Animals and Immortality in the Monadology

1. INTRODUCTION

The view that all animals can begin their life only at the beginning of the world and end their life only through divine intervention belongs to the most puzzling doctrines of the *Monadology*. Leibniz mentions the microscopists' observations concerning plant and animal seeds in immediate vicinity to his view concerning animal immortality.² And his interest in microscopism may go some way towards explaining why he believed in the existence of imperceptibly small living beings and in the development of perceptible animals from imperceptibly small, preexisting living beings.³ Still, invoking microscopism alone would leave Leibniz with a huge argumentative gap—the fact that there are some minute animals does not imply that such animals are everywhere in matter, and the fact that perceptible animals develop out of imperceptible living seeds does not imply that such transformation processes span the entire duration of the world. Rather, biological conceptions would imply that living seeds sometime come into existence and that animals die after a while. No wonder, then, that Leibniz says that the insight that visible living beings arise from invisible "spermatic animals" can be only "half of the truth."5

But, then, why does Leibniz regard the view that there is natural end to the life of an animal to be the other half of the truth? I suggest that Leibniz's views on animal immortality are grounded in his view that, in some sense, souls and organic bodies cannot exist without each other. To substantiate this claim, I will explore the relevance of the doctrine of souls and organic bodies as incomplete entities for Leibniz's doctrine of natural immortality. To be sure, in the *Monadology* he does not mention this doctrine. However, it is prominent in Leib-

¹ Monadology §§ 72-73 (GP VI, 619).

² Monadology § 74 (GP VI, 619).

³ On Leibniz's attitude toward microscopism and its metaphysical implications, see Wilson 1997a; Wilson 1997b, chapter 6; Smith 2007; Smith 2011, 97–98, 149–152, 176–181. On Leibniz's views on the immortality of rational souls, see Wilson 1976.

⁴ Monadology § 74 (GP VI, 619).

⁵ Monadology § 75 (GP VI, 619).

niz's later metaphysics—from his response to the detailed anonymous review of François Lamy's De la connoissance de soi-même6 in the Journal des Sçavans of 1698 to the late correspondence with Nicolas Rémond⁷—and, moreover, it is closely connected with an issue that is mentioned in the *Monadology* shortly before the remarks about natural immortality, namely, the issue of the representation of the universe through the organic body of a living being.8 The task of this article will be to clarify the nature of the connection between Leibniz's usage of the notion of incomplete entities and the notion of perspectival representation (section 2), as well as the nature of the connection between his analysis of perspectival representation and the doctrine of natural immortality (section 3). A difficulty with respect to Leibniz's adoption of the theory of incomplete entities, of course, is that, in his later metaphysics, he no longer accepts an analysis of the relation between soul and body in terms of form and matter. Hence, the relevant sense of incompleteness cannot be the incompleteness of form and matter. As I will argue, his doctrine of the perspectival representation of the universe in simple substances fills out the relevant sense of incompleteness. In the *Monadology*, immediately before his claims concerning animal immortality, Leibniz outlines his theory of perspectival representation, and his theory of animal immortality should be seen as a direct consequence of his view that an animal soul represents the universe more distinctly by means of representing the perceptions of the simple substances constituting its organic body.

II. INCOMPLETE ENTITIES AND REPRESENTATION DEPENDENCE

In his later metaphysics, Leibniz uses the theory of incomplete entities to explicate a sense in which a plurality of simple substances—namely, the dominant monad that functions as the soul of an animal and the subordinate monads that

⁶ Lamy 1694–1698; review: *Journal des Sçavants* 26 (1698) [Amsterdam edition], 660–668 and 669–679.

⁷ On Leibniz's usage of the notion of incomplete entities in his correspondence with Rémond, see Blank 2010.

⁸ On the scholastic theory of incomplete entities, see Cover – O'Leary-Hawthorne 1999, 47–49; Adams 1994, 272–285. On Leibniz's whole-entity principle, see Cover – O'Leary-Hawthorne 1999, 40–44.

