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Leibniz on Concepts and Their Relation to the Senses

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1 A Puzzle

Leibniz, like Descartes before him, regards the mind as having a dual character.[1] He considers it simple in the traditional metaphysical sense of lacking any parts into which it could be divided. In this respect, it contrasts with material objects or bodies, which must always be composed of still smaller bodies. But he also views the mind as complex in the sense that it enfolds a multitude (indeed an infinity) of "accidents" or "modifications", such as appetites, perceptions, thoughts, ideas, and concepts. Their presence in the mind gives it a kind of complexity, though not, according to Leibniz, a complexity that conflicts at all with the mind's simplicity; they are not parts but rather qualities of a single, partless substance. The situation is rather like that of a center or point, which though simple and indivisible, contains in a way an infinity of angles formed by the lines that converge there (PNG 2; GP VII 566).[2]

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[1] Descartes affirms this view of the mind in (among other places) the sixth of his Meditations on First Philosophy, at AT VII 85-86. (AT = Oeuvres de Descartes, ed. C. Adam and P. Tannery (Paris: Vrin/ C.N.R.S., 1964-76), cited by volume and page number.)

[2] I use the following abbreviations throughout for Leibniz's works: A = Sämtliche Schriften und Briefe, ed. Deutsche Akademie der Wissenschaften (Darmstadt und Berlin: Akademie-Verlag, 1923-), cited by series, volume, and article or page number; C = Opuscules et Fragments Inédits de Leibniz, ed. L. Couturat. (Paris, 1903); DM = Discourse on Metaphysics, cited by section number; GP = Die philosophischen Schriften von Gottfried Wilhelm Leibniz, ed. C. I. Gerhardt, 7 vols. (Berlin: Weidmannsche Buchhandlung, 1875-90), cited by volume and page number; M = Monadology, cited by section number; NE = New Essays on Human Understanding, cited by page number from A VI, vi; PNG = Principles of Nature and of Grace, cited by section number; T = Essays of Theodicy, cited by section number.

More than just an interesting contrast, this duality of simplicity and complexity (together with two auxiliary principles identified below) leads Leibniz to draw an important conclusion about the mind: namely that the qualities constituting its complexity must be innate and can never come to it from without. He explains why in a brief essay on the nature of monads that has come to be known as the Monadology:

> There is no way of explaining how a monad can be altered or changed internally by some other creature, since one cannot transpose anything in it, nor can one conceive of any internal motion that can be excited, directed, augmented, or diminished within it, as can be done in composites, where there can be change among the parts. The monads have no windows through which something can enter or leave. Accidents cannot be detached, nor can they go about outside of substances, as the sensible species of the Scholastics once did. Thus, neither substance nor accident can enter a monad from without. (M 7; cf. C 521; GP II 251, 275)

One of the principles assumed in this argument is that a substance can only be affected internally by way of the exchange of either parts or accidents. The other is that there can be no transference of accidents between substances, because accidents simply cannot be detached from one substance and then reattached to another (cf. NE 224). Together these principles entail that internal changes can only be caused in a substance through the exchange of parts. However, since a simple substance such as the mind has no parts to exchange, it follows that none of its qualities can be acquired from without: they must all be born within the mind. Given then that concepts are among the qualities of a mind, Leibniz appears to commit himself with this argument to the extraordinary (even radical) thesis that

all our concepts, including those of "sensible qualities" such as colors, sounds, flavors, and odors, are innate to the mind and do not enter it through any sort of sensory intake.[3]

