

Leibniz and Monadic Domination

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I. INTRODUCTION

Although it has not gone unchallenged, a widely held interpretation of the mature Leibniz takes him to be of the view that bodies, understood as *extended* things, are confused perceptions of an extra-mental reality that is both devoid of extension and composed, at bottom, of simple substances or monads.¹ That is, on this interpretation, which I endorse, the mature Leibniz (or, as another version has it, the late Leibniz) denies that there are any extended things to be found *in rerum natura*: a body, understood as an extended thing, is invariably a phenomenon or perception—that is, a confused but conscious perception that has, as its extra-mental object, a collection of monads.²

¹ The following abbreviations, supplementing those listed in the front of this volume, are used in this paper: H = G. W. Leibniz, *Theodicy*, trans. by E. M. Huggard (London: Routledge and Kegan Paul, 1951); LR = *The Leibniz-Des Bosses Correspondence*, ed. and trans. by Brandon C. Look and Donald Rutherford (New Haven and London: Yale University Press, 2007); RB = G. W. Leibniz, *New Essays on Human Understanding*, trans. and ed. by Peter Remnant and Jonathan Bennett (Cambridge: Cambridge University Press, 1996) (the pagination of this volume is that of A VI. vi, references to which are accordingly omitted). Where no published translation is cited, translations are my own.

² This view is endorsed by the following, among others: Bertrand Russell, *A Critical Exposition of the Philosophy of Leibniz* [*Exposition*], 2nd ed. (Cambridge: Cambridge University Press, 1937), ch. 8; C. D. Broad, *Leibniz: An Introduction* (Cambridge: Cambridge University Press, 1975), ch. 4; J. E. McGuire, “‘Labyrinthus Continui’: Leibniz on Substance, Activity and Matter”, in P. K. Machamer and R. G. Turnbull (eds.), *Motion and Time, Space and Matter* (Ohio State University Press, 1976), 290–326; Nicholas Rescher, *Leibniz: An Introduction to his Philosophy* (Totowa, NJ: Rowman and Littlefield, 1979), ch. 9; Stuart Brown, *Leibniz* (Brighton: The Harvester Press, 1984), ch. 10; Nicholas Jolley, ‘Leibniz and Phenomenalism’, *Studia Leibnitiana*, 18 (1986), 38–51; Benson Mates, *The Philosophy of Leibniz: Metaphysics and Language* [*Philosophy of Leibniz*] (Oxford: Oxford University Press, 1986), chs. 2 and 11; Robert M. Adams, *Leibniz: Determinist, Theist, Idealist* [*Determinist*] (Oxford: Oxford University Press, 1994), ch. 9; Donald Rutherford, ‘Leibniz as Idealist’, *Oxford Studies in Early Modern Philosophy*, 4 (2008), 141–90.

This interpretation takes Leibniz to have thought, at least in his later years, that the most basic entities to be found *in rerum natura* are monads and their states. But it still leaves room to ask whether Leibniz at the same time admitted any other kind of substance into his ontology. For even in very late works like the *Monadology* (1714), Leibniz speaks in ways that seem to commit him to the existence of corporeal or composite substances, here understood (not as extended substances, but) as substantially unified, infinitely large collections of monads. In other words, although it may well be true to say that for the mature (or late) Leibniz simple substances and their states serve as the ultimate elements out of which all other beings (e.g. monadic aggregates) are composed, still, an adequate presentation of his view must also address the issue of corporeal substance and its place in his philosophy.

In some works, Leibniz claims that a corporeal substance is a substantially unified and infinitely large collection of monads. This collection, moreover, possesses a structure of sorts, all the monads included in it being related to each other according to relations of domination and subordination, and this in such a way as to constitute a hierarchy. At the top of the hierarchy stands the dominant monad of the entire corporeal substance. Immediately subordinate to this monad are certain other monads, each of which is, in turn, immediately dominant over still other monads, and so on, without end.³ The dominant monad of the entire corporeal substance is, moreover, commonly identified by Leibniz as the *soul* or *entelechy* of that corporeal substance,⁴ while the remaining monads contained in the collection are commonly said to constitute its *body*. Moreover, each of the monads that are immediately subordinate to the dominant monad of the entire corporeal substance is likewise conceived to be the soul or entelechy of a corporeal substance—a corporeal substance that constitutes one part of the first corporeal substance's body. In other words,

³ Since the collection contains infinitely many monads, there will be no monad in it that is not dominant with respect to other—indeed, infinitely many other—monads. See GP iv. 564/WF 117n.98.

⁴ See *Monadology*, §70: 'Thus we see that each living body has a dominant entelechy, which in the animal is the soul; but the limbs of this living body are full of other living beings, plants, animals, each of which also has its entelechy, or its dominant soul' (GP vi. 619/AG 222). Notice, however, that Leibniz often employs the terms 'entelechy' and 'soul' to refer, not to an entire monad, but to that primitive active force which, together with a primitive passive force, constitutes a single monad. See, e.g. GP ii. 252/AG 177.

according to Leibniz (in some works, at least), every corporeal substance is composed of (i) a dominant monad or soul and (ii) a body that is, taken by itself, a mere aggregate of other corporeal substances. That is, every corporeal substance has other corporeal substances nested within it.

As many interpreters have observed, however, this conception of corporeal substance is not without its problems, at least when considered together with some of Leibniz's other philosophical commitments. Most importantly, it doesn't sit very well with Leibniz's conviction that a substance, strictly speaking, must possess genuine or *per se* unity. For although Leibniz sometimes says that the dominant monad of a corporeal substance is responsible for the *per se* unity possessed by that corporeal substance (see, e.g. GP ii. 252),⁵ his system seems actually to lack the resources that are required to assign such a unity-conferring role to a dominant monad, since Leibniz frequently claims that all relations obtaining among created monads are ideal, rather than real (see, e.g. GP ii. 486/LR 327), and that every created monad can be understood as a world apart, so to speak, existing as if there were nothing else in the universe except it and its creator (A VI. iv. 1581/AG 64; GP iv. 484/AG 143). What's more, Leibniz himself seems to admit, in the draft of a letter of 1706 to Bartholomew Des Bosses, that his doctrine of monads lacks the resources to account for the substantial unity of corporeal substances (LR 23n.L3).⁶ And, as Brandon Look and Donald Rutherford have pointed out, there are good reasons to think that Leibniz's recognition of this problem for his system is what first led him to toy with the notion of a substantial bond or *vinculum substantiale* (LR Iv). A significant part of Leibniz's discussion of the *vinculum substantiale* in his correspondence with Des Bosses—which has, until recently, been associated primarily with his

⁵ The text cited here is incorrectly translated in early printings of AG as follows: 'and (s) the animal, that is, the corporeal substance, which the dominating monad makes into one machine' (AG 177). (More or less the same translation is found at L 531.) Later printings have the following: 'and (s) the animal, that is, the corporeal substance, which the dominating monad in the machine makes one' (ibid.). The Latin reads: '*Animal seu substantiam corpoream, quam Unam facit Monas dominans in Machinam*'. Assuming that the singular accusative '*Machinam*' of GP is right, a preferable translation, it seems to me, would be: 'and (s) the animal or corporeal substance, which the monad dominating the machine makes one'.

⁶ Note, however, that the relevant passage was deleted in the draft and not included in the copy that was sent to Des Bosses.

attempts to show how his system can be made to accommodate the Roman Catholic conception of the Eucharist—is nothing less than a discussion regarding the possibility of introducing a new entity into his ontology, distinct from monads and their states, and this so as to provide for the reality of corporeal substances.

My purpose here, however, is not to enter into the thorny issue of whether Leibniz's talk of corporeal substances should be taken as signalling a serious commitment on his part to the substantiality of composite beings like plants and animals. The status of such beings in the philosophy of Leibniz has been treated at length by other scholars.⁷ My concern, rather, is with the question of what exactly monadic domination, understood as a relation obtaining exclusively among monads, amounts to in the philosophy of Leibniz. *This* is an issue that has received little attention from scholars, as Brandon Look has observed.⁸ I mention the related issue of whether Leibniz has the resources to account for the unity of corporeal substances only because I want to distinguish it from the issue of monadic domination. And indeed, it seems that the two issues *can* be separated. For Leibniz's considered view—or at least his view in his later years—would seem to be that monadic domination cannot account for the unity and reality of a corporeal substance, and that relations of monadic domination obtain among monads even if there are no corporeal substances to be found *in rerum natura*.⁹ What's more, in one text Leibniz refers to God

⁷ On this issue, see: Russell, *Exposition*, 147–54; Brown, *Leibniz*, ch. 10; Mates, *Philosophy of Leibniz*, 194–5; Nicholas Rescher, G. W. *Leibniz's Monadology: An Edition for Students* (Pittsburgh: Pittsburgh University Press, 1991), 46; Adams, *Determinist*, ch. 10; Donald Rutherford, *Leibniz and the Rational Order of Nature* (Cambridge: Cambridge University Press, 1995), ch. 10; Glenn A. Hartz, 'Why Corporeal Substances Keep Popping Up in Leibniz's Later Philosophy', *British Journal for the History of Philosophy*, 6 (1998), 193–207; J. A. Cover and John O'Leary-Hawthorne, *Substance and Individuation in Leibniz* (Cambridge: Cambridge University Press, 1999), 50–5; Brandon Look, 'On Substance and Relations in Leibniz's Correspondence with Des Bosses', in Paul Lodge (ed.), *Leibniz and His Correspondents* (Cambridge: Cambridge University Press, 2004), 238–61; Glenn A. Hartz and Catherine Wilson, 'Ideas and Animals: The Hard Problem of Leibnizian Metaphysics', *Studia Leibnitiana*, 37 (2005), 1–19; Pauline Phemister, *Leibniz and the Natural World* (Dordrecht: Springer, 2005); Glenn A. Hartz, *Leibniz's Final System* (London and New York: Routledge, 2007); LR, Introduction.

⁸ Brandon Look, 'On Monadic Domination in Leibniz's Metaphysics' ['Monadic Domination'], *British Journal for the History of Philosophy*, 10 (2002), 379–99, at 379–80.

⁹ It is reasonable to think that when, in the correspondence with Des Bosses, Leibniz entertains the 'hypothesis of mere monads' (as distinguished from the 'hypothesis of

as dominant with respect to the entire universe, and compares God's relation to the created world with the relation that a dominant monad bears to its subordinate monads. And this is reasonably taken to imply that, on Leibniz's view, relations of domination can obtain even if monads alone are substances, since Leibniz expressly denies in many places that God is *anima mundi*, i.e. the soul of the world (see, e.g. GP ii. 324/LR 77), or that God and the created universe together constitute a single corporeal substance (A VI. iv. 1492).

