Leibniz vs. Lamy

How does confused perception unite soul and body?*

Andreas Blank

1. Introduction

In a well-known passage from the mid-1680s, Leibniz claims that what is real in bodies is only the force of acting and suffering and that, therefore, the "substance of a body consists in this, as if in matter and form" (De modo distinguendi phaenomena realia ab imaginariis summer 1683 - winter 1685/86; A VI 4 1504). Moreover, he there explains that substances "have metaphysical matter or passive potency insofar as they express something confusedly, and active potency, insofar as they express something distinctly" (ibid.). As Pauline Phemister has pointed out, such a version of hylemorphism is no longer essentially Aristotelian (Phemister 2001: 79, Note 41). Accordingly, she ascribes to Leibniz the view that a simple substance *qua* possessor of primitive active and passive force "is also, when created" a corporeal substance, because the extension of its organic body is, "to a large extent", a modification of its primitive passive force (Phemster 1999: 72–74). The issue of primitive passive forces also bears on the role of the so-called "confusion theory of body". Justin Smith has recently indicated some parallels between Leibniz's use of the idea of confused perception as an explanation for the origins of "secondary matter" and the role of confused perception in the neo-Platonic emanation schemes developed by Plotinus and Nicholas of Cusa (Smith 2003:49-56). According to his interpretation, confused perception, for Leibniz as for Plotinus and Nicholas, has the function to explain the particularity, multiplicity, and imperfection of created minds (Plotinus 1998: VI 6, 1; VI 9, 2; VI 9, 4; Nicholas 1988: 15). Moreover, Smith aligns Leibniz's view of confused perception with Nicholas' claim that substances are simple and composite at the same time, because the body is the "unfolding of the soul" (Smith 2003: 52; Nicholas 1988: 27).

The purpose of the present paper is to argue that Leibniz's small but significant controversy with the French Occasionalist philosopher François Lamy points to a more complex interpretation of the structure of corporeal substances.¹ In his response to a long review of the first edition of Lamy's *De la Conoissance de* soi-même, as well as in his reply to Lamy's explicit critique of the system of preestablished harmony in the second edition of the same work, Leibniz defends a conciliatory approach to the issue of corporeal substances. His approach tries to combine Aristotelian, Cartesian, and neo-Platonic aspects rather than to reduce the theory of corporeal substance to ideas stemming from one of these traditions. In a broadly Aristotelian perspective, he objects to Lamy that the scholastic theory, according to which soul and body are, in some sense, incomplete without each other, should not be rejected. In particular, confused perception for Leibniz plays a decisive role in explaining why souls could not have the qualities they have without the qualities of their bodies, and vice versa. In a broadly Cartesian perspective, he agrees with Lamy's claim that confused perceptions play a decisive role in the explanation of the union of soul and body. In particular, in a way similar to Lamy, Leibniz assigns to souls a location in their bodies on the basis of the functional dependence between confused perceptions and bodily traces. These Aristotelian and Cartesian components modify a neo-Platonic view of confused perceptions as the origin of the imperfection and materiality of individual objects: because the qualitative side of souls and bodies are incomplete without each other, and because bodily traces and confused perceptions are functionally dependent on each other, an organic body can never be the modification of the passive aspects of a single simple substance only (or mainly).

Section 2 of the present paper uses the issues of confused perception and incomplete entities to illustrate how a conciliatory strategy shapes Leibniz's responses to Lamy. The two subsequent sections argue that the strategy pursued in the controversy with Lamy has parallels both in Leibniz's early philosophy and in writings from his last years. Section 3 situates the development of Leibniz's view of the relation of soul and body in the field of theoretical options emerging from the controversy over the nature of the co-extension of soul and body in early modern Aristotelianism. Section 4 outlines some of the ways in which Leibniz's controversy with Lamy has influenced the former's later correspondence with the French Platonist Nicholas Rémond.

2. Lamy vs. Leibniz on incomplete entities and confused perception

In the parts of *De la Conoissance de soi-même* that attracted Leibniz's interest, Lamy is concerned with issues that are close to issues that are of importance for

Leibniz's metaphysics, in particular the problem of how soul and body are united, what role confused perception plays in this context, and in which sense souls can be assigned a place in their bodies. Leibniz's response to an extended review of the first edition of Lamy's work in the *Journal des Sçavans* of 1698 is an interesting combination of critical remarks and remarks that emphasize the defensible aspects of Lamy's view of the union of soul and body. Interestingly, Leibniz's critical remarks rather concern Lamy's attempt to exclude an Aristotelian aspect from the theory of living beings, whereas his affirmative statements concern what he regarded to be tenable in a broadly Occasionalist theory of the relation of soul and body. To put it paradoxically: in his response to Lamy Leibniz uses techniques of controversy not so much to exclude theoretical options but rather to defend a conciliatory approach to the problem of composite entities.