Beyond the fact that Leibniz commits himself to this thesis, there is clear explicit evidence that he embraced it. For instance, in his Discourse on Metaphysics (1686), having pointed out that "nothing ever enters into our mind naturally from the outside" and that "we have a bad habit of thinking of our soul as if it received certain species as messengers and as if it had doors and windows", he concludes that "nothing can be taught to us the idea of which we do not already have in our mind" (DM 26). Though this claim at least nominally concerns ideas rather than concepts, in the next section of the Discourse Leibniz observes that in his terminology a concept or notion is merely an idea that has been actually conceived or formed. Hence, it can be said in a sense that all our concepts are in us from the beginning, since every concept is an idea, and we always have all our ideas. In another sense, however, we can say that our concepts are acquired, in that we come to have them when an idea is actually conceived or formed. But even so, we acquire these concepts not from outside but from within our own depths, from our storehouse of ideas. In the Discourse, then, Leibniz clearly endorses the thought that all concepts are innate or born within us. He does so again in the New Essays on Human Understanding, written nearly twenty years later (1704-5): "Experience is necessary, I admit, if the soul is to be made to have such and such thoughts, and if it is to take heed of the ideas that are in us. But how could experience and the senses provide the ideas? Does the soul have windows? Does it resemble tablets? Is it like wax? Clearly, those who take this view of the soul are treating it as fundamentally corporeal" (NE 110; cf. NE 74).

[3] Descartes endorses a similar view in his Notæ in Programma (1647), AT VIIIB 358-59.

In view of the fact that Leibniz advances this doctrine of universal innateness, it should come as no small surprise that we also find him claiming that certain of our concepts come to us from the outside by way of the senses. In §27 of the Discourse, for instance, he endeavors to show "how our soul can be compared to empty tablets and how our notions come to us from the senses." Further, in a number of writings Leibniz promotes a distinction between ideas or concepts that are innate to the mind and those which come from the outside. He does so especially in the New Essays, in his lengthy attack on Locke's argument for the sensory origin of all concepts.[4] Against Locke, Leibniz maintains that though our confused ideas can be said to come to us through the senses, our intellectual ideas, which are distinct, come from within. The following remark is typical:

> Intellectual ideas, which are the source of necessary truths, do not come from the senses . . . . and truths into which enter ideas that come from the senses are dependent on the senses, at least in part. But ideas that come from the senses are confused, and so too are the truths that depend on them, at least in part; whereas intellectual ideas and the truths that depend on them are distinct, and neither the ones nor the others have their origin in the senses, though it is true that we would never think of them without the senses. (NE 81)

Among the intellectual ideas he numbers those of being, unity, substance, duration, change, cause, effect, action, similarity, perception, pleasure, and in general all those ideas the objects of which pertain to metaphysics, logic, and ethics (NE 51, 111, 392; GP VI 502; M 30). These ideas are innate, says Leibniz, because we acquire (or conceive) them through reflexive acts, by which we reflect on ourselves, what we are, and what is in us. In so doing, we

[4] For Locke's argument, see Book I of his Essay Concerning Human Understanding (1690).

discover the objects of these various ideas (PNG 5; M 30). For example, we come to have the idea of being because "we ourselves are beings and thus find being in ourselves" (NE 85-86; cf. GP VI 502-3). Something similar is true with all the other objects of our intellectual ideas. In contrast, the ideas that are not intellectual (i.e., sensory ideas) have as their objects the various sensible qualities—colors, flavors, odors, sounds, and tactile qualities such as hot and cold (NE 392).[5] These qualities are not found within us in the way that, say, being is, and so the ideas we have of them must, Leibniz reasons, come from the outside. In drawing this distinction between intellectual and sensory ideas, then, and attributing the latter to external sources, Leibniz appears to contradict his claim that all ideas are innate to the mind. Yet, surprisingly enough, he does not acknowledge any inconsistency here. How are we to account for this?

One line we cannot plausibly take is that Leibniz never endorsed both perspectives at the same time. We cannot, that is, suppose that he merely changed his mind on the subject, perhaps favoring the one view early and the other late. For as the careful reader will have noticed, Leibniz sometimes promotes both views within the very same writing. In the Discourse, he argues for the innateness of all ideas (and therefore all concepts) in §26, but then in the very next section claims to show how certain of our concepts can be said to come to us from the outside by way of the senses. The same thing happens again in the New Essays. As we have seen, in that work he distinguishes between intellectual and sensory ideas

[5] Matters are complicated by what Leibniz says at GP VI 501-2. There he recognizes three categories of ideas: sensible, imaginable, and intelligible. The imaginable ideas are, like intelligible ones, distinct. However, imaginable ideas differ from intelligible ones in that they come from the "common sense" or imagination rather than the understanding. The problem is that Leibniz seems to think only ideas coming from the understanding are truly innate. So what Leibniz says in this text entails that the class of distinct ideas does not coincide with the class of intellectual or innate ideas. I will not pursue how to reconcile this with the position he advocates in the New Essays.