Monadic domination, understood as a relation obtaining among monads, is something that Leibniz's interpreters have, by and large, neglected. They have indeed dealt with the issue of how the soul or entelechy of a corporeal substance is related to its body, where this body is understood to be the 'organic machine' or 'machine of nature' that belongs to the phenomenal realm of extended things. But, as Brandon Look has observed, in doing so interpreters have concentrated on the issue of how two things, belonging to two different levels of reality (the monadic and the phenomenal), are related to each other.¹⁰ The issue with which I am concerned, by contrast, concerns a relation that obtains exclusively among *monads*, which together constitute, according to Leibniz, 'the substructure of the phenomenal world'.¹¹

In the next section of this paper, I discuss the slender materials out of which one must try to reconstruct Leibniz's conception of what monadic domination involves. Of particular interest here will be Leibniz's conception of ideal influence or causation. For although Leibniz thinks that, strictly speaking, no created monad is causally influenced by any other created monad, he nonetheless also thinks

composite substances'—see GP ii. 473–4/LR 295), he still understands the monads in (say) a horse to be structured according to relations of domination and subordination, with one monad dominant with respect to every other, and this even though the collection of monads that together constitute the horse is merely an aggregate. Thus, in a note regarding Des Bosses's letter of 12 December 1712, Leibniz says: 'I acknowledge no modes of monads except perceptions and appetites, or tendencies to new perceptions; and through these alone it happens that souls or monads are subordinated to one another—that is, subordinated representatively, with no real influx between them' (LR 303–5). It is presumably also for this reason that Leibniz says in one letter to Des Bosses that, 'considered in terms of the monads themselves, domination and subordination consist only in degrees of perception' (GP ii. 451/LR 257).

¹⁰ Look, 'Monadic Domination', 379.

¹¹ I borrow this expression from Look, 'Monadic Domination', 384.

that, in a looser sense, we can speak of one monad's exercising a causal influence over another created monad. And it is on this relation—the relation of *ideal* influence that created monads bear to each other—that Leibniz depends in his account of domination and subordination. A major task of the next section, then, will be to get clear on what this relation of ideal causation amounts to, according to Leibniz, and this with a view to my main task, that of explaining his conception of monadic domination.

In §3, I discuss two accounts of monadic domination in the literature, those of Brandon Look and Ohad Nachtomy,¹² and argue that both views are unsatisfactory. It is worth noting up front, however, that there is an important difference between my treatment of monadic domination and those of Look and Nachtomy. Whereas I treat of the relations of domination and subordination insofar as they are *not* conceived by Leibniz to be capable of accounting for any *per se* unity that might belong to a collection of monads, Nachtomy takes these relations to be central to Leibniz's account of the genuine unity, and hence reality, of corporeal substances, while Look treats of these relations *insofar as* Leibniz conceives of them as accounting for the unity and reality of corporeal substances. That is, Nachtomy, who takes the late Leibniz's talk of corporeal substances at face value—and, following Pauline Phemister, even takes the late Leibniz to have held that corporeal substances are extended—sees in a proper understanding of monadic domination the key to understanding Leibniz's conception of what the *per se* unity of a corporeal substance consists in. On the other hand, Look (if I'm not mistaken) takes Leibniz's doctrine of monadic domination to have had two phases: an earlier one, in which monadic domination is meant to account for the *per se* unity and reality of corporeal substances, and a later one, in which monadic domination is deemed inadequate as an account of the unity and reality of corporeal substances.¹³ And Look's account of monadic domination treats of it as it is conceived in the former phase.¹⁴

¹² Look, 'Monadic Domination'; Ohad Nachtomy, 'Leibniz on Nested Individuals' ['Nested Individuals'], *British Journal for the History of Philosophy* 15, (2007), 709–28.

¹³ LR xlix–lvii; Brandon Look, *Leibniz and the 'Vinculum Substantiale'* (Stuttgart: Steiner, 1999), 72.

¹⁴ See Look, 'Monadic Domination', and Brandon Look, 'Leibniz on Composite Substances: A Kantian Problem of Inner and Outer' ['Composite Substances'], in H. Poser,

In §§4 and 5 of this paper, I first lay out what I take to be the consequences of the pre-established harmony for our understanding of monadic domination, and then integrate Leibniz's conception of ideal influence into the picture that results. In §5, I elaborate upon Aristotle's notion of a hierarchy of ends in order to flesh out my account of the relations of domination and subordination that obtain, according to Leibniz, among the monads that make up a living thing. In §6, I consider an objection that might be made against my account. And finally, in §7, I argue that my interpretation of Leibniz on the issue of monadic domination provides us with some insight into the details of his conception of the pre-established harmony—details, more specifically, that have to do with God's ordination of an end for his creation.

2. IDEAL INFLUENCE AND MONADIC DOMINATION

It seems fair to say that there is an important connection between Leibniz's conception of ideal influence or causation, on the one hand, and his doctrine of monadic domination, on the other—fair to say, in other words, that on Leibniz's view the domination of one monad by another necessarily involves the dominant monad's bearing a relation of ideal influence to its subordinate monad. For Leibniz commonly speaks of a relation of ideal influence between the soul and the body of a corporeal substance, and although in such contexts he often speaks of the body as an extended thing whose changes are governed by mechanical laws, it still seems that for Leibniz the relation of ideal influence obtains also between the soul or entelechy of a corporeal substance and those subordinate monads that underlie the phenomenal body of such a substance. (Indeed, the relation of domination that the entelechy of a corporeal substance bears to its subordinate monads presumably underwrites the relation of domination that it bears to its phenomenal body.) After all, 'domination', even taken in a very general sense, is reasonably understood as signifying some sort of influence of one thing over another, and such an influence in the context of Leibniz's system must necessarily be ideal, rather than real (at least when the influence

is of one created substance over another). What's more, in one letter to Des Bosses we find Leibniz stating that, 'considered in the monads themselves, the domination and subordination of monads consists only in degrees of perception' (GP ii. 451/LR 257). And, as we shall see, the distinctness and confusion of perceptions—to which Leibniz is presumably referring here when he speaks of degrees of perception—is an integral part of Leibniz's account of the relation of ideal influence.¹⁵

Monads, or simple substances, differ from each other, according to Leibniz, only by virtue of their 'internal qualities and actions', all of which must be either perceptions or appetitions, appetitions being the strivings or endeavours by which a monad advances from perception to perception (GP vi. 598/AG 207; GP vi. 609/AG 215). Further, since all of a monad's actions consist in perception and appetite, a monad is said to be more perfect the more distinct its perceptions are, while a less perfect monad has perceptions that are by comparison confused (GP vi. 604/AG 211). What's more, Leibniz also holds that all changes undergone by a monad are, strictly speaking, spontaneous or self-produced, since no created monad has any real causal influence over any other created monad (GP vi. 607–8/AG 213–4; GP vi. 137–8/H 157–8). As Leibniz colourfully puts it in his *Monadology*, 'monads have no windows through which something can enter or leave' (GP vi. 607/AG 214).

However, notwithstanding Leibniz's claim that a created monad's changes are all self-produced, he is in this case—as in many others—happy to accommodate ordinary ways of speaking, and thus to talk of one created monad's exercising a causal influence over another. As he puts it in the *New Essays*:

[A]nything which occurs in what is strictly a substance must be a case of action in the metaphysically rigorous sense of something which occurs in the substance spontaneously, arising out of its own depths; for no created substance can have an influence upon any other, so that everything comes to a substance from itself (though ultimately from God). But if we take action to be an endeavour towards perfection, and passion to be the opposite, then genuine

¹⁵ The draft of this letter to Des Bosses reads 'degrees of perfection' in lieu of 'degrees of perception'. But for my purposes, at least, this discrepancy makes little difference, since, as we shall see, ideal influence is often described by Leibniz in terms of monads' relative degrees of perfection, rather than in terms of the relative degrees of distinctness to be found in monads' perceptions (see, e.g. GP vi. 615/AG 219). For Leibniz holds that the perfection of a monad consists in—or perhaps manifest itself in—the distinctness of its perceptions (see GP vi. 604/AG 211).

substances are active only when their perceptions (for I grant perceptions to all of them) are becoming better developed and more distinct, just as they are passive only when their perceptions are becoming more confused. (RB 210)

In the first sentence of this passage Leibniz states that all changes in a substance are, strictly speaking, spontaneous, i.e. self-produced. But in the next, he labels some of the changes that go on in a substance 'passions', signalling thereby a readiness to countenance everyday talk of one thing's causally influencing another. Indeed, Leibniz's conception of ideal influence is simply an attempt to explain how such talk should be understood given his system's denial of genuine causal interaction between created substances.

Leibniz often describes the 'action' of one substance upon another as involving both an increase in the distinctness of the agent's perceptions and a corresponding decrease in the distinctness of the patient's perceptions.¹⁶ This view of what ideal influence involves is on display in the text from the *New Essays* (1704) quoted above. It's also to be found in §15 of the *Discourse on Metaphysics* (1686), where Leibniz says that when a number of substances undergo a change

one may say that the substance which immediately passes to a greater degree of perfection or to a more perfect expression exercises its power and *acts*, and [that] the substance which passes to a lesser degree shows its weakness and *is acted upon*. (A VI. iv. 1554/AG 48)

Of course, the more perfect expression to which a substance is said to pass insofar as it acts is a more distinct perception of some object(s).

A second, apparently distinct account of ideal influence is mentioned in §50 of the *Monadology*, where Leibniz states that

one creature is more perfect than another insofar as one finds in it that which provides an *a priori* reason for what happens in the other; and this is why we say that it acts on the other. (GP vi. 615/AG 219)

What exactly this *a priori* reason is is a question to which I shall return in a moment. For now, the question I would like to consider is: *how or in what way* does the agent monad contain this *a priori* reason for what happens in the patient monad? This question is liable to cause some

¹⁶ A decrease in the distinctness of a substance's perceptions is equivalent to an increase in the confusion of its perceptions.

puzzlement, given that a monad possesses only perceptions and the strivings by which it passes from perception to perception. But upon further inquiry, it seems, the answer turns out to be that when the agent monad contains an *a priori* reason for what happens in a patient monad this involves the agent monad's distinctly perceiving something that is only confusedly or obscurely perceived by the patient monad. For in §52 of the *Monadology*, after saying that actions and passions are always mutual among creatures, and that one and the same created monad is, therefore, invariably active in one respect and passive in another, Leibniz states that monads are active 'insofar as what is known distinctly [*ce qu'on connoist distinctement*] in one serves to explain what happens in another' and passive 'insofar as the reason for what happens in one is found in what is known distinctly [*dans ce qui se connoist distinctement*] in another' (GP vi. 615/AG 219–20; see also LR 21–3n. L2). According to Leibniz, then, the *a priori* reason for what happens in the patient monad is present in the agent monad objectively, or as an object of perception. But not *just* as an object of perception. For since Leibniz holds that every created monad is confusedly omniscient (with the result that there will be nothing perceived by the agent monad that isn't also perceived by the patient monad), the *a priori* reason must be present in the agent monad as the object of a comparatively *distinct* perception. That is to say, the *a priori* reason must be something that is perceived more distinctly by the agent monad than it is by the patient monad.