⁹ This is why Marleen Rozemond believes that the notion of incomplete entities cannot fulfil any useful function within the framework of Leibniz's metaphysics of composite substances; see Rozemond 1997, 150–178. Rozemond argues that although Leibniz at some place is talking about the incompleteness of soul and body, the only notion of incompleteness that really has a place within Leibniz's metaphysics is that of the incompleteness of primitive active and passive forces internal to a simple substance (ibid., 174–175). Pauline Phemister agrees that talk about the incompleteness of soul and body is always found together with a theory about the internal structure of simple substances; see Phemister 1999, 72. Roger S. Woolhouse discusses Leibniz's theory of pre-established harmony without taking up this challenge; see Woolhouse 2000, 164–170.

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constitute the body of an animal—can stand in a relation of union (even if, perhaps, not in a relation of unity). This is why the theory of incomplete entities becomes relevant for the question of natural immortality. Clearly, however, the sense of unity that Leibniz has in his later metaphysics is not the unity constituted by form and primary matter. On first sight, this makes it seem puzzling why Leibniz invokes the theory of incomplete entities at all. There can be little doubt that the analysis of corporeal substances in hylemorphic terms played a central role in scholastic theories of the relation between soul and body. If the scholastic theory of soul and body as incomplete entities would reduce to an analysis of the relation between form and matter, Leibniz's adoption of this theory would not be able to do much work within the framework of his theory of pre-established harmony.

However, examining one of the most prominent versions of the theory of incomplete entities, the one developed by Francisco Suárez (1548–1617), indicates that the relation between matter and form is only one example of the relation between incomplete entities. Using "physical" in the unusual sense that what is "physical" exists in a thing itself independently from the operations of the mind,¹¹ he defines the notion of an incomplete substance in the following way: "In a physical sense, a substance is called incomplete, which is a physical part or a substantial mode, or the goal of a substance, concurring in some way to its complement." Interestingly, form and matter are subsequently treated only as one of several examples of physically incomplete substances:

Thus in particular a substance in the state of becoming, or the substantial becoming itself, can be called an incomplete substance... Then, form and matter, which are physical parts of a substance, are physically incomplete substances. In the same way, the whole nature, be it composite of matter and form or simple like the angelic nature, compared to the logical subject is an incomplete substance, because it is compared to this part or form, which is complemented and terminated through subsistence. From whence also subsistence itself is an incomplete substance, or something physically incomplete in the kind of a substance.¹³

¹⁰ The importance of this distinction is emphasized by Rozemond 1997 and Woolhouse 2000.

¹¹ Francisco Suárez, *Disputationes Metaphysicae* 33, 1. 6 (cited according to disputation, section, and subsection). By contrast, he calls "metaphysical" or "logical", what depends on the operation of the mind. Thus, a substance that can be called "metaphysically complete" is one that has a complete description in terms of genera and lowest species. Cf. *Disputationes Metaphysicae* 33, 1, 15–23.

¹² Disputationes Metaphysicae 33, 1, 6: "substantiam Physice incompletam vocamus, quae ex sua entitate in re ipsa non habet quidquid ad substantiae complementum intra ipsum substantiae genus necessarium est."

¹³ Ibid.: "Sic inprimis dici potest substantia incompleta ipsa substantia in fieri, seu ipsum fieri substantiale, prout est via ad talem terminum, aut dependentia eius a sua causa, sic enim omnis motus quatenus est via ad suum terminum, solet ens incompletum appellari... Deinde forma & materia, quae sunt partes Physicae substantiae, sunt Physice incompletae substantiae.

Thus, the notion of incompleteness Suárez has in mind is more general than the notion of incompleteness of form and matter. This more abstract notion of incompleteness is especially relevant for the way Suárez distinguishes the relation between soul and body from the relation between different portions of water:

[A] drop of water is not so to speak positively a part, even according to its aptitude, but only negatively, because out of its own nature it does not demand the conjunction with another portion of water; since in itself it has the whole essence, and the proper logical subject of water, and its own intrinsic goal, it just does not resist being joined to another portion of water ... However, things are different with the soul, since even when it is separated it is a part according to its positive aptitude and nature, and not only by means of non-resistance. This is because it is not an integral part but an essential part, and has an incomplete essence that by its nature has the constitution to complete another essence, and thus it is always an incomplete substance.¹⁴