This use of controversy as a tool of a conciliatory approach can perhaps most impressively be observed in Leibniz's response to Lamy's view that the Scholastic theory of soul and body as incomplete entities should be thrown overboard. The review in the *Journal des Sçavans* puts Lamy's view thus:

He regards it as chimerical to pretend as they do [sc. the Scholastic philosophers] that the mind & the body are incomplete beings that have a natural & essential relation to each other. ... That one suggests that they are incomplete is not more reasonable, if by this one pretends that the mind would not have all that is needed for being a true thinking substance independently of the body, or that the body would not have independently of the mind all that is needed to be a true human body.

(Journal des Sçavans 26 (1698):664)

Leibniz most decisive attack is not directed against Lamy's Occasionalism but rather against this rejection of an Aristotelian theory of composite substances:

The opinion of the Scholastics that soul and matter have something incomplete is not as absurd as one thinks. Because matter without souls and forms or entelechies is nothing but passive, and souls without matter would be nothing but active: the complete corporeal Substance, truly one, which the Scholastics call *Unum per se* (in contrast to entities by means of aggregation), as it must result from the principle of unity which is active, and from the mass that makes the multitude and which would be solely passive, if it would contain nothing but prime matter. Instead, the secondary matter or mass that makes our body has everywhere parts, which are complete substances themselves, because they are other animals or organic substances, animated or actuated separately. But the collection of these organized corporeal substances that constitutes our body is not united with our soul but through a relation that follows from the order of natural phenomena for each substance separately. And all this makes visible how on the one hand, one can say that the soul and the body are independent from

each other, and on the other hand, that each of them is incomplete without the other, because naturally the one is never without the other.

(Addition à l'Explication du système nouveau touchant l'union de l'ame et du corps, envoyee à Paris à l'occasion d'un livre intitule Conoissance de soi-même. GP 4 572-573)

As I have argued elsewhere (Blank 2003), the successive manuscript versions of this passage as well as passages from the contemporary correspondence with Johann Bernoulli suggest that what Leibniz has in mind here is not the incompleteness of active and passive aspects internal to a simple substance but rather the incompleteness of a given portion of passive mass without an active simple substance (ibid.: 7-9). Nevertheless, Leibniz's emphasis on the role of the passive aspects of souls for the union of soul and body has close parallels in Lamy's view of the role of confused perception. This explains why in the remainder of his reply, Leibniz tries to make clear to which extent he agrees with aspects of Lamy's Occasionalism rather than to refute the theory as a whole. The Journal des Sçavans renders Lamy's view of the union of soul and body as follows:

This strategy to establish in the confused perceptions the union of the mind and the body, & to make known to the mind the needs of the body, & the relations the surrounding bodies have to it, appears to be the most wise to our philosopher.

(Journal des Sçavans 26 (1698): 669)

To support this claim, Lamy argues that to know clearly and distinctly the infinite relations the surrounding bodies have to mine would require a constant effort of the mind, whereas the "bare sensation of pain or bitterness, of pleasure or discontent, is a proof that is short & secure alike" (ibid.: 670). Moreover, he thinks that sensible qualities cannot be modifications of extension and, therefore, must be modifications of the mind. At the same time, Lamy's account of the nature of the union of soul and body also has aspects that diverge strongly from Leibniz's. For example, from the idea that sensible qualities are modifications of the mind Lamy draws the conclusion that bodies cannot have any similarities to the sensations they give us (ibid.: 672). In particular, this implies that they also cannot have any similarity to the bodily traces they are associated with:

> These ideas do not have any resemblance to the traces from which they result. Also, it is not at all by means of consulting these kinds of phantoms that the soul forms its ideas. The soul finds all of them formed, & God presents them to the soul as it pleases him on the occasion of the excitation of these traces. I say, as it pleases him: because although God always constantly follows the order he has established once and for all; this establishment has been so free for him, that he would have been able to make a completely different one, & e.g. attach

the sensation of taste to the trace that results in the brain on the occasion of the excitation of the ear ... (ibid.: 674)

Lamy further explicates this view by claiming that the connection of ideas with traces, although free for God, for us is nevertheless natural and necessary, and that, in addition to these connections, we have free ones, which he calls "acquired connections" (ibid.). Finally, he holds the view that the connections between traces explain the connections between ideas:

The connection the traces have among themselves consists in the easiness with which they can be mutually retraced, that is to say in case they have been formed at the same time in the brain, it is practically impossible to retrace the ones without the others, because finding open channels of communication between them, the spirits that have retraced one of them, can more easily continue their path in the routes which lead them to all the other routes than make new ones for themselves. So that, because there is a connection between the ideas of these traces, in the same way as between traces, the renewing of one single idea of a long scene is capable to recall the ideas of all the circumstances. (ibid.: 675)

Interestingly, in his response Leibniz tries to accommodate as many as possible of Lamy's views. Most importantly, he accepts Lamy's basic idea about the role of confused perception for the union of soul and body:

Ordinarily, one conceives of *confused thoughts* as a kind completely different from *distinct* thoughts, and our author judges that the mind is more united with the body through confused thoughts than through distinct ones. (GP 4 574)

At this place, Leibniz gives to this idea a turn, which integrates it into the neo-Platonic view of confused perception as the origin of imperfection and particularity:

This is not without foundation, because the confused thoughts mark our imperfection, our passions, and our dependence on the collection of external things or on matter, whereas the perfection, force, power, liberty and action of the soul consist primarily in our distinct thoughts. (ibid.)

