number of living things in it, this may simply be due to the fact that on his view the set of created living things (understood as bodies endowed with souls) and the set of created simple substances are equinumerous.

⁴² A VI, 4 B, 1673-4: "Hoc interest inter modum quo Linea constituitur punctis, et quo Materia constituitur ex substantiis quae in ea sunt, quod punctorum numerus non est determinatus, at substantiarum numerus etsi infinitus sit tamen est certus ac determinatus, nascitur enim ex actuali divisione materiae non ex possibili tantum. Neque enim materia divisa est omnibus modis possibilibus, sed certis quibusdam proportionibus servatis, ut Machina, piscina, grex. Linea non est aggregatum punctorum cum tamen corpus sit aggregatum substantiarum."

This is not to say that in this document Leibniz slams the door, once and for all, on the possibility of recognizing corporeal substances, in some sense. (Indeed, we know that he toys with the idea of recognizing corporeal substances later, in the correspondence with Des Bosses.) But given the evidence, it seems clear that if Leibniz *was* at this time considering the possibility of admitting corporeal substances into his system, they must have been conceived by him to be reducible to simple substances—or to simple substances taken together with some unifying reality. (Given the foregoing examination of the Fardella memo and its associated texts, it seems unlikely, at least, that in 1690 Leibniz should have contemplated a shift to the robust realism that Garber attributes to him.) I say this because something that Leibniz says at the very end of the third document might be taken to suggest that he was toying with the idea of admitting corporeal substances, so understood, into his system, and that he recognized the need for something other than souls or monads—some “unifying reality” like the *vinculum substantiale* of his correspondence with Des Bosses, perhaps—if indeed he was to do so. The comment in question reads: “One must consider whether there must be something in matter besides those indivisible substances.”⁴³

But what sort of entity Leibniz had in mind in making this comment is something that we’ll probably never know. At any rate, this much seems indisputable: in the Fardella memo and the two other documents examined here, Leibniz’s stated position is that bodies are aggregates of simple—rather than corporeal—substances.⁴⁴

Conclusion

As mentioned at the outset of this paper, Garber’s reading of the Fardella memo is offered in support of his larger thesis that between the late 1670s and the late 1690s Leibniz “had not yet come upon the monadological metaphysics that will characterize his later years,” and that what one finds in this period instead is “a metaphysics grounded in corporeal substance, extended unities of matter and form.” My reading of the Fardella memo and the two documents associated with it shows,

⁴³ A VI, 4 B, 1674: “Considerandum an non debeat aliquid esse in Materia praeter substantias illas indivisibiles.”

⁴⁴ Recall that in the Fardella memo, Leibniz expressly denies that animals and plants, understood as bodies endowed with souls, are substances. So it can’t be the case that in the Fardella memo a body is understood by Leibniz to be an aggregate of corporeal substances in the sense of an aggregate of substantially unified collections containing simple substances. But even if it *were* the case, Garber’s thesis would still be false, for Garber’s claim (at least in his book) is not that Leibniz endorses such a weak realism in the Fardella memo, but that he endorses a “strong realism” which affirms the existence of extended corporeal substances that don’t admit of being reduced to simple or incorporeal substances.

at the very least, that by 1690 the monadology was not a discovery that still lay in the future. To the contrary, the Fardella memo is in fact to be read as actually asserting that bodies are aggregates of simple substances, notwithstanding Leibniz's claim in it that bodies are not aggregates of souls, but aggregates of substances. This claim, it turns out, can only be motivated by the fact that Leibniz's considered view is that a soul constitutes a simple substance only in conjunction with prime matter or primitive passive power. But notwithstanding this, as we have seen, Leibniz himself doesn't scruple to speak of a true resolution of bodies into souls in one of the memo's marginal notes. Moreover, in one of two associated texts he explicitly claims that matter is constituted from simple substances, and that substances are to be sought outside of corporeal nature.

To what extent Garber's larger thesis is undermined by my reading of the Fardella memo is too large a question to be addressed here. But it does seem to me that the memo and its associated texts are not the only works from Leibniz's middle period that call this thesis into doubt. There is, for example, the fact that in a letter of 1686 to Arnauld Leibniz states that souls or substantial forms are "the only true complete beings," i.e., the only true substances.⁴⁵ I don't mean to suggest, however, that this text and Leibniz's notes on Fardella by themselves warrant the conclusion that Leibniz consistently espoused some form of idealism in the 1680s and 1690s. In fact, I would go so far as to grant that, on the whole, the texts of the 1680s and 90s present serious challenges to anyone wishing to argue that in this period Leibniz's metaphysics is more or less that of the *Monadology*. But I do think that the case for idealism in Leibniz's middle years can still be made, notwithstanding the significant obstacles set up by the case that Garber has offered for a realist reading of Leibniz's philosophical work in the 1680s and 90s.

⁴⁵ A II, 2, 121: "les seuls estres accomplis veritables." For a text in which Leibniz says that complete beings (*entia completa*) are substances, see A VI, 4 B, 390 (1680-1684 [?]). As for the issue of whether Leibniz means the French expression "*estres accomplis*" to be equivalent to the Latin expression "*ens completum*" consider the following passage: "En effect la notion d'une substance individuelle, ou d'un estre accompli n'est autre chose que cela, sçavoir une notion assez complete, pour en pouvoir deduire tout ce qu'on peut attribuer au meme sujet" ("In fact, the notion of an individual substance, or of a complete being, is nothing other than that, namely, a notion sufficiently complete to enable one to deduce from it everything that can be attributed to the same subject") (A II, 2, 57 [1686]). At A II, 2, 45/AG 70 (1686), moreover, Leibniz contrasts a "*notion incomplete ou abstraite*" with a "*notion accomplie*."