Here, a substance is seen as an incomplete entity in case its essence is incomplete without the essences of other entities, or it is not a proper subject of predication, or it has not reached its internal goal. In particular, the soul is characterized as an incomplete entity in the first sense. Because soul and body have incomplete essences that complement each other, they form a whole that is more than a sum of mereological parts. Of course, this notion of incompleteness can be combined with the idea of form and matter as incomplete entities. However, it is formulated on a more abstract level, and therefore, in principle, can be integrated into different ontological frameworks. Moreover, although Suárez uses the terminology of complete and incomplete "substances", he points out that properly speaking only a complete entity can be called a "substance"; calling incomplete entities "substances" is justified only because entities that are entirely non-substantial cannot constitute a genuine substance. ¹⁵ Contrary to Rozemond, ¹⁶ Leibniz's views should therefore not be seen as being incompat-

tiae. Tota item natura, vel composita ex materia & forma, vel simplex ut angelica comparata ad suppositum, est incompleta substantia, nam comparatur ad illud ut pars seu forma, quae per substistentiam amplius completur & terminatur. Unde & subsistentia ipsa, substantia est incompleta, seu aliquid incompletum Physice in genere substantiae." Unless otherwise noted, translations are my own.

¹⁴ Disputationes Metaphysicae 33, 1, 11: "[G]utta aquae separata, non est positive ut sic dicam pars, etiam aptitudine, sed tantum negative, quia ex natura sua, non postulat coniunctionem ad aliam aquam: in se enim habet integram aquae essentiam, & proprium suppositum, & intrinsecum terminum suum, ei vero non repugnant coniungi alteri aquae... In anima vero secus res habet, nam etiamsi sit separata est pars secundum positivam aptitudinem & naturam & non tantum per non repugnantiam. Est enim pars non integralis, sed essentialis, habetque incompletam essentiam, natura sua institutam ad complendam aliam, & ideo semper est substantia incompleta."

¹⁵ Disputationes Metaphysicae 33, 1, 5.

¹⁶ Rozemond 1997, 173.

ible with the scholastic doctrine simply on the grounds that he does not think that bodies are substances: reservations as to the substantiality of incomplete entities are inherent in the scholastic approach itself.

There is no evidence that Leibniz was familiar with the details of Suárez's theory of incomplete substances. However, there is a more indirect connection. Something very close to Suárez's abstract, not specifically hylemorphic conception is a target of Descartes's criticism of scholastic theories of the relation between soul and body. For example, in a letter to Regius, Descartes clearly rejects the theory of soul and body as incomplete entities but also clearly formulates what the theory that he rejects implies:

It may be objected, that it is not accidental for the human body to be joined to the soul, but its very nature; because if the body has all dispositions required to receive the soul, which it must have to be strictly a human body, then short of a miracle it must be united to a soul. Moreover, it may be objected that it is not the soul's being joined to the body, but only its being separated from it after death, which is accidental to it. You should not altogether deny this, for fear of giving further offence to the theologians; but you should reply that these things are still be called accidental, because when we consider the body alone we perceive nothing in it demanding union with soul, and nothing in the soul obliging it to be united to the body; which is why I said above that it is accidental in a sense, not that it is absolutely accidental.¹⁷

Particularly relevant for present concerns, Lamy's broadly occasionalist theory of the union of mind and body adopts Descartes's rejection of the theory of soul and body as incomplete entities. The review in the *Journal des Sçavans* puts it thus:

He regards it as chimerical to pretend as they [sc. the scholastic philosophers] do 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

¹⁷ Descartes to Regius, mid-december 1641, in Descartes 1982, vol. 3., 460–461: "On peut seulement vous objecter qu'il n'est point accidentel au corps humain d'être uni à l'âme, mais que c'est sa propre nature; parceque le corps ayant toutes les dispositions requises pour recevoir l'âme, sans lequels il n'est pas proprement un corps humain, il se peut faire sans miracle que l'âme ne lui soit unie. On nous objectera aussi qu'il n'est pas accidentel à l'âme d'être jointe au corps, mais seulement qu'il lui est accidentel après la mort d'être séparée du corps, ce qu'il ne faut pas absolument nier, de peur de choquer derechef les théologiens; mais cependant il faut répondre qu'on peut appeller ces deux substances accidentelles, en ce que ne considérant que le corps seul, nous n'y voyons rien qui demande d'être uni à l'âme, et rien dans l'âme qui demande d'être uni au corps; c'est pourquoi j'ai dit un peu auparavant que l'homme est *en quelque facon*, et non pas *abolument* parlant, un être accidentel." Translation from *The Philosophical Writings of Descartes*. Trans. John Cottingham – Robert Stoothoff – Dugald Murdoch – Anthony Kenny. Vol. 3: *Correspondence*. Cambridge. Cambridge University Press, 1991, 200. See also Descartes, *Quartae Responsiones, Oeuvres*, vol. 7, 222–223.