The *a priori* reason for what happens in a patient monad, then, is present in the relevant agent monad as an object of relatively distinct perception—i.e. is something perceived distinctly by the agent monad but only confusedly by the patient monad. The next question to ask, then, is this: What is this *a priori* reason? The answer, it seems, is that this *a priori* reason is a final cause. For the account of ideal influence that is cast in terms of *a priori* reasons is certainly meant to explain the apparent interaction of simple substances or monads. And in the *Monadology*, where this account is foregrounded, Leibniz claims that souls 'act according to the laws of final causes', while bodies 'act according to the laws of efficient causes' (G vi. 620/AG 223).

This is not to say that we should understand Leibniz to be denying either that final causality is at work in the physical realm or that efficient causality is at work in the monadic realm. For Leibniz himself

offers analyses of physical phenomena in terms of final causes.¹⁷ Rather, his frequent talk of two realms—one of final causes, the other of efficient causes—seems instead meant to indicate that the analysis of events in the physical realm is often most profitably made in terms of efficient causes, and that the analysis of events in the monadic realm is often most profitably made in terms of final causes. Be that as it may, given the *Monadology*'s claim that monads act in accordance with final causes, the *a priori* reason that features in this work's account of ideal influence is very likely to be understood as a final cause. What exactly to make of this final cause which serves as an *a priori* reason for what happens in another monad is an issue that will be taken up later in this paper. For now, at least this much can be said: a final cause is traditionally understood to be an *end* or *goal*.

The question left unaddressed in all of this is, of course, the following one: how is the *Monadology*'s account of ideal influence related to the account of ideal influence that appears in both the *Discourse on Metaphysics* and the *New Essays* (i.e. the account which is cast in terms of increasing and decreasing levels of distinctness in monads' perceptions)? The answer, it seems, is that the latter account is meant to explain the appearance of *efficient* causal relations among monads. For although Leibniz denies that the body, strictly speaking, acts on the mind or vice versa, within his system of ideal influence he is quite prepared to speak of how the mind's confused thoughts or perceptions have their source in the body, and this, presumably, by virtue of an (ideal) efficient causal influence that the body has over the mind. Moreover, in the passages from the *Discourse* and *New Essays* that were quoted above, Leibniz speaks of actions and passions, and such talk is naturally interpreted as having to do with efficient causation. It seems reasonable to conclude, then, that the account of ideal influence that is cast in terms of increasing and decreasing levels of distinctness in monads' perceptions is meant to serve as an explanation of the appearance of efficient causal interaction between monads. This conclusion, moreover, allows us to see that Leibniz's two accounts of ideal influence are consistent, and even complementary.

It will be noticed that in many places Leibniz suggests that God mediates the relations of ideal causation that obtain among substances,

¹⁷ See A VI. iv. 1560–1/AG 52–3; GP iv. 398/AG 254–5.

one monad's apparent action upon another being described, for example, as the consequence of God's 'intervention, when in the ideas of God a monad reasonably asks that God take it into account in regulating the others from the beginning of things' (GP vi. 615/AG 219). In such passages, moreover, Leibniz sometimes speaks of God's 'accommodating' one monad (the patient) to another (the agent) before creation, or of reasons that 'appear in one monad which, from the beginning of things, prompt God to produce modifications in another monad' (GP ii. 475/LR 299). And in fact this account of what is 'really' going on when creatures give the appearance of causally interacting is what motivates Leibniz to speak of *ideal* influence—i.e. of an influence that one creature exercises (so to speak) over another in the mind of God before the creation. It is, however, important to recognize that the expression 'ideal influence' is something of a misnomer, and this because Leibniz's considered view is that God does not actually decree, even before its actual existence, that any created substance do *x*; nor does God produce 'from the beginning of things' any modification in one monad with a view to accommodating it to another monad. Rather, on Leibniz's considered view, God chooses to create a substance that will do *x* independently of any sort of divine intervention (whether before or after its creation). As Leibniz says of Judas in the context of explaining why God does not cause us to sin, 'one must not ask why Judas sins, since this free action is contained in his notion, but only why the sinner Judas is admitted to existence in preference to some other possible persons' (A VI. iv. 1575).¹⁸ In other words, according to Leibniz, a Judas who does not betray Jesus is not Judas at all. Granted this, it cannot be the case that God really accommodates one monad to another by producing certain modifications in it before creation, since such a modification would yield an altogether different possible individual. Rather, God chooses to create monads that will, independently of any divine intervention, harmonize with, or accommodate themselves to, their fellow creatures.¹⁹

¹⁸ The translation of this passage at AG 60 omits 'since this free action is contained in his notion'.

¹⁹ Cf. Stephen Puryear, 'Monadic Interaction', *British Journal for the History of Philosophy*, 18 (2010), 763–96.

Nevertheless, Leibniz's talk of God's accommodating one monad to another typically occurs in the context of making an important point—namely, that actions and passions are mutual among creatures (GP vi. 615/AG 219–20; GP vi. 139/H 159). On Leibniz's view, in other words, the relation of ideal influence is invariably reciprocal. For, as he himself puts it, God has regard for creatures, accommodating one to another according as each is more or less perfect. And since every monad has *some* measure of perfection and therefore *some* claim to God's attention, while no creature is absolutely perfect, it follows that when one created monad acts on another it is also, at the same time, acted upon by that other—although the more perfect of the two monads exercises a greater influence on the less perfect than vice versa. Thus, in the *Theodicy*, Part I, §66, Leibniz states:

insofar as the soul has perfection and distinct thoughts, God has accommodated the body to the soul, and has so acted in advance that the body is pushed to execute its orders. And insofar as the soul is imperfect and its perceptions confused, God has accommodated the soul to the body, so that the soul lets itself be moved by those passions that arise from corporeal representations. (GP vi. 138–9)²⁰

Thus also, in §49 of the *Monadology*, Leibniz states:

The creature is said to *act* externally insofar as it is perfect, and *to be acted upon* by another, insofar as it is imperfect. Thus we attribute *action* to a monad insofar as it has distinct perceptions, and *passion*, insofar as it has confused perceptions. (GP vi. 615/AG 219)

According to Leibniz, then, the relation of ideal influence or causation runs in both directions, from the dominant monad to the subordinate monad, and *vice versa*. Viewed from one perspective, this conclusion should come as no surprise, for, as mentioned earlier, Leibniz often speaks of how a soul's confused perceptions (including its sensations and emotions) have their source in the body.

²⁰ Note that a couple of lines later, Leibniz adds:

And the same thing must be understood of the actions of simple substances on one another. Each is reckoned to act on the other to the extent of its perfection, even though this is so only ideally and in the reasons of things, in that, in the beginning, God accommodated one to the other according to the perfection or imperfection that there is in each (GP vi. 139).

Leibniz's claim that the actions and passions of created substances are mutual also fits well with his conception of how a monad advances from perception to perception—that is, fits well with his conception of how a monad advances from *conscious* perception to *conscious* perception. For Leibniz's conception of how a created monad advances from one conscious perception to another is reasonably taken to admit of being analyzed in terms of two different changes: first, an increase in the distinctness of its perception of certain objects, and second, a decrease in the distinctness of its perception of certain *other* objects—a monad's perception of some object x being conscious or not depending on how distinctly it perceives x .²¹ That is, on the assumption that an increase in the distinctness of a monad's perception of certain things is typically (though not always) offset, at least in part, by a decrease in the distinctness of its perception of other things, its advance from conscious perception to conscious perception must involve these two changes, one towards a greater degree of distinctness

²¹ I take it that, strictly speaking, the labels 'clear but confused', 'clear and distinct', 'clear, distinct, but inadequate', etc., are meant by Leibniz to serve in the classification of *conscious* perceptions or *cognitions* (Latin: '*cognitiones*'; French: '*connoissances*'). (That cognitions are conscious perceptions is true of all cognitions save those which are obscure, on my view.) Thus, I take it that for Leibniz an object x ceases to be an object of consciousness for some monad when that monad no longer has a clear cognition of x , and conversely, that x becomes an object of consciousness for some monad the moment that that monad begins to cognize x clearly. In other words, when a monad perceives x only obscurely, it has only a subconscious perception of x . What's more, on my reading of Leibniz, underlying any cognition or conscious perception of x that is to any degree confused there is a more complex *subconscious* perception of x from which the somewhat confused cognition immediately results. Thus I take it that, according to Leibniz, when I hear the noise of the crashing sea, this is the result of a subconscious perception in which the sounds of particular waves are distinctly—i.e. severally—represented. Strictly speaking, then, when at first I fail to discern the sounds made by the waves, but thereafter manage to distinguish them, this is really due to the fact that the subconscious perception which underlay my original auditory perception of the crashing sea has been brought to consciousness. Still, for convenience's sake, in this paper I will simply speak of an increase in the distinctness of my perception of the crashing sea, and of an increase in the distinctness of my perception of each wave. Similarly, when I cease to be able to distinguish the sounds of the waves, the more complex perception which originally lay below the threshold of my consciousness, and which was subsequently brought to consciousness, has now slipped back below the threshold of my consciousness. (Notice that when this happens I cease to be conscious of the individual sounds made by the different waves.) Nevertheless, for the sake of convenience, I will speak here simply of a decrease in the distinctness of my auditory perception of the sea, and of a decrease in the distinctness of my perception of each of the waves. For more on this, see my 'Ideas and Confusion in Leibniz' ['Ideas and Confusion'], *British Journal for the History of Philosophy*, 17 (2009), 705–33.

or perfection, and one towards a lesser degree of distinctness or perfection.²² And since, on Leibniz's conception of ideal causation, the one change can be understood as a passion, and the other can be understood as an action, one ought to interpret a dominant monad's advance from conscious perception to conscious perception as (at least in part) the joint result of two factors: the action of that dominant monad on its subordinate monads, and the reciprocal action of these subordinate monads on the dominant monad.