and claims that the latter come to us from without. Yet elsewhere in the work he denies that the senses could ever provide us with any ideas (NE 74; 110). So it cannot be that he simply changed his mind about the origin of concepts. We could, of course, accuse him of vacillating wildly on this issue, or of being ambivalent, but that should be only a last resort. If at all possible we should see him as consistently and deliberately advocating both points of view.

We might suppose instead that when Leibniz speaks of certain ideas as coming to us through the senses, he is simply accommodating his language to that of others, even though he knows that in doing so he says something false. In the New Essays, for example, which take the form of dialogues between representatives of Leibniz and Locke, Leibniz may simply be adopting the Lockean framework in order to explore or criticize it, without intending to endorse it. The trouble with this suggestion is that Leibniz clearly does endorse our ordinary talk of concepts coming through the senses. He says that such talk is "sound and justifiable" (NE 74), and that in speaking this way we say nothing false (DM 27). But how can this be, given that in metaphysical strictness all concepts are born within the mind?

Though it takes some work to discover what exactly the proposal is supposed to be, I believe it can be shown that Leibniz does offer (what he intends to be) a way of reconciling these competing pictures of the origin of concepts. My task in this essay will be to explain in some detail what this proposal involves and then evaluate its plausibility. In the end, I will conclude that Leibniz fails to identify any sense consistent with his views in which concepts can be said to have an external source, and therefore that his position ought to be simply that all concepts are without qualification innate to the mind.

2 The Germ of a Proposal

I begin with Leibniz's discussion in the Discourse concerning the origin of concepts. The single passage of greatest significance for our purposes comes from §27, where Leibniz considers Aristotle's likening of the soul to a blank slate (tabula rasa) and the Scholastic-Aristotelian dictum that nothing resides in the understanding which was not first in the senses. Of these he writes:

> [T]hese kinds of doxologies or practicologies may be acceptable in ordinary usage, much as we see that those who follow Copernicus do not stop saying that the sun rises and sets. I even find that they can be given a good sense, a sense according to which they have nothing false in them, just as I have already noted how one can truly say that particular substances act on one another. In this same way, one can also say that we receive knowledge from the outside by way of the senses, because some external things contain or express more particularly the reasons that determine our soul to certain thoughts. But when we are concerned with the exactness of metaphysical truths, it is important to recognize the extent and independence of our soul, which goes infinitely further than is commonly thought, though in ordinary usage in life we attribute to it only what we perceive most manifestly and what belongs to us most particularly, for it serves no purpose to go any further. (DM 27)

The key claim here is that we can be said to receive (certain) concepts through the senses "because some external things contain or express more particularly the reasons that determine our soul to certain thoughts." To be precise, Leibniz actually speaks here of receiving knowledge rather than concepts. But a closer look suggests that what he says of

knowledge here goes for ideas, and in particular concepts, as well. First, he commonly associates having knowledge with having ideas or concepts. In particular, he does so in the Discourse (§24; see also the New Essays). In his essay "Meditations on Knowledge, Truth, and Ideas" (GP IV 422-26), he even uses 'knowledge' and 'concepts' (or 'notions') interchangeably. Second, Leibniz indicates elsewhere that his goal in this section of the Discourse is to show "how our soul can be compared to empty tablets and how our notions come from the senses" (GP II 14). Third, shortly after the passage quoted above he concludes the section by pointing out that "it is always false to say that all our notions come from the external senses, for the notions I have of myself and of my thoughts, and consequently of being, substance, action, identity, and of many others, arise from an internal experience" (DM 27). These observations make it plausible to suppose that in this passage 'knowledge' is essentially equivalent to 'concepts', and therefore that Leibniz is here offering an explanation of the sense in which it can truly be said that our concepts come to us from the outside by way of the senses.