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. 18

Leibniz's response to Lamy may be seen as a reaction to this formulation of the doctrine of incomplete entities. Hence, rehabilitating the scholastic doctrine, as Leibniz attempts to do. amounts to defending the view that mind (or soul) and body (or matter)¹⁹ have a "natural and essential" relation to each other, not the more specific claim that they are related to each other as form and matter, or as potency and actuality. That Leibniz pursues this more abstract strategy is most obvious in the way he treats the issue of the dependence of the representative nature of the soul on its organic body. 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 on the role of confused perception. 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 wisest to our philosopher.²⁰

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." What is more, Lamy holds 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

²¹ Ibid., 670.

¹⁸ Journal des Sçavans 26 (1698), 664: "Il regarde com[m]e chimerique de pretendre com[m] e ils font, que l'esprit & le cors sont des êtres incomplets qui ont une naturele & essentiele relation l'un avec l'autre ... Ce qu'on alegue que ce sont des êtres incomplets, n'est pas plus raisonable; si par là l'on pretend que l'esprit n'ait pas tout ce qu'il faut pout être une vraye substance pensante independemment du cors, ou que le cors n'ait pas independemment de l'esprit, tout ce qu'il faut pour être un vrai cors humain." On Lamy's occasionalist position and Leibniz's response, see Woolhouse–Francks 1994; Woolhouse 2001.

¹⁹ In the draft of the text, Leibniz starts out using Lamy's terminology of "mind" and "body" but after a few sentences switches to the terminology of "soul" and "matter" and corrects the previous occurrences of "mind" and "body"; see the manuscript LH II, 2, 3a, Bl. l. On the relevance of the manuscript variants for the genesis of Leibniz's views on incompleteness, see Blank 2003.

²⁰ Journal des Sçavans 26 (1698), 669: "Cette conduite d'établir dans ces perceptions confuses l'union de l'esprit & du cors, & de faire conoître à celui-là les besoins de celui-ci, & les raports que les cors environans ont avec lui, paroît la plus sage à notre Filosofe."

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.²²

In his response, Leibniz tries to accommodate as many as possible of Lamy's views. Most importantly, he accepts Lamy's basic idea that "the mind is more united with the body through confused thoughts than through distinct ones."23 At this point, Leibniz applies to this idea a twist that integrates it into the Neoplatonic view of confused perception as a mark of imperfection and of "our dependence on matter and on external things," while he ascribes the perfection, force, power, liberty and action of the soul primarily to our distinct thoughts.²⁴ Even if in Leibniz's late metaphysics perceptions and the striving towards new perceptions are all that can be found in simple substances, 25 confused perception thus is used to explicate the sense in which a simple substance can thought of standing in a dependence relation to other beings. Clearly, however, it cannot be a relation of causal or existential dependence. The only relevant relation can be a relation of representation dependence. Moreover, confused and distinct perceptions, together with the strivings originating from them, is all that can constitute the essence of a simple substance (where Leibniz understand essence as "what is real in possibilities" ²⁶). If so, then representation dependence can be understood as a kind of essential dependence: no simple substance would be what it is independently of the content of its perceptions, and its essence could not be what it is independently of the description of the content of its perceptions. Simple substances, thus, can be understood as being incomplete in the sense that relations of representational dependence hold between all simple substances and that, correspondingly, their essences could not be understood independently of the essences of the simple substances that are represented.

²² Ibid., 675: "La liaison que les traces ont entre elles consiste dans la facilité qu'elles one à se retracer mutuelement, c'est à dire en ce qu'ayant été en même tems formées dans le cerveau, elles ne peuvent presque plus se retracer les unes sans les autres, parce que se trouvant entre elles des chemins libres de communication, les esprits qui en ont retrace une, ont plus de facilité à continuer leur chemin dans les routes qui menent à toutes les autres, que de s'èn faire de nouveles. De sorte que com[m] il y a même liaison entre les idées de ces traces, qu'entre les traces, le renouvellement d'une seule idée d'une longe scene est capable de rapeler les idées de toutes ses circonstances."