Moreover, Leibniz tries to reconcile Lamy's insight concerning the role of confused perception with a not specifically Occasionalist view of Divine causation. As Leibniz points out, if expressing the states of its own body is constitutive for the soul, then even from the point of view of Divine action soul and body are naturally non-separable:

It is true that *God does not need the body*, absolutely speaking, *to give the soul the sensations it has*, but God needs it to act in the order of nature she has established, having given to the soul and once and for all this force or tendency which causes it to express its body. (GP 4 574)

For this reason, Leibniz accepts a version of a theory of emanative causation that explains the ultimate origin of minds and sensations without assuming an immediate Divine intervention: "One agrees that these sensations cannot come originally but from God, but not immediately, except in this general manner, in which all realities emanate continually from God" (ibid.: 573). Finally, another respect in which Leibniz attempts to accommodate Lamy's view of the relation of soul and body within the framework of his own ontology is the issue of the location of the soul. Lamy puts forth the thesis that the soul has a location only in the sense that there are parts of the body in which it immediately performs its functions. The review in the *Journal des Sçavans* renders it thus:

He begins by remarking that the soul, because it has no extension, there can be no way to find a local residence for it; that it is neither out of nor in the body; that exactly speaking, the minds are nowhere; & that it is only a question to know in which part of the body the soul performs its functions.

He pretends that this is particularly in the part of the brain, which is the source of the nerves. It is there where like in its seat it gives its orders to all the parts of the body, & where through intermission of nerves reaching out from there to the most remote parts of the body, it receives in an instant news of all that there happens.

(Journal des Sçavans 26 (1698): 667–668)

Leibniz basically accepts the claim that the soul is located by means of the functional dependence of bodily states on the states of the soul, only adding an important qualification: "It seems also *more exact* to say that the spirits are where they operate immediately, rather than to say, as one does here, *that they are nowhere*" (GP 4 574).

The real disagreements with Lamy concern issues that have to do with the rejection of the Scholastic theory of incomplete entities. Contrary to Lamy, Leibniz defends the view that both with respect to distinct thoughts and to confused perceptions, the states of the soul depend on the states of its body. With respect to distinct thought, Leibniz rejects Lamy's claim that abstract thoughts can occur independently of processes in the organic body:

But it seems that the body senses also our abstract thought, and experience shows that the meditations are capable of hurting it: because the most abstract thoughts use always some *signs*, which touch the imagination, in addition to the attention which binds the fibers of the brain. (GP 4 574)

With respect to confused perceptions, Leibniz rejects the view that there are no structural similarities between bodily states and sensations:

These confused sensations are also not *arbitrary*, and one does not at all agree with the opinion accepted now by several thinkers, and followed by our author, according to which there is no resemblance or relation between our sensations and the bodily traces. It rather seems that our sensations represent and express them perfectly. Someone may perhaps say that the sensation of heat does not resemble movement: Yes, without doubt, it does not resemble a sensible movement, such as that of a driving coach, but it resembles the collection of small movements of fire and the organs which are the cause of the sensation, or rather the sensation is nothing but their representation. This is like how whiteness does not resemble a spherical convex mirror, though it is nothing but the collection of many small convex mirrors such as one sees in foam when one regards it from close up. (GP 4 576)

Thus, just as whiteness has the same internal structure as the light reflected from a collection of many small mirrors, sensations have the same internal structure as the movements they represent. In this way, by stressing the importance of structural similarities, Leibniz tries to revive the idea that there is a similarity between movements in the external world, in the traces of the sensory organs, and in the sensations. This is turn gives content to the idea that perceptions in the soul could not naturally be as they are independently of the processes in the sensory organs. Rather, their representative nature depends on the existence of structural resemblances between perceptions, processes in the sensory organs, and processes in the external world represented indirectly by means of processes in the sensory organs. And it is the dependence of the qualitative side of the soul on the qualitative side of the organic body that makes the essence of the soul an incomplete essence and the soul "something incomplete".