The explanation he gives, however, raises more questions than it answers. What does it mean to contain or express reasons more particularly? And more particularly than what? Moreover, how does the fact that external things have this more particular expression justify our talk of concepts coming to us through the senses? What does the one thing have to do with the other? These are important and difficult questions, and they must be answered in order to understand Leibniz's proposal. Yet we will look in vain for answers in Leibniz's treatment of concepts in the Discourse, or in any of his discussions of concepts. Still, the answers can, I believe, be discovered if we look in the right places. In particular, in a number of writings Leibniz addresses himself to two closely related problems, and in each case he appears to employ essentially the same strategy for vindicating ordinary ways of speaking.

But in these contexts he explains the strategy more clearly and in more detail. So by attending to his treatment of these problems, we can get a much better idea of the sense in which he thinks it true to say that some concepts come to us from without. One of the problems concerns interaction between the mind (a simple) and the body (a composite). I will have something to say about Leibniz's account of this sort of interaction below. First, however, I want to consider the other problem, about which Leibniz has much more to say. This is the problem of interaction among simples.

3 Leibnizian Interaction

For the same reason that in metaphysical strictness a mind cannot receive any concepts from the outside, Leibniz holds that monads in general cannot interact in any real sense with one another. Interaction, on his view, requires exchange of either parts or accidents. But in the case of simples there are no parts to exchange; further, the accidents of a thing can never be transferred from one thing to another. Hence monads can never really interact with one another. Yet we ordinarily think that, and speak as if, minds are capable of interacting. We may think, for instance, that the malicious thoughts of one person incited feelings of resentment in another, or that one individual's decision to speak caused another person to hear sounds, and so forth. So once again we have a case where Leibniz's metaphysical conclusions clash with ordinary ways of talking, and as before he claims to have found a way to achieve a kind of rapprochement between the two.

His proposal can be viewed as having two parts. The first is nowhere explained more clearly than in this passage from a 1686 letter to Antoine Arnauld composed shortly after the completion of the Discourse:

> . . . since all created substances are a continual production of the same sovereign being, by the same designs, and expressing the same universe or the same phenomena, they correspond exactly with each other. This leads us to say that one acts upon the other, because one expresses more distinctly than does the other the cause or reason of their changes . . . . It is thus, I believe, that the intercourse between created substances must be understood and not as a real physical influence or dependence. (GP II 57)[6]

In this passage and many others like it Leibniz associates substantial activity with the more distinct expression or representation of certain reasons.[7] To understand what he has in mind, we must first clarify what he means by distinct representation. It would be wrong to give the impression that Leibniz always means the same thing when he speaks of representation or perception as distinct.[8] But the primary idea, and the one he apparently has in mind in the passages of interest to us, is that A represents B distinctly to the extent that A represents the content (or nature) of B explicitly, that is, in a way that makes that content accessible. In contrast, A represents B non-distinctly, or in Leibniz's terminology confusedly, to the extent that A represents the content (or nature) of B only implicitly. We find this conception of distinctness explained clearly in, among other places, Leibniz's Essays of Theodicy (1710), his only published book:

> The representation often suppresses something in the objects when it is imperfect; but it can add nothing: that would render it, not more than

[6] Cf. A VI, iv, 1620; GP I 383; II 69, 71; M 49, 52.
[7] Leibniz consistently uses 'expression' and 'representation' interchangeably: see, e.g., DM 9, 26; GP II 112-121, VII 554; T 403; M 56-65.
[8] Leibniz defines perception as the representation of a multitude in a unity, or in other words, as any representation of a body or material thing in a monad: see, e.g., GP II 311; III 622; VII 529, 566; PNG 2, 4; M 14.