But of course the reciprocal action of dominant and subordinate monads on each other complicates Leibniz's account of monadic domination. For now it should be clear that the relation of monadic domination that one monad, *A*, bears to a second monad, *B*, cannot simply be equated with the relation of ideal causation. For if it were, the relation of domination, like the relation of ideal causation, would be reciprocal. That is, not only would *A* dominate *B*, but *B* would also dominate *A*. And this cannot be right: everything that Leibniz says about the relation of monadic domination points to the conclusion that this relation is *not* reciprocal.

The domination of one monad by another must therefore involve more than mere ideal influence. But what else must it involve? Part of the answer, it seems, is that the dominant monad must, in addition, exercise an influence over its subordinate monad that is *greater* than that which the subordinate monad exercises over it. After all, the dominant monad is more perfect than its subordinate and, on Leibniz's view, a creature 'is said to *act* externally insofar as it is perfect, and to *be acted upon* by another insofar as it is imperfect'. Thus, when one monad is dominant with respect to another, this involves, not merely its exercising an ideal influence over its subordinate monad, but also a difference in the degree of influence each has over the other.

Notice, however, that this would still seem to be insufficient as an account of what the relation of monadic domination involves. For if monadic domination consists solely in a reciprocal relation of ideal

²² Thus when I am standing in a room and I turn my head so that I go from having a relatively distinct perception of the north end of the room to having a relatively distinct perception of the south end of the room, my perception of the north end of the room loses its distinctness until finally I am no longer conscious of it, while my perception of the south end of the room becomes more and more distinct until finally it becomes an object of consciousness for me.

influence between dominant and subordinate monads, together with the fact of the dominant monad's being more perfect than the dominant monad (which results in the dominant monad's exercising a greater ideal influence over its subordinate than vice versa), what stops a given monad from being dominant with respect to *all* the monads in the universe that are less perfect than it? For Leibniz thinks that *every* created monad or simple substance exercises *some* degree of ideal influence over every other.

The answer, it seems, must have to do with the strength and duration of the dominant monad's influence over its subordinate monads, the strength and duration of this influence falling off dramatically as one exits the collection of monads that make up the living thing. Thus, the relation of monadic domination that obtains between one monad and another must also be understood to involve a fairly strong and enduring relation of ideal influence. Therefore, when one monad, *A*, is dominant over another monad, *B*, *A* must exercise a fairly strong and enduring influence over *B*, and the influence of *A* over *B* must be stronger than the influence of *B* over *A*, this difference being reflective of the fact that *A* is more perfect than *B*.

To this one might object that the relation of domination must differ, not in degree, but rather in kind, from the relation of ideal influence that one monad, situated (say) in a dog, bears to another less perfect monad, situated in (say) a human being. But it's far from clear why this should be the case when relations of monadic domination are not held responsible for any *per se* unity that might belong to the collection of monads that make up a living thing. For it seems fair to demand that the monads within any collection that possesses genuine unity bear *some* relation to each other that differs in kind (and not merely in degree) from those relations that the monads within that collection bear to monads outside the collection. But why monadic domination should be identified as that relation is unclear, at least when one treats of it as I am treating of it here—i.e. as *not* responsible for the unity and reality of corporeal substances.

3. LOOK AND NACHTOMY

As I mentioned in the introduction to this paper, Brandon Look and Ohad Nachtomy both treat of the relation of domination as Leibniz's answer to the question of how a corporeal substance gets its *per se*

unity, although they differ insofar as Look takes Leibniz to have given up eventually on monadic domination as a solution to the problem of a corporeal substance's *per se* unity, while Nachtomy takes monadic domination to have remained to the end Leibniz's solution to this same problem. Both accounts are, as one might expect, fairly involved. Limitations of space dictate, however, that my discussion of them focus only on the essentials. I begin with a discussion of Look's view.

Look understands an explanation of monadic domination to require an appeal to that account of interaction which I have examined under the heading of Leibniz's conception of ideal influence, although he takes this influence to become real in Leibniz's hands insofar as, and for as long as, monadic domination is put by Leibniz to the task of accounting for the *per se* unity and hence reality of corporeal substances.

Focusing specifically on Leibniz's claim that when one monad influences another a reason for what happens in the patient monad is to be found in the agent monad, Look considers what this reason can be. Granted that nothing is to be found in a monad save perceptions and appetitions, he says, one might think that the dominant monad's containing a reason for what happens in its subordinate monads consists in its having perceptions of the subordinate monad's perceptions and appetitions. On the other hand, Look continues, one might deny that these reasons in the dominant monad are perceptions; instead, one might think that *appetitions* in the dominant monad serve as reasons for what happens in the subordinate monad. Appetitions, after all, are *tendencies* to go from perception to perception, and a monad's tendency to go from perception to perception, Look notes, is identified by Leibniz (in a letter to De Volder) with that monad's primitive force, which, being an efficient principle of change, can serve as a reason for a given change.

It is this latter alternative that Look ultimately endorses.²³ In fact, Look argues that for Leibniz a subordinate monad's appetitions, or tendencies to go from perception to perception, are partly contained within the dominant monad. According to this view, as Look puts it, 'the appetitive part of any composite substance is located in the dominant monad of the composite'.²⁴

²³ Look, 'Monadic Domination', 387–90.

²⁴ *Ibid.*, 390.

Of course, monadic domination, so understood, involves a violation of Leibniz's ban on causal interaction between created substances, which Look himself recognizes. As Look states in another paper, in reference to his interpretation of monadic domination, monadic domination *does* 'contradict quite explicitly Leibniz's denial of causal interaction and his resulting view that the changes within a monad come from *internal* principles'.²⁵ But, Look immediately goes on to add, the tension here is . . . merely part and parcel of Leibniz's denial of causal interaction [combined with] his assertion that some monad can dominate and unify some group of other monads, which *prima facie* implies a kind of causal power of monads.²⁶

That is to say, according to Look, when Leibniz presses monadic domination into the job of accounting for the *per se* unity of corporeal substances, he ends up contradicting his own view that no created substance causally interacts with any other.

What, then, to make of Look's account of Leibniz's notion of monadic domination? It seems to me that there's a major obstacle to accepting it. For recall that Leibniz explicitly states that the *a priori* reason for what happens in the patient monad is contained in the agent monad as an object of distinct perception or knowledge. In other words, as we've seen, when one monad is dominant with respect to another, according to Leibniz, and therefore contains a reason for what happens in this other monad, its containing a reason for what happens in the other monad consists in its distinctly perceiving something that the patient monad perceives only confusedly.

This, I think, puts Look's account of monadic domination out of contention—unless that is, he thinks that Leibniz's conception of the relevant sort of reason as an object of distinct perception is the result of a change in Leibniz's thinking about monadic domination, a change brought about by Leibniz's abandonment of monadic domination as a solution to the problem of a corporeal substance's *per se* unity. But if this is Look's view, his account of monadic domination in Leibniz is not really a competitor to my account, since I'm interested in monadic

²⁵ Look, 'Composite Substances', 738n.10.

²⁶ *Ibid.*

domination insofar as it is conceived by Leibniz to be inadequate to account for the *per se* unity of a corporeal substance.

As for Nachtomy's account, its greatest virtue, I think, is that it stresses the functional organization of a living thing, seeing the relation of subordinate monad to dominant monad as involving the subordinate monad's *subserving*, or *contributing to the end sought by*, the dominant monad of a corporeal substance. Nachtomy is, in addition, almost certainly right to see Aristotle's notion of a hierarchy of ends at work in Leibniz's conception of monadic domination.²⁷

In his account of monadic domination, Nachtomy often speaks of how the dominant monad of a corporeal substance 'activates' and 'organizes'—i.e. functionally organizes—the subordinate monads that make up its organic body. Nonetheless, unlike Look, Nachtomy takes monadic domination to be consistent with Leibniz's ban on causal interaction between created monads.²⁸ Thus he denies that the relation of dominant monad to subordinate monad should be understood to involve any genuine efficient causality and claims that the only causal relations here are ideal and, moreover, teleological. In other words, the monads of a corporeal substance are, on his view, connected by relations of final causality that manifest themselves in the way every subordinate monad of a corporeal substance acts so as to secure the end or *telos* of its dominant monad, thereby contributing to the attainment of the end sought by the dominant monad of the *entire* corporeal substance.²⁹

²⁷ Nachtomy, 'Nested Individuals', 723.

²⁸ 'If Leibnizian individuals are causally independent of one another, the notion of activation has to be explained in non-causal terms (that is, at least not in terms of efficient causation). This point should clearly apply to the domination/subordination relation.' (Ibid., 723).

²⁹ 'For example, an acorn develops into a mature oak through the activation of matter by its entelechy in accordance with the acorn's final form. In such organic examples, the various functions of the constituents comprising the animal or plant may be seen as serving the *telos* and executing its natural development. In turn, the *telos* of an individual can be viewed as a programme of action consisting of numerous subprogrammes of action. All the substructures that make up an oak tree—branches, leaves, cells, subcellular constituents, etc.—are organized by a single program and directed towards a single end, which gives the tree its unity. At the same time, each constituent is fully organized (and in turn organizes its substructures) towards the fulfillment of its function. A leaf is a unit whose function is to produce sugar which provides energy for the tree's growth. The leaf itself may be seen as a fully organized unit whose constituents are organized and activated in order to perform their functions (e.g. one of chlorophyll's functions is to provide colour) and thereby to contribute to the function

This part of Nachtomy's account, I am happy to concede, seems right to me. But on other points Nachtomy seems to go wrong. For one thing, he claims that on his interpretation monadic domination provides *per se* unity to corporeal substances. I must confess that I fail to see how. It certainly seems to be the case that the functional organization that he describes—which proceeds *ad infinitum* to smaller and smaller parts of a corporeal substance—serves to distinguish (say) the collection of substances that together make up a horse or tortoise from those collections that Leibniz most commonly cites as examples of aggregates—e.g. a pond, a herd of sheep, a pile of rocks, an artificial machine. But why, given his account of the relations of monadic domination and subordination that obtain among the monads of a horse or tortoise, we should understand the collection of these monads to be a *per se* unity rather than an aggregate of a special kind is something that Nachtomy (so far as I can see) never explains.³⁰ Indeed, on this issue, Nachtomy's account seems inconsistent with Leibniz's own acknowledgement, in popular works like the *Theodicy* as well as in correspondence with other philosophers, that the reality of corporeal substances depends on a metaphysical union of which we can have no notion.³¹

Most problematic, it seems to me, is the fact that Nachtomy makes no appeal to the perceptions of monads in his account of monadic domination, notwithstanding the centrality of perceptions to Leibniz's conception of ideal influence. This, I think, is a significant omission. Perhaps related to it, moreover, is Nachtomy's endorsement of Pauline Phemister's view that the monads included within a corporeal

of the leaf. In turn, their constituents, such as cells, are themselves entirely organized towards performing their function in the overall programme of the leaf, which in turn is organized towards performing its function in the programme of the oak.' (Nachtomy, 'Nested Individuals', 723–4).