Similar considerations in favor of a conciliatory approach to the problem of composite substances play a role in Leibniz's response to the explicit critique of the system of pre-established harmony in the second edition of Lamy's *De la Conoissance de soi-même* (1699/1701).² One of Lamy's objections there is that simple substances either are made for each other, or they are not. In the first case, he argues, the theory of pre-established harmony coincides with the system of Occasionalism:

because in this way God, on the occasion of the series of motions, which he has foreseen will take place to the body as a consequence of the laws of nature that he has given to it, has destined a different nature to the soul, from the laws of which must arise as many diverse thoughts to respond to the diverse movements of the body. All the difference there is, thus, between this system and the

system of occasional causes, would be that God, when he follows the occasions of the modes of one of these two substances, produces immediately the impressions in the other: whereas in the new system, God produces these impressions only mediately by endowing these substances with virtues & forces appropriate to produce them from their own interior.

(Lamy 1701, Traité Second, Vol. II: 231–232; Leibniz Review 11 (2001): 81–82)

In the second case, Lamy argues, pre-established harmony would be a result of an arbitrary decision of God. Later in the text, he adds an argument that purports to speak against the system of pre-established harmony and in favor of the system of occasional causes:

Because, e.g., when a man receives a blow; I wish that one would be able to say that it is not due to this blow, nor on its occasion that the soul senses pain; but as a consequence of its own laws, it would have had the same sensation if there would have been only God and it; however, can one in the same way say, when a man gets mad, that this is not due to the reversal which takes place in his brain that his mind gets extravagant? (Lamy 1701, Vol. II: 236; Leibniz Review 11 (2001): 86)

Leibniz's response to the second edition of Lamy's work, dated 30 November 1702, is to a large extent concerned with what Leibniz perceives as outright misunderstandings on Lamy's part. This renders his response less illuminating than, e.g., his contemporary replies to Pierre Bayle's Dictionnaire Critique. Nevertheless, there are some passages that are of interest for the present issues. At the beginning of his response, Leibniz puts forth the claim that the union of soul and body is distinguished from the universal harmony among all substances only by a difference in the degrees of indirectness of representation:

> I respond that there is no room for doubt about which side I would choose, and that I have already declared myself in favor of the first one: therefore, one should not see any difficulty here, because it seems that one agrees that the difficulty disappears in case my system cannot accommodate what it does not have in common with the system of occasional causes. Because I hold that not only the soul and the body, but also all the other created substances of the universe are made for each other, and express themselves mutually, although one relates itself more or less mediately to the other according to the degree of the relation. (GP 4 578)

Moreover, later in the text he repeats his constitutivity thesis, according to which the expression of the body is constitutive of the soul: "I respond that I can quite well say that the soul gets extravagant because of the body, as in the other systems, because its nature is to express its body, and to be in accord with it ..." (GP 4 580). Seen on the background of the claim that soul and body are related to each other only by means of a less indirect way of representation than other substances in the

world, this thesis involves two aspects: First, it shares with Lamy's theory of the relation of soul and body the view that everything that can explains the union of soul and body is a matter of functional dependence. Second, in contrast to Lamy's view, it emphasizes the fact that functional dependence at the same time involves interdependence on the qualitative side. In this way, the response to the second edition of *De la Conoissance de soi-même* once more indicates that it is the constitutive role of the expression of bodies in souls that motivates Leibniz's re-appraisal of the Scholastic theory of incomplete entities.

3. Leibniz and the controversy over the co-extension of soul and body in early modern Aristotelianism

The idea of the incompleteness of soul and matter is well documented in Leibniz's writings between 1698 and 1704.³ Nevertheless, although Leibniz uses the Scholastic term "unum per se" in several earlier writings (e.g., A VI 1 503–505; A VI 3 513; A VI 4 401), the idea of incomplete entities does not occur before the controversy with Lamy. Moreover, after 1704 the theory of incomplete entities seems to disappear again. Thus, it looks as if the idea of incomplete entities is not well integrated into Leibniz's philosophical development. However, this impression is misleading, as this and the following section will argue. The present section backs up a continuity thesis by placing some of Leibniz's early statements about the union of the soul and the body in the context of the controversy about the nature of co-extension of soul and body in early modern Aristotelianism, in particular in the work of Julius Caesar Scaliger, Fortunio Liceti, and Daniel Sennert.

In a letter to Jakob Thomasius dating from 1669, Leibniz mentions both Scaliger and Sennert as predecessors in a tradition that attempts to reconcile Aristotelian philosophy of nature with modern mechanism – a tradition in which Leibniz explicitly locates his own early metaphysics of nature. In particular, he mentions Scaliger and Sennert's efforts to formulate a theory of animal generation that at the same time incorporates components stemming from Aristotelian and corpuscularian views of corporeal substances. It is true that there is no evidence that Leibniz had first-hand acquaintance with Liceti's writings on the structure of living beings. However, in the fourth part of the *Physical Remarks* (1632) Sennert discusses Liceti's views in extensive detail. Although it therefore seems plausible to assume that Leibniz was aware of the outlines of Liceti's theory, nothing depends on this point for the present purpose. The aim of this section is not to establish textual links, but rather to make clear some of the theoretical alternatives available within the framework of mechanistic Aristotelianism, and to place Leibniz's early views on the union of soul and body in the context of

these alternatives. Moreover, following this interpretive approach shows the way Leibniz's Aristotelianism modifies his Platonist learnings early on.