> perfect, but false. Moreover, the suppression is never complete in our perceptions, and there is in the representation, confused as it is, more than we see there. Thus there is reason for supposing that the ideas of heat, cold, colors, etc., also only represent the small movements carried out in the organs, when one senses these qualities, although the multiplicity and smallness of these movements prevents distinct representation. Almost in the same way it happens that we do not discern the blue and the yellow which play their part in the representation as well as in the composition of the green, when the microscope shows that what appears to be green is composed of yellow and blue parts. (T 356)

What makes representations confused or imperfect, we see here, is that they suppress something, in the sense that they represent "more than we see there," just as our ideas of sensible qualities represent various minute motions in our organs which we cannot notice because of their multiplicity and smallness. We sense these qualities, he says, but we are unaware of the small perceptions of motions that compose these sensations, and thus we cannot represent the qualities distinctly. To represent them distinctly would be to represent them in such a way that we could discern the contents of those qualities, something which is beyond us. According to this passage, then, to represent something distinctly is to represent it in such a way that its complexity or content is explicit. For our purposes, the important point is that this "explicit content" conception of distinctness appears to be just the one Leibniz has in mind in his discussions of interaction among substances. For consider the following formulation of his proposal: "the thing with the more distinct expression is judged to act, and the thing with the more confused expression is judged to be passive, since to act is a perfection and to be passive is an imperfection. Again, that thing is thought to be a cause

from the state of which a reason for changes is most easily given…. Causes are assumed, not from a real influx, but from the need to give a reason" (A VI, iv, 1620). Leibniz indicates here that the thing with the more distinct expression (of a certain reason) will be the one that most readily yields that reason. But the thing that yields a reason most readily will do so precisely because it expresses the content of that reason most explicitly. Hence, when Leibniz speaks of one substance having a more distinct expression than another of the reasons for certain changes, he evidently means that the first substance represents the content of those reasons more explicitly, and therefore makes that content more readily available.

We are now prepared to take a stab at Leibniz's claim that the active substance represents more distinctly (that is, in a more explicitly contentful way) the reasons for the changes taking place. I propose to understand him as thinking along the following lines. Leibniz believes the world to be maximally harmonious, so that when a change takes place in one substance, a corresponding change always takes place in every other substance.[9] For instance, if one monad perceives a certain event, all other monads must perceive that same event, though each from its own unique point of view. Further, each substance contains within itself the reasons for the changes it undergoes. This is because in the final analysis a monad's changes are all changes from one perceptual state to another, and these changes are governed by what he calls laws of appetites or laws of final causes.[10] As he explains in the Discourse, "In effect nothing can happen to us except thoughts and perceptions, and all our future thoughts and perceptions are only consequences, though contingent, of our preceding thoughts and perceptions, in such a way that if I were capable of considering distinctly

[9] Cf. DM 9; GP II 95, 112; T 360; PNG 3; M 56-60.
[10] Cf. GP II 113-15; IV 518, 522-23; T 291; PNG 3; M 78.

everything that happens or appears to me at this time, I could see there everything that will ever happen or appear to me" (DM 14). And I could see these future states in my present state, he explains elsewhere, only because "perceptions in the monad arise one from another by the laws of appetites or of the final causes of good and of evil, … just as bodily changes and external phenomena arise from each other by the laws of efficient causes, that is to say, of motions" (PNG 3). Hence, every change that occurs in a monad can at least in principle be fully explained in terms of its past states together with the laws that govern it. However, sometimes this explanation is not accessible to us, either because we are not aware of the relevant past states or because of our inadequate grasp of the relevant laws. Indeed, sometimes an explanation of the changes we are experiencing is more readily found by looking to some other substance. Consider some examples. Suppose I decide to exercise. This decision is a kind of change, and I can find the reason for this change readily enough by looking within myself. In particular, I will discover that it follows from some beliefs that I have, perhaps including my belief that exercise is good for my health, and so on. Or suppose I deduce, and therefore think, that the angles of a triangle must equal two right angles. Again, I can easily discover the reason I am thinking this by considering my own past states, most notably certain thoughts that I previously had and from which the later thought logically follows. Now consider a different type of example. Suppose someone speaks and I begin to perceive the sound. If I want to know why this change has occurred in me, I will likely find nothing in my previous perceptual states that enlightens me. In point of fact this perception does follow from my previous states, but not from ones that I am aware of, or at least not in a way that I am able to grasp. If, however, I turn to the states of things outside of me I will more readily find a reason. For the person who speaks does so for a reason, and if I can discover this reason I will have discovered the reason (or at least a reason) for the

perception I am having. These examples illustrate Leibniz's point that we attribute action to the simple substance with the more explicitly contentful expression of the reason for the changes taking place.