³⁰ In a letter of 29 May 1716 to Des Bosses, Leibniz explicitly states that the subordination of monads is insufficient to account for the *per se* unity (and hence reality) of a corporeal substance (GP ii. 517–8/LR 371). Something more is required, which is precisely why Leibniz entertains the hypothesis of a substantial bond in the correspondence with Des Bosses. Thus, in the absence of this 'something more', things like horses and tortoises will be mere aggregates of monads. Notice, however, that they will be aggregates of a special kind: collections of monads in which one monad is dominant with respect to every other monad in the collection. Of course, Leibniz's standard examples of aggregates—a pond, a herd, a machine—are not collections of this sort.

³¹ See GP vi. 45/H 69; GP vi. 595–6/WF 249–51; GP ii. 296/LR 13. But see also GP ii. 281/AG 184.

substance are to be understood as extended substances.³² This is an issue on which I disagree with both Nachtomy and Phemister, and my agreement with Nachtomy on certain aspects of his account should be understood as qualified for this reason.

Having discussed the accounts of Look and Nachtomy, in the next section I turn, first, to the task of sketching a picture of monadic domination that is informed purely by an understanding of Leibniz's doctrine of pre-established harmony, and second, to the task of developing an account that goes some way towards integrating ideal causation into this picture. Only in §5 will Leibniz's conception of ideal causation be fully integrated into the picture sketched in the next section, thanks in large part to an appeal to Aristotle's notion of a hierarchy of ends. My aim in what follows is to give an explanation of monadic domination that goes well beyond Nachtomy's account (or rather, well beyond that part of his account that I agree with), and this, to a great extent, by virtue of the fact that my interpretation, unlike Nachtomy's, involves an appeal to monadic perception.

4. MONADIC DOMINATION FROM THE VIEWPOINT OF THE PRE-ESTABLISHED HARMONY

Leibniz appeals to the pre-established harmony to account for the appearance of causal interaction between the soul and the body of a corporeal substance. But in doing so he commonly understands by 'the body of a corporeal substance' the organic, extended natural machine that belongs to the realm of phenomena. And, as mentioned earlier, this approach to the question mixes two levels of reality by appealing, on the one hand, to a phenomenon, and on the other hand, to a monad. However, my concern here, again, is with an analysis of such apparent interactions that appeals primarily to items belonging to the monadic realm. So let us consider what the doctrine of pre-established harmony can tell us about how such apparent interactions play out at the monadic level.

Although Leibniz himself does not say much about which parts of an animal's body count as corporeal substances in their own right—or,

³² Nachtomy, 'Nested Individuals', 719–20. Nachtomy cites Phemister's 'Leibniz and the Elements of Compound Bodies', *British Journal for the History of Philosophy*, 7 (1999), 57–78.

rather, which sub-collections of monads within an animal's body are constituted from monads related to each other in the same way that all the monads in the entire animal are—we might nevertheless imagine that the monads in a muscle fibre in one of the biceps of a human being are so related. (Of course, by 'muscle fibre' here, I don't mean the phenomenal muscle fibre, but the extra-mental thing confusedly expressed by this phenomenon.) Accordingly, this muscle fibre will have its own dominant monad possessed of its own activity, which can consist in nothing but perception and appetite. Moreover, a relation of domination obtains, on Leibniz's view, between the dominant monad of the human being and the dominant monad of this muscle fibre. Let us now suppose that the human being acts, and that this action manifests itself on the phenomenal level as the human being's deliberately taking hold of a piece of candy and popping it into his mouth. Let us also suppose that this action involves a physical change in the phenomenal muscle fibre. Using the terms 'action' and 'act' in the metaphysically rigorous sense identified above (according to which anything that happens in a monad counts as an action because it arises spontaneously in the monad), let us now consider what we can deduce about the monads in the human being purely on the basis of Leibniz's doctrine of a pre-established harmony obtaining among all created beings.

It seems clear that, corresponding to the action by which the dominant monad of the human being undergoes a change with respect to its perceptions—some (including the perception of the candy's sweetness) becoming more distinct, others becoming more confused—there is also some sort of action undertaken by the dominant monad of the muscle fibre, an action which, like that of the dominant monad, must involve a change in its perceptions. In other words, when the dominant monad of the human being spontaneously acts so as to acquire a more distinct perception of the candy's sweetness, Leibniz's notion of a pre-established harmony obtaining among the actions of all creatures would seem to require that the dominant monad of the muscle fibre also act so as to acquire a more distinct perception of something. Moreover, the action of the dominant monad of the muscle fibre will, on the phenomenal level, manifest itself in that flexing of the muscle fibre which is one small part of that action by which the human being takes hold of some candy and pops it into his mouth. That is to say, the change in the dominant

monad of the muscle fibre will, at the phenomenal level, show itself to be instrumental for the end achieved by the dominant monad of the entire human being (i.e. a distinct perception of the candy's sweetness). But of course the instrumentality here involves not only the dominant monads of both the human being and the muscle fibre. For since, according to Leibniz, there are infinitely many monads that are subordinate, more or less immediately, to the dominant monad of the muscle fibre, a relation similar to this one that obtains between (i) the dominant monad of the human being and (ii) the dominant monad of the muscle fibre will obtain also between the dominant monad of the muscle fibre and each of those monads that are immediately subordinate to it. And each such monad will likewise bear a similar relation to each of *its* immediately subordinate monads, and so on, *ad infinitum*.

Leibniz's pre-established harmony and his analysis of bodies in terms of simple substances that are capable of only perception and appetite would seem to commit him to some such account of what is going on when a human being acts in a voluntary manner. But the account can be further developed when we look more carefully at what goes on *within* the monads that make up a human being when that human being performs some action. And this we can do in two different ways: either (a) by taking what happens within a monad for what it is, according to Leibniz—i.e. something altogether spontaneous or self-produced, or (b) by taking what happens within a given monad to be at least in part the result of an influence that other monads have over it.

When we take what happens in a monad in the first way, we find that when a monad goes from having a conscious perception of x to a conscious perception of y —and this in such a way that its perception of x becomes increasingly confused until finally x itself ceases to be an object of consciousness for it, while its perception of y becomes increasingly distinct until finally y becomes an object of consciousness for it—the decrease in the distinctness of its perception of x is understood to be a joint-result of two things: first, its striving after a more distinct perception of y and, second, the finitude of its active force, which is a consequence of the dominant monad's prime matter, or of an original limitation in the monad that limits its receptivity for perfection.³³

³³ See Adams, *Determinist*, 393–4. See also GP vi. 119–21/H 140–2; GP vi. 383/H 384; GP vi. 210/H 228; GP vi. 602–3/AG 210.

(That is, one might ask why there must be a decrease in the distinctness of some of a created monad's perceptions when there is an increase in the distinctness of some of its other perceptions, and, given the monad's causal independence from every other created being, the answer to this question will be: because the monad's primitive active power is limited by the monad's very nature, a nature which necessarily imposes limits on just how perfect it can be.) What's more, also attributable to the prime matter of an individual monad is the monad's failure to acquire a perception of γ that is more distinct than the one that it does in fact succeed in acquiring.³⁴ For such a failure is clearly due to a want of more active force.

Strictly speaking, then, a monad's prime matter is properly held responsible for both (i) the decrease in the distinctness of its perception of object x and (ii) the monad's failure to acquire a perception of object γ that is more distinct than the one that it does in fact acquire. And it's precisely when we thus analyze what happens in a monad that we recognize it to be an action in Leibniz's metaphysically rigorous sense of 'action', according to which *everything* that happens in a monad arises spontaneously, or from its own depths (GP vi. 138/H 158; A VI. iv. 1620/LOC 311). For what happens in the monad is strictly this: an increase in the distinctness of its perception of γ and a decrease in the distinctness of its perception of x . And the monad's striving after a distinct perception of γ is clearly an action, while the loss of distinctness in the monad's perception of x is consequent upon both this striving and the monad's original limitation (i.e. the limitedness of its capacity for perfection, which is a necessary consequence of its very nature as a created thing). Thus, even the decrease in the distinctness of the monad's perception of x is self-wrought, and so counts as an action.

Not surprisingly, then, when viewed from the standpoint of the pre-established harmony, which stresses the causal independence of each created thing from every other created thing, the physical action of popping a piece of candy into one's mouth turns out to be the phenomenal result of a special kind of coordination between the

³⁴ 'The action of the internal principle which brings about the change or passage from one perception to another can be called appetite; it is true that the appetite cannot always completely reach the whole perception toward which it tends, but it always obtains something of it, and reaches new perceptions.' (GP vi. 609/AG 215; emphasis added).

spontaneously acting monads that go to make one up. The instrumentality that manifests itself at the phenomenal level—the contribution of the muscle fibre to the action of the entire human being, the contributions of the muscle fibre's constituent corporeal substances to the action of the entire muscle fibre, etc.—is not really a product of any sort of causal influence that the dominant monad of the human being exercises over its subordinate monads.

Things look rather different, however, when Leibniz's conception of ideal influence is brought to bear on one's analysis of what happens in a human being's monads when she acts in a voluntary manner. For here the decrease in the distinctness of a monad's perception of x is not taken to be the result of both its prime matter and its striving after a more distinct perception of y . Nor is prime matter held responsible for the monad's failure to acquire a perception of y that is more distinct than the one that it does in fact acquire. Instead, both the decrease and the failure are taken to be the result of an ideal efficient causal influence that other monads exercise over it.³⁵

In other words, when the dominant monad of the human being strives after a distinct perception of y , the corresponding loss in the distinctness of its perception of x , as well as the resistance that prevents it from acquiring a perception of y that is more distinct than the one that it actually ends up acquiring, are taken to constitute a *passion*, something due in large part to the influence of its subordinate monads upon it.³⁶ On the scheme of ideal influence, in other words, only the *increase* in the distinctness of the monad's perception of y counts as an action or as something to which the monad itself gives rise. The same, moreover,

³⁵ In the *New Essays*, Leibniz says that when it comes to a 'true substance, we can take to be its action, and attribute to the substance itself, any change through which it comes closer to its own perfection; and can take to be its passion, and attribute to an outside cause (though not an immediate one), any change in which the reverse happens; *because the change can be explained in an intelligible way by reference to the substance itself in the former case and by reference to outer things in the latter*' (RB 211; emphasis added). The qualification 'though not an immediate one' reflects Leibniz's notion that the ideal influence of one created monad over another is mediated by God.