In On the Co-extension of Souls and the Body (1616), Liceti bases his view of the location of vegetative souls on a version of a mechanistic interpretation of Aristotle's theory of the operation of souls:

That it is co-extensive with the whole body of herbs, and not contained in a single part only ..., first of all is taught by nutrition; for necessarily the substance of the soul is where the operation is displayed, of which the soul is the primary efficient cause; since for Aristotle there cannot happen any operation or motion without the primary agent, and in the presence of the primary agent; because all physical action is by contact;5 but as the nutrition of a herb is an action, & a physical mutation, which proceeds from the vegetative soul, like from a principle, by means of which first of all the plant is nourished: and as everything that is nourished, according to Aristotle's observation, is nourished with respect to even the smallest part of its body ... it is necessary to confess that the vegetative soul of plants is not contained in only a part of the herb, but diffused everywhere throughout the whole body ... (Liceti 1616: 2)

Liceti develops analogous arguments for the sensitive soul dominating the vegetative soul (ibid.: 24), and for the rational soul dominating the sensitive soul (ibid.: 27). Moreover, he understands the idea of an action by contiguity and contact as a mechanistic reformulation of the idea that the soul is the formal cause of the bo Liceti develops analogous arguments for the sensitive soul dominating the vegetative soul dy (ibid.: 4).

Sennert explicitly rejects Liceti's theory by taking up an idea formulated in Scaliger's Exoteric Exercises (1557). According to Scaliger, souls of angels are "extended without a predicable quantity & are not moved by corporeal motions, but by the motion of an incorporeal extended thing, by changing the 'where" (Scaliger 1557: exercitatio 359, sect. 12). More generally, Scaliger writes, "The soul is not in a place, because it is not a quantity. Since a quantum cannot be in all parts of a quantum as a whole. But the soul is in each part of the body, which is a quantum" (ibid.: exercitatio 309, sect. 13). Sennert's theory of the co-extension of soul and body can be understood as an explication of this view: "the form & soul per se is not a quantum, & and therefore it fills out & penetrates the whole body, it is per se indivisible, but nevertheless without quantity is co-extensive with the body" (Sennert 1676:132-133). Therefore, Sennert compares the relation of souls to place with the relation of rays of light to space: also the presence of one ray of light does not impede the presence of a different ray of light at the same place at the same time, and an analogous observation can be made with respect to shadows. He also compares the relation of souls to place with that sensible species have to place:

not only can more than one sensible species occupy the same place at the same time as other sensible species. They also can be at the same time in the minds of different perceivers; in this sense they can be at different places at the same time, and, in addition, have the capacity to multiply themselves (ibid.: 133). Moreover, Sennert takes up Scaliger's view according to which the soul is extended without a predicable quantity:

Here one has to distinguish between extension in the proper sense; & extension understood only analogously. Extension in the proper sense belongs to quantity & and bodies, which have parts that are disposed in way that where the one is, the other is not ... However, there is not one part of the soul in the eye, another in the foot, nor is the soul bigger in the man than in the child; but as the immense & infinite God is everywhere, not having parts external to parts; also the soul in its own way fills out the whole body without having parts external to parts. (ibid.)

Leibniz's early view of the relation of soul and body seems to come closer to Scaliger's view that the soul is only in analogical sense co-extensive to its body than to Liceti's view that the soul is present by contact and contiguity. It is true that in the Dissertation on the Art of Combinations (1666), he explores a theory of substantial form in purely geometrical terms. There, he puts forth the view that substantial forms understood as geometrical figures are indivisible, and thus display a structural feature traditionally associated with the formal aspect of individual substances. At the same time, the Dissertation on the Art of Combinations embraces a neo-Platonic emanation scheme that leads to the conclusion: "God is substance, a creature an accident" (Dissertatio de Arte Combinatoria, 1666, Corollaria, II, 2; A VI 1 229). More specifically, in On Transsubstantiation (1668-1669) Leibniz formulates a view as to the role of passive aspects of substances that with a view to the later explication of passive potency as confused perception can well be understood as a version of a confusion theory of body: "In the idea there is ideally contained both the passive and the active potency, the active and passive intellect. Insofar as the passive intellect concurs, in the idea there is matter; insofar as the active intellect concurs, there is form" (A VI 1 512). Very early on, Leibniz's ontology also adds to material objects displaying geometrical figure another kind of entities, which due to their immaterial nature and dynamical properties are characterized as mind-like substances. Already in On Transsubstantiation, Leibniz regards the existence of human minds or a Divine mind as a necessary condition for the individuation, and therefore the reality, of material objects:

Whatever if considered with a concurrent mind is a substance, if deprived of a mind is an accident. A substance is the union with a mind. Thus, the substance of the human body is the union with the human mind; the substance of bodies lacking reason is the union with the universal mind or God; an idea is the union of God with a creature. (A VI 1 508–509)

Leibniz at this place characterizes both the Divine and the human mind as a "principle of motion" external to the body. The view of minds as immaterial principles of motion has the consequence that the relation of minds to space is different from that of material objects. In On Transsubstantiation he constructs the following argument to support the Thomistic view according to which minds are related to space only through their operations:

All mind lacks extension.

Whatever lacks extension, is not co-extensive with space.

Whatever is not co-extensive with space is not at a place per se.

Therefore, mind is not at a place per se.

The mind operates on the body, which is in space.

In this sense, therefore, it can be said that the mind is in space through

its operation. (A VI 1 509-510)

In addition, the contemporary Outline of Catholic Demonstrations (1668–1669) distinguishes the way human minds can be assigned a place in their bodies from the way the Divine mind is related to space. There, the envisaged topic of chapter 4 of the third part is characterized as "the mode of the omnipresence of GOD and the multipresence of each other mind, against Conrad Vorstius, and the Scholastic theory of the impletive, circumscriptive, and definitive 'where" (Demonstrationum catholicarum conspectus; A VI 1 495).

Early in the 1670s, Leibniz makes the view of the multiple location of the human soul more specific by introducing the idea that in organic bodies there is some subtle matter, which he calls a "kernel of substance" (Letter to Duke Johann Friedrich, 21 May 1671; A II 1 108–109). About this subtle matter, he writes that it is diffused throughout the body, that it is what accounts for the regeneration of plants, and that it remains united to a soul even if the "gross" matter constituting an organic body is destroyed (De ressurectione corporum; A II 1 116-117). In the Paris years, Leibniz comes back to this issue in a short response to Robert Boyle's alchemically inspired theory of the resurrection (Boyle 1675). There, he emphasizes his basic agreement with Boyle's views and identifies them with his own view that a perennial "flower of substance" is what actually constitutes our body. In addition to being diffused throughout the less subtle parts of the organic body, it also is described as "containing alone in some way the form [of the body]." Moreover, the only addendum Leibniz wants to make to the theory of Boyle is

the claim that the soul is firmly implanted in the "flower of substance" (*De sede animae*, February 1676; A VI 3 478–479). That at this place the *flos* is said to be "our body" seems to imply that it is something extended and material (Brown 1998: 582–584). At the same time, having a formal aspect distinguishes the subtle matter Leibniz has in mind here from prime matter (which at another place also is called "subtle matter" (*De material prima* (ca. 1670–1671); A VI 2 279–280). Moreover, in *On the Union of the Soul and the Body*, written possibly at the same time as the response to Boyle, Leibniz applies the idea of a subtle "flower of substance" to the problem of the seat of the soul:

I have believed that there is some fluid or, if you like, an ethereal substance, diffused in the whole body, and continuous; by which the soul senses; which inflates the nerves, which contracts itself, and which explodes. ... But that the soul itself agitates a vortex, is true wonder. Nevertheless, it does do this, since we act not simply mechanically, by out of those reflections, or actions on ourselves.

(De unione animae et corporis, February 1676; A VI 3 480)

Thus, according to Leibniz, subtle matter has a certain causal role in the working of the nervous system and thereby functions as the instrument by means of which the soul has sensations. Subtle matter is co-extensive to the body in the sense that it is contiguous with each part of the body. Leibniz even characterizes this subtle matter using the terminology of "form". This implies that there is some mechanical formal cause in organic beings. Nevertheless, for Leibniz this material formal cause is not identical with the soul. The soul is an immaterial principle of force that has multiple location in the sense that, by means of subtle matter, it acts everywhere in the bodies. This amounts to the view that the soul is co-extensive with its body only in an analogical sense: the soul does not act everywhere by contact, but by acting (in a way yet to be explained) on subtle matter that acts everywhere by contact. Moreover, being co-extensive in this way presupposes the existence of entities different from the soul and its modifications. For this reason, understanding the co-extension of souls and bodies in the way outlined by Scaliger and Sennert leads to a theory of organic entities that are genuinely composite. Moreover, mind-like entities are seen as the condition for the reality of material objects. In this sense, material objects very early on are characterized as something that cannot exist independently of mind-like entities. Finally, the idea of a subtle matter acting as the instrument of the soul implies that the way souls perceive the world cannot be explained independently from the nature of bodily traces.