²³ Leibniz, Addition à l'explication du système nouveau, GP IV, 574.

²⁴ Ibid. On confused perception as the origin of the particularity, multiplicity and imperfection of created minds, see Plotinus, *Enneads* VI 6, 1; VI 9, 2; VI 9, 4A (transl. by H. Armstrong. Cambridge, Mass., Harvard University Press, 1998); Nicholas of Cusa, *De coniecturis* 15 (ed. by J. Koch – W. Happ, Hamburg, Meiner, 1988). The similarities between Plotinus, Nicholas of Cusa and Leibniz are explored in Smith 2003.

²⁵ See, e.g., *Monadology* §§ 13–14 (GP VI, 608).

²⁶ See, e.g., *Monadology* § 43 (GP VI, 614).

III. REPRESENTATION DEPENDENCE AND NATURAL IMMORTALITY

If representation dependence between simple substances can be understood as a kind of essential dependence, representation dependence can explicate a sense in which simple substances functioning as souls and simple substances constituting an organic body can be understood to be incomplete entities. In this way, Leibniz's theory of representation offers an explication of incompleteness without invoking the ontology of form and matter. For Leibniz, the relation between body and soul is a special case of the relation of representation dependence holding between all simple substances, and this is why he agrees with Lamy that confused perception is crucial to understanding the union between soul and body. Moreover, as Leibniz argues in his response to Lamy, if expressing the states of its own body is constitutive of 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 he has established, having given to the soul and once and for all this force or tendency which causes it to express its body.²⁷

Thus, Leibniz concedes that God, through his absolute power, could give to the soul the perceptions that it has without anything in the world corresponding to these perceptions. However, how such a scenario is contrary to the divine will to create the best possible world since then the perceptions of the soul would no longer follow the order of nature.

Yet, one may wonder whether such a conception of incompleteness is appropriate for explicating the relation between the soul and its organic body. To be sure, this conception applies to the soul and its organic body because the essence of the soul is not independent of the essence of the body (since the soul is represented in the simple substances that constitute its body and the simple substances constituting its body are represented in the soul). As we have seen, the idea of representation lies at the heart of the notion of essential dependence. But this may exactly be the problem: in Leibniz's late metaphysics, the soul represents not only its organic body but every simple substance in the world. Relations of essential dependence thus hold between all simple substances in the universe. And if relations of representation are the only relations that hold between simple substances, Leibniz needs to specify a special kind of representation relation that singles out the right kind of composite substances.

²⁷ GP IV, 574: "Il est vray que *Dieu n'a pas besoin du corps*, absolument parlant, *pour donner à l'ame les sentimens qu'elle a*, mais il en a besoin pour agir dans l'ordre de la nature qu'il a établie, ayant donné à l'ame dès le commencement et une fois pour toutes cette force ou tendance qui la fait exprimer son corps."

In fact, his account of perspectival representation fulfils this task. Among his commentators, there has been some controversy about how to understand the doctrine of perspectivity. One reading would have it that the perspectivity of the representation of the universe in a simple substance results because the simple substance represents only through the relations that its body has to other bodies.²⁸ Such a reading is supported by Leibniz's remark to the effect that all the perceptions of a soul must "be born to it (spontaneously) from its own nature, and exactly in such a way that they by themselves correspond to what happens in the whole universe, but more particularly and perfectly to what happens in the body that belongs to it, because it is in a certain way and for a particular time, according to the relation of other bodies to its own body, that a soul expresses the state of the universe."29 Still, one can object that Leibniz characterizes the harmony between soul and body as a particular case of the harmony between all simple substances, 30 and that he maintains that the perceptions in the soul correspond to everything that happens in the universe and only in a particular way to what happens in the body.³¹ Consequently, one may suppose that the perspectival representation applies in the same way to all simple substances, without presupposing mediation through organic bodies. According to such a reading, perspectival representation between all simple substances would be a necessary condition for the particularly clear and distinct perception of those simple substances that constitute the organic body of a living being.³² Still, such a reading seems to overlook Leibniz's remarks concerning the constitutive role of the representation of the body for perspectivity. These interpretive difficulties suggest that what may be demanded is a two-tier analysis of Leibniz's conception of perspectivity. In Leibniz's view, there seem to be two complementary aspects of perspectivity: (1) the view that the soul represents from its own perspective the whole universe, and therefore particularly clearly its own body, and (2) the view that the soul represents the universe in a particular way due to the mediating role of its body. Both aspects are articulated in *Monadology* § 62:

²⁸ Brown 1990, 93: "Each finite monad is effectively bodied, and it is through and only through the relation of its body to other bodies that the finite monad perceives its world."