The first part of Leibniz's proposal, then, involves his association of activity with the maximally distinct representation of the reasons for the changes associated with that activity.[11] But what relevance does this association have to Leibniz's attempt to vindicate ordinary ways of talking about interaction among simples? To answer this, we need to introduce the critical second component of his proposal: namely, the idea that in creating this world God chose to accommodate that substance which ends up with the less distinct expression of a thing (specifically, a reason) to the one with the more distinct expression of that thing, so that the latter can be said to have had a kind of "ideal" influence on the former in the mind of God. As Leibniz explains in his essay "New System of the Nature and Communication of Substances" (1695), one of the advantages of his system is that

> Our ordinary ways of speaking can also be easily preserved. For we may say that the substance the state of which explains a change in an intelligible way (so that we may conclude that it is this substance to which the others have in this respect been adapted from the beginning, in accordance with the order of the decrees of God) is the one which, so far as this change goes, we should therefore think of as <u>acting</u> upon the others. (GP IV 486; cf. DM 32; G II 516, III 465; T 66; M 51-52)

If I am reading Leibniz correctly, the substance the state of which explains some change in an intelligible way will be the one with the most distinct representation (perception) of the

[11] For some similar thoughts on activity that may have influenced Leibniz, see Part III of Spinoza's <u>Ethics</u>, especially Props. 1-3.

reason for this change. For to represent a reason more distinctly is to make the content of that reason more explicit, and therefore to provide a deeper, more intelligible explanation. Leibniz's claim here is therefore that with respect to some change in substances God adapts those with less distinct representations of the reason for the changes to the one with the most distinct representation of that reason. In this way it can truly be said that these substances interact, albeit only through God, and that one is active while the others are passive.

We may well wonder why God takes the trouble to adapt substances to one another in this way. It would of course be unacceptable to conclude that he must do so because otherwise our ordinary ways of speaking would be wrong. So Leibniz needs some independent reason for supposing that God takes this action. We receive a hint of what this reason is in §66 of the Theodicy:

> Each [simple substance] is assumed to act on the other in proportion to its perfection, although this be only ideally and in the reasons of things, as God from the beginning has ordered [réglé] one substance to the other according to the perfection or imperfection in each…. It is this that leads us to attribute action to the one and passion to the other. (T 66)

For our purposes the key claim here is that in the beginning God ordered one substance to another, or perhaps modeled the one on the other, in accordance with their respective perfection and imperfections. It is not immediately clear exactly what Leibniz is envisioning here, but I would suggest he has something on the following lines in mind. It is well known that on Leibniz's view God creates or actualizes that collection of essences or possible existents that has the greatest overall amount of perfection; in short, he creates the best of all possible worlds. But in order to qualify as maximally perfect, a world must have among

other things the property of being perfectly harmonious, in the sense that if any substance in that world perceives some object O, then all the other substances in the world must also perceive O, though not necessarily with the same degree of distinctness (cf. M 60). This means that when God selects an essence or "possible" for actualization, he ensure that its perceptions are harmonious in this sense with the perceptions of the other possibles he has selected for actualization. One way to achieve this would be to make adjustments to the possible he is selecting (either by giving it perceptions it did not already have or by changing the perceptions it does have); another would be to make adjustments to the substances he has already decided to create. A third possibility would be to combine these strategies, that is, to make adjustments both to the possible being selected and to the possibles already selected. Leibniz's idea appears to be that God employs something like the third strategy, adapting the perceptions of the substances already selected to those of the one being selected in cases where the latter's perceptions are (rather) distinct, and adapting the perceptions of the latter to those of the former substances in cases where the perceptions of these substances are more distinct. Thus suppose some possible substance P_1 commends itself to God for creation due to its very distinct perception of O_1, distinct perception being a kind of perfection; and suppose God decides for this reason to create P_1. Then, realizing that a perfect world would have more than just one being, God decides to actualize another possible substance, P_2. P_2 commends itself to God, let us say, because it has a rather distinct perception of some object O_2. But in order for this two-substance world to be maximally perfect, P_1 and P_2 must be brought into perceptual harmony. So God must adapt P_1 to ensure that it perceives O_2, and P_2 so that it perceives O_1. Further, suppose that God decides to actualize some possible P_3 because it perceives O_3 rather distinctly and therefore adds considerably to the overall perfection of the world. Considerations of harmony now dictate