4. Incomplete entities and confused perception in Leibniz's correspondence with Rémond

Leibniz's claimthat soul and body, in some sense, are incomplete without each other can be seen as a clarification and extension of ideas that were present very early on in his philosophical development. This makes it even more puzzling why he did not make more use of this strategy in his later writings. One possible explanation of this may be that Leibniz at some time gave up the view that pre-established harmony is sufficient as an explanation of the metaphysical union of soul and body (Rozemond 1997: 174-178; Woolhouse 2000: 164-170). Such an interpretation can be plausibly motivated by the response to objections put forth by de Tournemine, where Leibniz admits that pre-established harmony does not bring about a "true union" or "metaphysical union" but only gives a natural explanation for the phenomena (GP 6 595–596). On the other hand, the vinculum substantiale theory later developed in the correspondence with des Bosses explores a stronger theory of a metaphysical union involving more than pre-established harmony. Nevertheless, there is at least one significant train of thought, which has close affinities to his earlier theory of incomplete entities. Moreover, Leibniz in this context holds on to a conciliatory strategy that combines Aristotelian, Platonic, and Cartesian components. This becomes particularly clear in his correspondence with the French Platonist Nicholas Rémond in the years 1714-1715.

In an undated letter to Rémond [1714], Leibniz opens the exchange with a statement of his view of the role of simple substances for the constitution of the world:

One could not even conceive that it would have anything but this in the simple substances and consequently in the whole nature. The collections are what we call bodies. In this mass one calls matter or rather passive force or primitive resistance what one considers in bodies as what is passive and everywhere uniform; but the primitive active force is what one could call Entelechy, and in this mass is varying.

(GP 3 622)

Moreover, at this place Leibniz emphasizes his agreement with Plato's view that bodies are real only in a limited sense (GP 3 623). However, this does not amount to a reduction of the theory of simple substances to a Platonic version of idealism. Rather, in one of the subsequent letters to Rémond (1715), Leibniz integrates into a Platonic framework the Aristotelian aspects of his theory of composite substances. There, he argues that the transition of a soul from one organic body to another would be incompatible with the order of nature, which requires intelligible explanations and excludes leaps – two criteria that are violated by the theory

of metempsychosis. He also outlines his alternative view of the development of living beings:

Because one can conceive only the development and change of matter, the machine which constitutes the body of a spermatic animal can become a machine of the sort required to form the organic body of a human being: at the same time the merely sensitive soul must have become reasonable, due to the perfect harmony between the soul and the machine. (GP 3 635)

Thus, even at this late stage of Leibniz's philosophical career animals are seen as genuinely composite entities: there is not only a universal harmony between simple substances, but also the relation between a simple substance and its body is seen as a special case of this universal harmony. The pre-established harmony between the soul and its organic body is more than can be explained by means of the modifications of the passive aspects inherent in the soul itself. At the same time, Leibniz integrates a Neo-platonic theory of the origin of the passive aspects of material objects into this broadly Aristotelian theory of composite substances:

As to the inertia of matter, because matter itself is nothing but a phenomenon, although a well-founded one, resulting from monads, the same is the case with inertia, which is a property of this phenomenon. ... But in interior of things, because the absolute reality is only in the monads and their perceptions, it must be the case that these perceptions are well ordered, that is to say, that the rules of harmony are observed there, such as that which orders that the effect must not exceed the cause. ... [B]ecause monads are subject to passions (except for the primitive one), they are not pure forces; they are the foundation not only of actions, but also of resistance or passivity, and their passions are in their confused perceptions. This is what involves matter or the infinite in number. (GP 3 636)

At this place, Leibniz embraces a neo-Platonic view according to which both the materiality and the multiplicity of individual objects derive from the confused perceptions in mind-like substances. However, at the same time he holds such a theory to be compatible with an Aristotelian theory of composite substance. The way to reconcile the one with the other is quite straightforward: the (secondary) matter associated with a given simple substance is not only a modification of the passive aspects of this substance, but a modification of the passive aspects of many simple substances standing in relations of pre-established harmony to each other.

The issue of primary and secondary matter is explicitly combined with the theory of incomplete entities in one of the last letters to Rémond, dated 4 November 1715:

I believe to have proven that each substance is active, and the soul above all. This is also the idea the Ancients and the Moderns had of it, and Aristotle's entelechy, which has made so much noise, is nothing but the force or activity ... But pure *primary matter* taken without souls or lives that are united to it is purely passive: moreover, to speak properly it is not a substance, but something incomplete. And secondary matter (such as, e.g., the organic body) is not a substance, but for another reason; namely, that it is a collection of several substances, like a pond full of fishes, or like a herd of sheep, and consequently it is what one calls an *Unum per accidens*, in a word, a phenomenon. A true substance (such as an animal) is composed of an immaterial soul and an organic body, and it is the composite of both that one calls an *Unum per se*. (GP 3 657)