²⁹ Discours de Métaphysique", § 33 (A VI, 4, 1582): "ses apparences ou perceptions luy doivent naistre (*sponte*) de sa propre nature, et justement en sorte qu'elles respondent d'elles memes à ce qui arrive dans tout l'univers, mais plus particulierement et plus parfaitement à ce qui arrive dans le corps qui luy est affecté, parce que c'est en quelque façon et pour un temps, suivant le rapport des autres corps au sien, que l'ame exprime l'estat de l'univers." See also *Système nouveau de la communication des substances* (GP IV, 484); Leibniz to Jaquelot, 9. February 1704 (GP III, 464); *Extrait du Dictionnaire de M. Bayle, article Rorarius* (GP IV, 530).

³⁰ "Discours de Métaphysique", § 33 (A VI, 4, 1582).

³¹ Ibid.

³² Gurwitsch 1970, 232, 235–238. The same view is expressed in Pape 1997, 7–9. Good support for this line of interpretation is found in the "Eclaircissement des difficultés que Monsieur Bayle a trouvées dans le système nouveau" (GP IV, 523). For discussion, see Blank 2001, 141–146.

[A]lthough each created monad represents the whole universe, it represents more distinctly the body, with which it is particularly connected and whose entelechy it constitutes; and because this body expresses the whole universe due to the connection of all matter in the plenum, the soul likewise represents the whole universe by representing the body that belongs to it in a particular way.³³

Thus, the perspectival representation of the universe in the simple substance is, on the one hand, a necessary condition for the representation of a body associated with it. But, on the other hand, the representation of the body in the soul also plays a constitutive role for the perspective of the soul. This is so because the soul does not only perceive the states of the simple substances that constitute its body with greater clarity and distinctness, but also the states of other simple substances that are represented more clearly and distinctly by the states of the simple substances that constitute the body. This is why Leibniz can say that "we *apperceive* all other bodies only through the relation in which they stand to our body."³⁴ This thought is spelled out in more detail in *Monadology* § 61, where Leibniz explicates the idea (mentioned in *Monadology* § 60) that monads represent the infinite confusedly but are limited and distinguished from each other through the degrees of distinct perceptions:

And the composite beings stand in a symbolic relation with the simple beings in this respect. For, because everything is full, which renders all matter connected, and because in the plenum each motion exerts some effect on distant bodies, proportional to the distance; such that each body is not only affected by those that touch it... but also senses by means of them those that touch the former bodies by which it is immediately touched: from this it follows that this communication extends to any distance whatsoever. And consequently, each body senses everything that happens in the universe, such that he who sees everything could read in each of it what happens everywhere and even what happened and will happen... But a soul can only read in itself what is represented there distinctly, and it cannot develop in an instant all of its folds, because they go to infinity.³⁵

³⁴ Leibniz to Arnauld, September 1687 (GP II, 231): "nous ne nous *appercevons* de tous les autres corps que suivant le rapport qu'ils ont au nostre..." (my emphasis).

³³ GP VI, 617: "[Q]uoique chaque Monade creée represente tout l'univers, elle represente plus distinctement le corps qui lui est affecté particuliérement, et dont elle fait l'Entelelechie: et comme ce corps exprime tout l'univers par la connexion de toute la matière dans le plein, l'ame represente aussi tout l'univers en répresentant ce corps, qui lui appartient d'une manière particuliére."