³⁶ The fact that there are two ways of explaining both (1) a decrease in the distinctness of a dominant monad's perceptions and (2) its failure to acquire a perception of y that is more distinct than the one that it does in fact acquire—the one explanation involving an appeal to the monad's own prime matter, the other involving an appeal to the actions of its subordinates upon it—is perhaps what leads Leibniz to say that the prime matter of a living thing's dominant monad is 'related to the whole mass of the organic body' (GP ii. 252/AG 177).

can be said of each of the dominant monad's subordinate monads: when a subordinate monad goes from a conscious perception of q to a conscious perception of r , both its failure to acquire a more distinct perception of r and the loss of distinctness in its perception of q are to be understood as effects of other monads' actions upon it. Of course, prominent among these other monads will be the one that is immediately dominant over it as well as those that are immediately subordinate to it.

On this scheme, then, the monads immediately subordinate to the dominant monad of a human being are taken to form a kind of efficient principle or source of confusion in the dominant monad's perception. This (again) should come as no surprise, given Leibniz's oft-repeated claim that our confused perceptions—that is to say, our sensations and emotions—have their source in our bodies.³⁷

As we have seen, however, there is more to Leibniz's account of ideal interaction than increases and decreases in the distinctness of the perceptions of those monads which ideally influence each other. For Leibniz claims that when one monad, A , acts on another, B , something distinctly known by A serves to explain what happens in B , this something constituting an *a priori* reason for what happens in B —which reason, I have claimed, should be understood as a final cause. And it is with a view to understanding *this* aspect of Leibniz's account that we can, I think, usefully appeal to Aristotle's notion of a hierarchy of ends or activities—a notion which, I might add, would have been quite familiar to anyone who was versed in scholastic Aristotelian philosophy, as Leibniz himself certainly was.

5. ARISTOTLE'S HIERARCHY OF ENDS OR ACTIVITIES

At the very beginning of the *Nicomachean Ethics*, Aristotle introduces us to the view that all the different activities to be found in a well-ordered *polis* can be situated in a kind of hierarchy, a hierarchy in which all of these activities are related to each other according to more or less immediate relations of subordination and superordination. One

³⁷ Indeed, this is perhaps what leads Leibniz to say in several places that it is through our own bodies that we sense, or are affected by, other bodies. See GP vi. 599/AG 207; A II. ii. 242/L 340; RB 117.

example of such a relation is that which obtains between the bridle-maker's activity and the activity of riding horses. According to Aristotle, the bridle-maker does what she does at least in part for the sake of the activity engaged in by the rider of horses, with the result that the activity of bridle-making is subordinate to the activity of horseback-riding. In this case, not only is the product of the bridle-maker's craft used by the rider of horses, but the horseback-rider is also in some way thought to be the cause of the bridle-maker's activity. And this is so because, not only is bridle-making for the sake of riding horses, but the bridle-maker's product must also be made in accordance with the specifications of the rider, who is the appropriate judge of whether a bridle is well made or not. Thus, although the bridle-maker's activity serves as a means to the end of riding horses, and therefore might be thought to serve as a kind of auxiliary cause of horseback-riding, nonetheless, the activity of riding horses is at least in a certain way—i.e. in the order of final causes—prior in the order of explanation, since the bridle-maker's activity exists for the sake of horseback-riding and *only counts as bridle-making* to the extent that it is given structure or shape by the needs of the person who rides horses. As Aristotle puts it, horseback-riding is 'controlling' (*kurios*) with respect to bridle-making.³⁸

According to Aristotle, moreover, the activity of horseback-riding is subordinate, in turn, to a higher activity, namely, the activity of the general, whose aim or end (*telos*) is victory on the battlefield. The general's activity is, in turn, subordinate to at least one other activity, according to Aristotle: the most controlling (practical) activity—i.e. the politician's activity, the end of which is the good of the entire *polis*. Of course, corresponding to this hierarchy of activities is a hierarchy of capacities or skills: just as the activity of the general is subordinate to that of the politician, so also is military science subordinate to political science. Moreover, since each science or craft has its own special end, to the *polis*' hierarchy of activities there corresponds a hierarchy of ends, and the highest end—namely, the good of the entire *polis*, which is the end sought by the politician or statesman—is that end which sets the standard by appeal to which all other activities in the *polis* must be regulated. Thus, although bridle-making is an activity that is regulated by

³⁸ See *Nicomachean Ethics*, I.1–3 (1094a6–27).

appeal to the requirements specified by the person who rides horses, it is also regulated, albeit mediately or in a less direct fashion, by the requirements of the politician, whose aim is the good of the whole *polis*.³⁹

This is not to say, of course, that the bridle-maker herself is mindful of how her activity, when properly regulated, contributes to, or serves as a means to, the end sought by the politician. She may never give any thought to the good of the entire *polis*. The following passage, from Chapter 1, Book I of the *Metaphysics*, strongly suggests this way of reading Aristotle:

[W]e think . . . that the master-workers in each craft are more honourable and know in a truer sense and are wiser than the manual workers, because they know the causes of the things that are done. (We think that the manual workers are like certain lifeless things which act indeed, but act without knowing what they do, as fire burns, but while the lifeless things perform each of their functions by a natural tendency, the labourers perform theirs through habit.)⁴⁰

Here, Aristotle contrasts the master-workers in a craft with their subordinates, the manual workers, saying that the former, but not the latter 'know the causes of the things that are done'. And among those causes, it seems reasonable to say, is the end immediately sought by the craft—e.g. a sculpture, in the case of the sculptor's craft. The manual workers themselves do not regulate their activities by keeping an eye on the end or goal that is sought by the craft. They simply perform their tasks by habit, a habit presumably instilled in them by the master-worker, who *does* keep an eye on the end immediately sought

³⁹ Aristotle makes this last point in terms of the ranking of the productive and practical sciences within the hierarchy of the *polis*' activities when he says that political science 'is the [science] that prescribes which of the [other] sciences ought to be studied in cities, and which ones each class in the city should learn, and how far; indeed we see that even the most honored capacities—generalship, household management, and rhetoric, for instance—are subordinate to it' (1094a28–b3). The translation quoted here is that found in: Aristotle, *Nicomachean Ethics*, trans. Terence Irwin, 2nd ed. (Indianapolis and Cambridge: Hackett Publishing Company, 1999), 2.

⁴⁰ *Metaph.* A.1, 981a30–b5. The translation is from Aristotle, *The Complete Works of Aristotle: The Revised Oxford Translation*, ed. J. Barnes (Princeton: Princeton University Press, 1984), 1553. For a helpful elaboration of this passage, see Thomas Aquinas, *In duodecim libros Metaphysicorum Aristotelis expositio*, eds. M. R. Cathala and Raimundo M. Spiazzi (Marietti: Torino, 1977), Bk. I, lect. 1, p. 10nn.25–8. (For an English translation, see Thomas Aquinas, *Commentary on the Metaphysics of Aristotle*, trans. John P. Rowan [Chicago: Henry Regnery Co., 1961], vol. 1, pp. 13–14.)

by the craft. The basic point here, I think, can be generalized in such a way as to lead to the conclusion that for Aristotle, a person whose activity is subordinate in the *polis*' hierarchy of activities does not necessarily keep an eye on the end sought by the politician. Thus, a general can be eager to go to war even when it is not in the *polis*' best interests, and in this case the excellent politician will not heed the general's advice to go to war, since he recognizes that going to war is not an effective means to his end.

On Aristotle's conception of a hierarchy of activities, moreover, it should be clear that the end immediately sought by, and proper to, a given person is conceived to be an effect of *her* activity, notwithstanding the fact that activities which are subordinate to hers in the hierarchy likewise contribute to the securing of her end.⁴¹ For this reason, when it comes to activities that *we* might be tempted to call collective because they involve a number of agents, some doing the hands-on work, some engaged in supervisory roles, and one engaged in coordinating the work of all the others, Aristotle would say that the

⁴¹ Aristotle is quite explicit about this in the analogous case of plants and animals, in which there exists a hierarchy of activities and capacities not unlike the hierarchy of activities and capacities found in the *polis*. Consider the following passage:

Some think that it is the nature of the fire which is the cause quite simply [*haplōs aitia*] of nourishment and growth; for it appears that it alone of bodies [or elements] is nourished and grows. For this reason one might suppose that in both plants and animals it is this which does the work. It is in a way a contributory cause [*sunaitia*], but not the cause simply; rather, it is the soul which is this. For the growth of fire is unlimited while there is something to be burnt, but in all things which are naturally constituted there is a limit and a proportion both for size and growth; and these belong to soul, but not to fire, and to the principle [*logos*] rather than to matter (*De Anima*, 416a9–18).

(The translation quoted is that found in: Aristotle, *De Anima: Books II and III (with Passages from Book I)*, trans. D. W. Hamlyn, with a Report on Recent Work and a Revised Bibliography by Christopher Shields (Oxford: Clarendon, 1993)). Aristotle is arguing in this passage against the kind of reductionist analyses offered by those of his predecessors who took some activity of an organism to be sufficiently explained by appeal to an activity which is natural to some component material part of the organism. According to Aristotle, such explanations are insufficient: the activity of assimilating nourishment, for example, involves a kind of measuredness (so to speak) that is alien to fire. Although fire, or heat, is a contributing or auxiliary cause of nourishment and growth in living things, it is the soul (specifically, the nutritive soul), inasmuch as it imposes direction and limits on the natural activity of fire, that is most properly the cause of nourishment. As Aristotle puts it, the soul is the cause *simpliciter* (*haplōs*) of nourishment and growth. Similarly, I claim, just as the nutritive soul directs, limits or regulates the natural activity of fire, so also does the politician direct, limit or regulate the activities of those subordinate to her in the *polis*' hierarchy, and this makes *her* primarily responsible for the good of the *polis*.

activity—e.g. the activity of building a temple—is most properly assigned to the person who oversees and coordinates the work of all the others. She is most properly the one who builds a temple, the agent whose activity brings about this effect, since it is she who knows the final cause or end of her subordinates' activities. This, of course, is not to deny that the activities performed by her subordinates contribute, on Aristotle's view, to the production of the temple. Indeed, they are necessary, and the subordinates are therefore contributing or auxiliary causes of the temple. But just as the rider of horses is in some way a cause of the bridle-maker's activity, inasmuch as the bridle-maker must make bridles in accordance with the horseback-rider's specifications, so also is the person in charge of building the temple the cause of her subordinate's activities. (In other words, the temple-maker's subordinates are instruments—albeit living ones—that she employs in the pursuit of her end.) For this reason, the activity of temple-making is most properly assigned to her.