Although this does not amount to a view of soul and body as form and matter in a genuinely Aristotelian sense, Leibniz tries to hold on to a genuinely Aristotelian notion of entelechy and the resulting view of a living being as an organic body endowed with an active principle. Interestingly, it is exactly this side of the Aristotelian theory of composite substance, which Leibniz thinks to be compatible with the philosophy of the Moderns. Moreover, Leibniz explicitly reaffirms what he had doubted in the response to de Tournemine, viz., that pre-established harmony can explain the metaphysical union between soul and body:

> That is why secondary causes act truly, but without any influence of a created simple substance on another one; and the souls match with the bodies and with each other due to the pre-established harmony, and not at all through a mutual physical influence, except for the metaphysical union of the soul and its body, which makes them compose an unum per se, an animal, a living being.

> > (GP 3 657-658)

Again, Leibniz combines this broadly Aristotelian theory of composite substances with a Cartesian theory of ideas in the human mind and a Neo-platonic account of the emanation of created beings from the ideas in the Divine mind:

> It suffices to consider ideas as concepts, i.e. as modifications of our soul. This is how the Scholastics, Monsieur Descartes and Monsieur Arnauld understand them. But because God is the source of possibilities and, consequently, of ideas, one can excuse or even praise this Father to have changed the terms and to have given ideas a higher signification by distinguishing them from concepts and by taking them as perfection which are in God, and in which we are participating in our knowledge. (GP 3 659)

In this sense, Leibniz can hold the view that not only in the system of Occasionalism but also in his own system "God is the only immediate external object of souls, which has a real influence on them" (GP 3 660). Finally, he points out that

although the there is a commonly held theory of causal influence by means of species within the Scholastic tradition, the Scholastics nevertheless "acknowledge that all our perfections are a continuous gift from God, and a limited participation in his infinite perfection. Which suffices to judge that also what is true and good in our knowledge is an emanation of the light of God …" (GP 3 659–660).

Thus, holding a broadly Aristotelian theory of composite substances, in the eyes of Leibniz, is compatible with a Neo-platonic emanation scheme, as well as with aspects of the Cartesian tradition. Leibniz's reaffirmation of the theory of body and soul as incomplete entities in the correspondence with Rémond, therefore, should not be characterized as an attempt to reduce the theory of composite substance to a specifically scholastic theory. Rather, it is an attempt at integrating one particular aspect of the scholastic theory into a view of the nature of living being that reconciles elements of diverse origins. To these belongs the idea of a hierarchy of being, in which the less perfect beings differ from the Divine mind by their confused perceptions. In this sense, the primitive passive force in simple substances leading to confused perceptions can be interpreted as a principle of particularity and materiality. At the same time, however, Leibniz defends the idea that confused perceptions are something by means of which souls are united to their bodies. In this sense, confused perceptions can be seen as a feature of finite souls that makes them incomplete without their organic bodies. Thus, confused perception for Leibniz not only explains the particularity and materiality of individual things in the world, it also contributes to explaining the functional dependence between the states of a plurality of simple substances constituting a living being.

Notes

- * Initial research for this paper was conducted at the Center for Philosophy of Science of the University of Pittsburgh during my time as a Visiting Fellow in the academic year 2002–2003. The special collections of the Hilman Library of the University of Pittsburgh and the Staatsbibliothek Berlin provided me with rare printed sources. Earlier versions of this paper were read at the Department of Philosophy at the Humboldt University of Berlin in January 2004, and at the Annual Conference of the New Israeli Philosophical Association at the Hebrew University, Jerusalem, in February 2004. I would like to thank Ursula Goldenbaum, Ohad Nachtomy, and Pauline Phemister for their helpful comments.
- 1. For the history of the editions of Lamy's work and Leibniz's responses, see Woolhouse and Francks (1994), Woolhouse (2001). The parts of the review of the first edition to which Leibniz responded were published in the *Journal des Sçavans* 26 (1698): 660–668 and 669–679.

- 2. François Lamy, De la Connoissance de soi-même, 2nd ed., 6 vols., Paris 1699; reprinted Paris, 1701. The passages relating to Leibniz from the 1701 edition are reprinted in the Leibniz Review 11 (2001): 73-100.
- 3. In addition to Leibniz's response to Lamy, see Leibniz to Johann Bernoulli, August or September 1698; GM 3 537; Leibniz to Johann Bernoulli, 20/30 September 1698; GM 3 541-542; Leibniz to Johann Bernoulli, 17 December 1698; GM 3 560; Leibniz to Damaris Masham, September 1704; GP 3 363.
- 4. Leibniz to Jakob Thomasius, 20/30 April 1669; A II 1 14.
- 5. Liceti refers the reader to Aristotle, Phys., 7, 10-12; 8, 33; De an., 2, 3; 2, 24; 2, 47; De gen., 1, 35.

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