³⁵ GP VI, 617: "Et les composés symbolisent en cela avec les simples, Car, comme tout est plein, ce qui rend toute la matiére liée, et comme dans le plein tout mouvement fait quelque effect sur les corps distans, à mesure de la distance; de sorte que chaque corps est affecté non seulement par ceux, qui le touchent..., mais aussi par leur moien se ressent de ceux, qui touchent les premiers, dont il est touché immediatement ; il s'en suit, que cette communication va à quelque distance que ce soit. Et par consequent tout corps se ressent de tout ce qui

This brings us back to the question of the argumentative grounds of Leibniz's views on natural immortality. *Monadology* §§ 61-62 are the starting point of a series of deductive arguments that, with only some few additional assumptions, lead to the view that living beings undergo transformation but are not subject to natural destruction. To begin with, the "Ainsi" with which § 62 begins presents Leibniz's views concerning perspectivity as a consequence of the preceding considerations. Moreover, taken together, §§ 61-62 imply that the soul's awareness of its own mental states depends on its representing the body. This is so because the more distinct perceptions that are possible candidates for being the objects of awareness are representations of bodily states and of what bodily states indicate about the states of other bodies more clearly than the confused representation of the infinite in the soul does. This connection between distinct perception and indirect representation of the universe is what makes the relation between the soul and its organic body distinctive. Indirect representation thus singles out the group of simple substances constituting an organic body by means of which the soul represents the entire universe confusedly, but with a high enough degree of distinctness to be capable of reaching awareness of its own perceptions.36

In a further step, Leibniz presents his conception of the living being as a composite of soul and organic body as a consequence of his conception of perspectival representation of the universe in the monad (as suggested by the connective "car" in Monadology § 63). In turn, the infinite complexity involved in perspectival representation is what grounds Leibniz's conception of infinitely complex organic bodies (as suggested by the connective "Ainsi" in *Monadology* § 64). Subsequently, the thesis that in the smallest part of matter there is an infinity of animal-like creatures is presented as a further consequence (as suggested by the connective "Par où l'on voit" in Monadology § 66), which further implies that there is nothing dead in the universe (as suggested by the connective "Ainsi" in Monadology § 69) and, consequently, that the body of an animal is also full of other animal-like creatures (see the connective "On voit par là" in *Monadology* § 70). The only further premise that Leibniz adds occurs in *Monadology* § 71, where he notes that the parts of an organic body are in a perpetual flux, which is why the soul cannot always be connected with the same body parts. Taken together with the foregoing considerations, Leibniz derives the consequence that the soul changes its body only gradually, such that souls never can exist separately (see the

se fait dans l'univers; tellement que celui qui voit tout, pourroit lire dans chacun ce qui se fait par tout et même ce qui s'est fait ou se fera... Mais une Ame ne peut lire en elle-même que ce qui y est representé distinctement, elle ne sauroit developper tout d'un coup tous ses replis, car ils vont à l'infini."

³⁶ On Leibniz's analysis of higher-order perceptions, see McRae 1976; Kulstad 1991; on the role of awareness of the own perceptions for Leibniz's views concerning the discontinuity between bare simple substances and souls, see Blank 2000.

connective "Ainsi" in *Monadology* § 72). And from this Leibniz derives his claim concerning natural immortality (see the connective "C'est ce qui fait aussi" in *Monadology* § 73). Finally, after his digression concerning the results of microscopism, which, in his view, lead only to "half of the truth" (*Monadology* §§ 74-76), he explicitly characterizes his own argumentation as being based on "principles deduced a priori" (*Monadology* § 76). These, then, are the a priori arguments that supplement the half of the truth that can be gleaned through microscopy.

IV. CONCLUSION

The remarks about animal immorality in the *Monadology* can thus be understood as a series of consequences derived deductively from the doctrine of indirect representation. What makes the derivation plausible is the role that indirect representation plays for Leibniz's analysis of the unity of living beings: indirect representation is the kind of essential dependence between simple substances that singles living beings. The role of representation dependence for the union of soul and body within his system of pre-established harmony explains why, in the Monadology, Leibniz presents his considerations concerning the perspectival representation of the universe immediately before the passages concerning animal immortality. Perspectival representation is what, in his views, explicates the relevant sense in which the soul and the simple substance constituting its organic body cannot exist without each other. Indirect representation—representing features of the external world more distinctly through representing the simple substances constituting the organic body more distinctly—is what accounts for the union of soul and body in Leibniz's late metaphysics. The order of argument here seems to be strictly deductive: From the fact that a soul is united with its organic body because its body is a means of indirect representation, it follows that, as long as indirect representation is essential to the nature of the soul, it cannot be separated from its body. In this way, it may become visible that the claim that animals are naturally immortal follows from the claim that indirect representation is essential for how souls represent the universe consciously.

REFERENCES

Adams, Robert Merrihew 1994. *Leibniz: Determinist, Theist, Idealist*. New York, Cambridge University Press. 272–285.