Now, Aristotle's notion of a hierarchy of ends or activities presents itself as an attractive model in the attempt to reconstruct Leibniz's views on the issue of monadic domination. For one thing, although Leibniz sometimes claims that all the monads in a corporeal substance concur in the production of that substance's actions, he also implies elsewhere that the actions of a corporeal substance should be attributed to its dominant monad, which stands at the very top of that hierarchy in which *all* the monads of the corporeal substance are situated.⁴² And, as we have just seen, Aristotle's conception of a hierarchy of activities is such that, although many people concur in the production of a temple, the activity of temple-making is most properly assigned to the person

⁴² In a letter of 21 May 1706 to Des Bosses, Leibniz states: 'in actions exerted according to mechanical laws, not only the entelechy adequate to the organic body, but also all partial entelechies, come together [*concurrent*]' (GP ii. 307/LR 39). On this view, when a corporeal substance acts, the action is ultimately attributable both to the dominant monad of the corporeal substance, which is here called 'the entelechy adequate to the organic body', and to the subordinate monads contained in the corporeal substance, which are here called 'partial entelechies'. However, motivated, it seems, by the fact that he equates the dominant monad of a corporeal substance with its soul, Leibniz elsewhere simply attributes a corporeal substance's action to its dominant monad (see GM vi. 236/AG 119). The thought seems to be that in voluntary actions the soul merely uses the body as an instrument, for which reason the action is credited simply to the soul.

who is in charge of the temple's construction, i.e. to the person who stands at the top of the relevant hierarchy.

Moreover, we saw above that in our candy-eating scenario what actually happens in the dominant monad of the muscle fibre shows itself to be instrumental, at the phenomenal level, for that action by which the human being grabs a piece of candy and pops it into his mouth. And this situation, of course, has its analogue in Aristotle's conception of a hierarchy of ends or activities. For on Aristotle's view the stonemason's activity over the course of the temple's production is instrumental for the end that is sought by the person who is immediately responsible for the production of the temple—and this because, just as the flexing of the muscle fibre is one small part of that action by which the human being pops some candy into his mouth, so also is the activity of the stonemason one small part of the entire activity of producing a temple.

Here, however, it is important not to lose sight of Leibniz's distinction between two senses of 'action', the metaphysically rigorous sense, according to which everything that happens in a monad counts as an action, and the less strict sense, according to which only *part* of what happens in a monad counts as an action, everything else that happens in it being a passion. For when we use the term 'action' in the latter sense, it turns out that only the subordinate monad's *passion* serves the dominant monad in the pursuit of its own end.

I argued above that for Leibniz, when a monad acquires a more distinct perception of some object y , and simultaneously experiences a decrease in the distinctness of its perception of some other object x , the latter decrease, together with the monad's failure to acquire a perception of y that is more distinct than the one that it does in fact acquire, can both be attributed to the influence of other monads upon it. Now, *this* way of making sense of the appearance of interaction between creatures—by appealing to increasing and decreasing levels of distinctness in monads' perceptions—seems, as I have already suggested, to be suitable for explaining the appearance of relations of *efficient* causality among created substances. For Leibniz, as I've mentioned, regularly finds the origin of a monad's confused perceptions in its body, and the causal relation by which the body gives rise to confused perceptions in its associated mind or soul is commonly taken to be a relation of efficient causality. On the other hand, the account of ideal influence

that is cast in terms of one creature's containing an *a priori* reason for what happens in another creature seems to be better tailored to relations of final causality. For, on Leibniz's scheme of ideal influence, when we ask *why* a subordinate monad experiences a passion, one possible answer is that the dominant monad brings this passion about in the subordinate monad (by an exercise of its efficient causality) because of, or for the sake of, its own pursuit of some goal—i.e. the acquisition of a relatively distinct perception of something. In other words, the end pursued by a dominant monad serves as an *a priori* reason for the passion that occurs in the subordinate monad. And since ends are final causes, this end pursued by the dominant monad is a *final cause* of the passion experienced by the subordinate monad—this passion being resolvable into two parts, as it were: (i) the loss of distinctness in the subordinate monad's perception of some object *q* and (ii) the resistance that keeps the subordinate monad from acquiring a perception of *r* that is more distinct than the one that it does in fact acquire. And of course the dominant monad's end or goal is a more or less distinct perception of something that the patient monad perceives only obscurely.

Now one might ask *why* it should be the case that when we set aside Leibniz's metaphysically rigorous sense of 'action', and instead employ the term 'action' in the loose sense (according to which only *part* of what happens in a monad counts as an action, everything else being a passion), it turns out that only *part* of what happens in the subordinate monad is instrumental for the dominant monad's pursuit of its end. The answer, briefly put, is that for Leibniz relations of ideal influence are invariably reciprocal, and this means that, when a dominant monad acts on its subordinate monad, the subordinate monad always reciprocates by acting on the dominant monad. It also means that the passion experienced by a dominant monad is to be explained in part by appeal to something in each of its subordinate monads—namely, the action by which each such subordinate monad pursues some end of its own, i.e. a more or less distinct perception of some object. Therefore, the subordinate monad's passion, as opposed to its action, can alone be instrumental for the dominant monad's pursuit of its end, since the action of the subordinate monad instead *frustrates*, to some degree, the dominant monad's pursuit of its end. For the dominant monad no doubt aims to keep a distinct perception of *x* even as it pursues a

distinct perception of γ , and also aims to acquire a perception of γ that is more distinct than the one that it does in fact end up acquiring,⁴³ but it is frustrated in these aims by the actions of its subordinates upon it.

Notice, moreover, that this way of understanding what happens within the monads of a single living thing leaves the hierarchy of ends intact. Consider the case of the stonemason who is situated fairly low in that hierarchy which is headed by the person whose immediate goal is the production of a temple. Insofar as he complies with his superiors' instructions, both producing and placing hewn stones thus and so, the stonemason helps to bring about the end immediately sought by the person in charge of producing a temple. And this amounts to saying that the stonemason's activity, *precisely insofar as it is directed by his superiors*, has, as a final cause, the end sought after by the temple-maker. Thus, it makes sense to say that a reason for what the stonemason does, insofar as he complies with the instructions given to him by his superiors, is to be found in the temple that the temple-maker conceives as her immediate end. As we saw, however, this is not to imply that the stonemason has a clear conception of the end pursued by the temple-maker. The claim that the temple-maker's end is also the stonemason's end insofar as the latter complies with the instructions of his superiors (i.e. insofar as he lets himself be used as an instrument) is not a claim about what the stonemason knows or consciously aims at. It is, instead, a claim about the natural relations of sub- and superordination obtaining among various activities and skills. Similarly, I claim, in the case of two monads one of which is dominant with respect to the other: the *a priori* reason for, or final cause of, *part* of what happens in the subordinate monad—specifically, that part which constitutes the passion brought about by the efficient causal influence of its dominant monad—is contained in the dominating monad because the latter has a relatively distinct perception of the end that it pursues, which is, unbeknownst to the subordinate monad, also an end to which its own passion is directed. (In other words, the subordinate monad has only a confused perception of the end pursued and distinctly perceived by its dominant monad.)

⁴³ See n. 34 above.

Moreover, if the subordinate monad's passion is comparable to the stonemason's complying with his superior's instructions, then the subordinate monad's action (its pursuit of a distinct perception of some object r) is, on the other hand, comparable to those actions of the stonemason which keep him from complying with his superiors' instructions. It is insofar as the stonemason lets himself be directed by his superiors—lets himself be used as an instrument—that he contributes to the end sought by the temple-maker. But it is insofar as he pursues his own private ends, rather than complying with his superiors' instructions, that he frustrates, to some extent at least, the temple-maker's pursuit of her goal (say, the production of a temple with such-and-such features within a particular amount of time). Similarly with the subordinate monad: its pursuit of a distinct perception of some object r has, as its ideal effect, (i) the decrease in the distinctness of the dominant monad's perception of x (a decrease that accompanies the increase in the distinctness of the dominant monad's perception of y), as well as (ii) the dominant monad's failure to acquire a perception of y that is more distinct than the one that it actually acquires. Here, the subordinate monad's action (in the loose sense of 'action') is held responsible for both the decrease and the failure in the dominant monad. And this passion in the dominant monad has its *a priori* reason or final cause in the object, r , that the subordinate monad aims to acquire a relatively distinct perception of. In all of this, the subordinate monad *frustrates*, to some extent, the dominant monad's pursuit of its goal, just as the stone-mason's pursuit of his own private ends frustrates, to some extent, the temple-maker's pursuit of her end.

Above, I said that in the candy-eating scenario what actually happens in the dominant monad of the muscle fibre shows itself to be instrumental, at the phenomenal level, for that action by which the human being grabs a piece of candy and pops it into his mouth. Notice that the same point can be made purely in terms of monads, without any appeal to what happens at the phenomenal level. For, given the requirements of goodness and harmony that characterize the actual world (which is the best of all possible worlds), the action (in the rigorous sense of 'action') performed by the dominant monad of the human being could not have taken place without the action (in the rigorous sense of 'action') performed by the dominant monad of the muscle fibre. In other words, what in fact happened in the

subordinate monad was instrumental for what in fact happened in the dominant monad.

However, when we consider the situation from the standpoint of ideal influence, distinguishing what happens within a monad into two components (an action and a passion), what in fact happens in the dominant monad of the human being is a combination of advance, retreat and failure: it acquires a more distinct perception of some object γ , suffers a decrease in the distinctness of its perception of another object x , and fails in its attempt to acquire a perception of γ that is more distinct than the one that it does in fact acquire. Viewed from *this* perspective, only the passion suffered by its subordinate monad is instrumental in the dominant monad's pursuit of a distinct perception of γ , the action of the subordinate monad both costing the dominant monad its distinct perception of x and keeping it from acquiring as distinct a perception of γ as it aims for.

To sum up the results of this section and the last: at the very least, Aristotle's notion of a hierarchy of ends or activities provides us with a useful guide in our attempt to understand Leibniz's conception of the relations of domination and subordination that obtain among the monads that go to make up a living thing. In particular, Aristotle's notion of a hierarchy of ends affords us a fairly detailed understanding of Leibniz's notion of monadic domination and allows us to make sense of the idea that a dominant monad contains an *a priori* reason for, or explanation of, the passion that occurs in each of its immediately subordinate monads—the passion that a monad suffers being that part of what happens within it that is, on Leibniz's conception of ideal influence, legitimately accounted for by appeal to something *outside* that monad.⁴⁴

I would suggest, in fact, that it's entirely possible that Aristotle's notion of a hierarchy of ends actually informed Leibniz thinking about monadic domination. For Leibniz himself was evidently familiar with Aristotle and the Aristotelian tradition—and this, in no small way, thanks to his professor at the University of Leipzig, Jacob Thomasius, who, aside from supervising Leibniz's dissertation on the principle of individuation, was also professor of moral philosophy and the author of

⁴⁴ See note 35 above.

a commentary (in tabular form) on the *Nicomachean Ethics*, which was first published in 1661, the very year that Leibniz matriculated at the University of Leipzig.⁴⁵

6. AN OBJECTION

In the face of all this, one might object that on Leibniz's scheme there are monads that perceive nothing at all distinctly (so-called 'bare monads'), and that the following problem therefore arises for the account of monadic domination presented above: how can the domination of one monad by another involve the dominant monad's distinctly perceiving something that its subordinate monad perceives only confusedly, given that each and every monad—and thus each and every *bare monad*—is dominant with respect to infinitely many others? How, in other words, can a monad that perceives nothing distinctly—i.e. that perceives nothing *consciously*—have a distinct perception of something that its subordinate monad perceives only confusedly?

A full answer to this question would require a lengthy examination of Leibniz's views on perception, which I cannot offer here. I have argued elsewhere,⁴⁶ however, that for Leibniz so-called 'bare monads', which are commonly characterized as having no conscious perceptions at all, can actually be understood as having a consciousness that is made up entirely of a single clear but utterly confused perception, comparable to the conscious perception of some colour.⁴⁷ I have also argued that, according to Leibniz, any conscious perception that is to any degree confused is the conscious result of a more complex, subconscious perception that underlies it—a more complex perception which, if brought to consciousness, would constitute a more distinct cognition of the original, comparatively confused perception's object.⁴⁸ (These underlying perceptions are none other than the *petites perceptions* out of which, Leibniz often says in the *New Essays*, our

⁴⁵ For more information on Leibniz's relations with Jacob Thomasius, see Maria Rosa Antognazza, *Leibniz: An Intellectual Biography* (Cambridge: Cambridge University Press, 2009), 50–9.

⁴⁶ Duarte, 'Ideas and Confusion', 721.

⁴⁷ The suggestion, in other words, is that Leibniz understands unconsciousness to be a limiting case of consciousness.

⁴⁸ Duarte, 'Ideas and Confusion', §§II–V.

conscious perceptions are composed.) Thus, to borrow an example from Leibniz himself, when I look at a fine mixture of yellow and blue powders that appears to me to be green, underlying my consciousness of green is a more complex subconscious perception composed of perceptions of yellow and blue, from which my consciousness of green results. What's more, Leibniz holds that, since the perception of yellow is still to some degree confused, underlying it (in turn) is a more complex perception, situated further below the threshold of consciousness, and so on, until, as one proceeds further and further below the threshold of consciousness, one finally arrives at a subconscious perception of the object that is lacking altogether in confusion—one which, if brought to consciousness, would constitute a clear and utterly distinct cognition of the object.

Now, as far as the objection goes, there are two points that must be observed. First of all, as we've seen, there are a couple of texts in which Leibniz quite explicitly states that the reason in an agent monad that serves to explain the passion in the patient monad is an object of perception. That much seems non-negotiable. The second point to keep in mind is that, on my interpretation of Leibniz, a complex, subconscious perception of some object x can lie farther or less far below the threshold of consciousness. Granted, this by itself gets us no closer to explaining how a bare monad can distinctly perceive something that its subordinate monad perceives only confusedly or obscurely. But it does provide us with an answer to the objection *on the condition that* we understand Leibniz's considered opinion to be, not that a dominant monad always distinctly perceives something that its subordinate perceives only confusedly or obscurely, but that a dominant monad invariably perceives something *more distinctly than* its subordinate does. For although a bare monad, strictly speaking, perceives *nothing* distinctly, it is, arguably, still fair to say of such a monad, A , that it can perceive something, x , more distinctly than another bare monad, B , does—namely, when in monad B a complex, subconscious perception of x lies further below the threshold of consciousness than it does in A .⁴⁹ Thus, in the case of a bare dominant

⁴⁹ In fact, in a couple of texts, instead of saying that one monad acts on another monad B insofar as it *distinctly knows* something that serves to explain a change in B , Leibniz states that one monad acts on another monad B insofar as it *more distinctly knows* something that serves to explain a change in B . See A II. ii. 81/L 337 and A II. ii. 90/WF 52.

monad, the object x that it strives, but ultimately fails, to have a distinct perception of, is, notwithstanding this failure, more distinctly perceived by it than it is by its subordinate monad.⁵⁰

7. GOD AND THE PRE-ESTABLISHED HARMONY

As I stated in the introduction, I think that the foregoing account of monadic domination in Leibniz provides us with an insight into his doctrine of a harmony, pre-established by God, that obtains among the actions of all creatures. And it does so, I would suggest, not merely by providing some insight into how the pre-established harmony plays itself out at the level of monads, but also by providing some insight into Leibniz's claim that God has foreordained an end for his creation.

I mentioned earlier that in one text Leibniz refers to God as dominant with respect to the universe of creatures. My aim in doing so was simply to point out that monadic domination was not always (at least) understood by Leibniz to be a sufficient answer to the question of how the monads in a corporeal substance can together constitute a genuine unity, since Leibniz himself denies that God is the soul of the world, or, equivalently, that God and the created universe together constitute a single corporeal substance. But Leibniz's description of God as dominant with respect to the universe, which involves a comparison of the relation that God bears to the universe, on the one hand, with the relation that a created dominant monad bears to its subordinate monads, on the other, suggests that, for Leibniz, the dominant monad of a human being stands to God in a manner similar to that in which any given subordinate monad within a human being stands to that human being's dominant monad or soul.

This is not to say that for Leibniz the domination of one created monad by another is precisely like God's domination of the entire universe of creatures. For one thing, God is understood by Leibniz to

⁵⁰ Note that, on my interpretation of Leibniz on the issue of monadic perception, we can still analyze a change in the utterly confused consciousness of a bare monad in terms of an increase in the distinctness of some of its perceptions and a corresponding decrease in the distinctness of some of its other perceptions. It's just that the increase is offset by the decrease, with the result that the monad's consciousness of the world remains altogether qualitatively undifferentiated: the bare monad strives after a distinct—i.e. conscious—perception of some particular object but is frustrated by its own essential limitations.

be an altogether perfect being to which all creatures stand, with respect to their different degrees of perfection, as zero stands to one. Accordingly, God cannot be said to 'accommodate' himself to created monads in the way that the dominant monad of a human being accommodates itself to its subordinates when, according to Leibniz's scheme of ideal influence, it suffers some passion at their hands.

Nevertheless, there seems to be no reason to deny that the action (in the metaphysically rigorous sense of 'action') of a created monad is instrumental in bringing about the end that God has foreordained for creation, each successive state of the universe being a sort of intermediate end which serves as a means to the ultimate end foreordained by God. At any rate, this is plausibly taken to be what Leibniz has in mind when he says in several texts that the final cause of the universe resides in God (see, e.g. GP vii. 305/AG 152; GP vi. 614/AG 218). Just as an *a priori* reason for what happens in the dominant monad of the muscle fibre can be found in the dominant monad of the entire human being, so also can an *a priori* reason for the actions of the human being's dominant monad be found in God. Moreover, Leibniz is quite clear in the *Discourse on Metaphysics* that God's choice to create this possible world involves the foreordination of an ultimate end for this world. Indeed, there he claims that the happiness or perfection of all minds—that is, the happiness or perfection of all rational monads—constitutes the principal part of this end (see, e.g. A VI. iv. 1537/AG 38).⁵¹ Thus, just as the end actually achieved by the person in charge of building a temple constitutes a final cause of the activities engaged in by her subordinates, the activities engaged in by her subordinates' subordinates, and so on, *so also* does the end foreordained for the universe by God constitute a final cause of the activities engaged in by *all* created monads. The claim here, in other words, is that the coordination or

⁵¹ Note, however, that in several texts Leibniz makes it clear that happiness for a mind consists in the continual and never-ending progress towards its highest perfection, which implies that the ultimate end foreordained by God for the universe is something that the universe continually approaches without ever finally attaining (see GP vi. 606/AG 213 and GP vi. 507–8/AG 192). Note also that for Leibniz reversals or set-backs in a created monad's progress towards greater degrees of perfection are deemed temporary and, moreover, instrumental for its attaining even higher degrees of perfection (see GP vi. 507–8/AG 192 and GP iv. 567/WF 121–2). Thus, it seems that even the actions of subordinate monads, which frustrate their dominant monad's pursuit of its immediate goal, end up contributing to the dominant monad's long-term progress to ever greater degrees of perfection.

harmonization of actions (in the metaphysically rigorous sense of 'action') performed by the different monads within a single corporeal substance is to be found also, according to Leibniz, among the actions performed by *all* the created monads in the universe.

8. CONCLUSION

As I mentioned at the outset of this paper, there have been very few attempts to explain Leibniz's conception of the relation that obtains between the soul of an animal and the collection of monads that make up that animal's body. Students of Leibniz's philosophy have tended to concentrate on the question of how he conceives the soul to be related to the phenomenal body. But they have neglected the distinct, though related, issue of how monadic domination plays out purely at the monadic level.

My aim here has been to remedy this defect in some small measure. My main claim is that we can understand the hierarchy of monads that together make up a living thing on the model of Aristotle's notion of a hierarchy of activities. The appeal to Aristotle here, I think, allows us to give a very definite sense to Leibniz's claim that an *a priori* reason for what happens in the subordinate monad can be found in the dominant monad.

I have also suggested that, on the conception of monadic domination presented here, Leibniz's claim that God is dominant with respect to the universe of creatures turns out to have a special significance. In particular, it allows us to see how the view that God has foreordained an end for creation fits within the doctrine of pre-established harmony.⁵²

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