Blank, Andreas 2000. Leibniz und die panpsychistische Deutung der Theorie der einfachen Substanzen. *Studia Leibnitiana*. 32. 117–125.

Blank, Andreas 2001. Der logische Aufbau von Leibniz' Metaphysik. Berlin – New York, De Gruyter.

Blank, Andreas 2003. Incomplete Entities, Natural Non-separability, and Leibniz's Response to François Lamy's *De la Connoissance de soi-même. Leibniz Review.* 13. 1–17.

- Blank, Andreas 2010. Leibniz vs. Lamy: How does Confused Perception Unite Soul and Body? In Marcelo Dascal (ed.) The Practice of Reason: Leibniz and his Controversies. Amsterdam, John Benjamins. 169–186.
- Brown, Clifford 1990. Leibniz and Strawson. A New Essay in Descriptive Metaphysics. Munich, Philosophia.
- Cover, J. A. O'Leary-Hawthorne, J.1999. Substance and Individuation in Leibniz. Cambridge, Cambridge University Press.
- Descartes, René 1982. Oeuvres. Ed. by C. Adam P. Tannéry. 11 vols. Paris, Vrin.
- Gurwitsch, Aron 1970. Leibniz. Philosophie des Panlogismus. Berlin New York, De Gruyter.
- Kulstad, Mark 1991. Leibniz on Apperception, Consciousness, and Reflexion. Munich, Philosophia.
- Lamy, François 1694–1698. De la Conoissance de soi-même. 5 vols. Paris, André Pralard.
- Leibniz, Gottfried Wilhelm 1875–1890. Die philosophischen Schriften von Gottfried Wilhelm Leibniz. Ed. C. I. Gerhardt. 7 vols. Berlin, Reimer [= GP].
- Leibniz, Gottfried Wilhelm 1923–. Sämtliche Schriften und Briefe. Berlin, Akademie-Verlag [= A]. McRae, Robert 1976. Leibniz: Perception, Apperception and Thought. Toronto, University of Toronto Press.
- Pape, Helmut 1997. Perspectivity: G. W. Leibniz on the Representation of Ontological Structure. *Journal of Speculative Philosophy*. 11. 1–19.
- Phemister, Pauline 1999. Leibniz and the Elements of Compound Bodies. British Journal for the History of Philosophy. 7. 57–78.
- Rozemond, Marleen 1997. Leibniz on the Union of Body and Soul. Archiv für Geschichte der Philosophie 79. 150–178.
- Smith, Justin E. H. 2003. Confused Perception and Corporeal Substance in Leibniz. *Leibniz Review* 13. 45–64.
- Smith, Justin E. H. 2007. Leibniz on the Spermatozoa and Immortality. *Archiv für Geschichte der Philosophie*. 89. 264–282.
- Smith, Justin E. H. 2011. Divine Machines. Leibniz and the Sciences of Life. Princeton, Princeton University Press.
- Suárez, Francisco 1866. *Disputationes Metaphysicae*. In Francisco Suárez, *Opera omnia*. Edited by C. Berton. Vols. 25–26. Paris, Vives.
- Wilson, Catherine 1997a. Leibniz and the Animalcula. In Michael A. Stewart (ed.) Studies in Seventeenth-Century European Philosophy. Oxford – New York, Oxford University Press. 153–175.
- Wilson, Catherine 1997b. *The Invisible World. Early Modern Philosophy and the Invention of the Microscope.* Princeton, Princeton University Press.
- Wilson, Margaret D. 1976. Leibniz: Self-Consciousness and Immortality in the Paris Notes and After. Archiv für Geschichte der Philosophie. 58. 335–352.
- Woolhouse, Roger S. 2000. Pre-established Harmony Between Soul and Body: Union or Unity? In A. Lamarra R. Palaia (eds.) *Unità e molteplicita nel pensiero fllosofico e scientifico di Leibniz*. Florence, Olschki. 159–170.
- Woolhouse, Roger S. 2001. Leibniz and François Lamy's De la Conoissance de soi-même. *Leibniz Review*. 11. 65–70.
- Woolhouse, Roger S. Francks, Richard 1994. Leibniz, Lamy, and 'the Way of Preestablished Harmony'. Studia Leibnitiana. 26. 76–90.