that he adjust each of the three possibles to the other. P_3 must be made to represent O_1 and O_2, the first because of P_1, the second because of P_2. Likewise, because P_3 represents O_3, P_1 and P_2 must be made to represent O_3 as well. In this way, God accommodates each created substance to the others, adapting substances with respect to a given perception in order to bring them into harmony with other substances that perceive the same thing but do so more distinctly. From this point of view, then, the reason God accommodates the substance that turns out to have the less distinct (more confused) perception to the one with the more distinct perception has to do with achieving harmony and thereby maximizing perfection. Whether this is precisely what Leibniz had in mind I do not know, but it does give us one way of understanding why God adapts substances to one another in the way Leibniz supposes.

We now have before us a basic sketch of Leibniz's strategy for justifying ordinary ways of talking about interaction among substances. In summary, that strategy has two parts. First, whenever we have two substances, one of which we consider active with respect to certain changes, the other passive, the one we consider active will always be the one with the more distinct representation of the reasons for those changes. Second, in creating the world God adapts the substance with the less distinct perception of the reasons for the changes to the one with the more distinct perception of these reasons. Together, Leibniz thinks, these points vindicate our ordinary ways of speaking, for substances that we intuitively think of as interacting truly do interact. Nothing we say is therefore false, even though the interaction is merely ideal and not real, occurring as it does in the mind of God, i.e., the realm of possibles.

Before returning to our main question, that of how certain concepts can be said to come through the senses, let us take a brief look at what Leibniz says about the second of the two problems to which he takes an approach that parallels the one he employs in

connection with concepts. The first problem was that of interaction among simples. The second concerns interaction between the mind and the body, or between simples and composites. Experience leads us to believe that interaction of this sort does take place. Yet for reasons having to do partly with the simplicity of the mind, and partly with the unintelligibility of such interaction, Leibniz denies that there can be any real interaction between the mind and the body.[12] His position therefore seems to run counter to experience. As we can see in this text, however, Leibniz maintains that the impossibility of real interaction does not entail that no interaction takes place at all:

> We can say with good reason that my will is the cause of this movement of my arm and that a break in the continuity [solutio continui] in the matter of my body is the cause of the pain, for the one expresses distinctly what the other expresses more confusedly, and we should attribute action to the substance with the more distinct expression…. If it is not a physical cause, we can say that it is a final cause, or better yet an exemplar cause, for its idea in God's understanding has contributed to his resolution in regard to this particularity, when the determination regarding the universal sequence of things was being made. (GP II 71; cf. T 66)

Clearly Leibniz is taking the same line here as before, the only real difference being that before the interaction was between simples, and now it is between a simple and a composite, that is, between a mind or soul and its body. The important point to draw from this is that sometimes it is a body or material thing that has the most distinct representation of the relevant reasons, and in such cases we (correctly) attribute action to that body. In the passage just quoted Leibniz illustrates this with an example involving a break in the matter of the

[12] Cf. GP III 340-41, 483-84; IV 497; NE 224.

body. To make the example more concrete, let us suppose that while walking a woman steps on a nail and begins to feel pain. Leibniz claims that in a case such as this there is something that the woman's body represents more distinctly than does her mind. Given what we have seen in the case of interaction among simples, it is reasonable to suppose that the thing variously represented is the reason why these changes have taken place. Indeed, Leibniz writes in the Theodicy: "We can nevertheless give a true and philosophical sense to this mutual dependence that we conceive between the soul and the body. It is that one of these two substances depends on the other ideally, insofar as the reason for what happens in it can be furnished by what is in the other, something that had already happened when God ordered beforehand the harmony that there would be between them" (T 66). Leibniz's thought is therefore that the woman's body provides a better, more contentful, more intelligible explanation of why these changes have occurred; and this is a thought which may strike us as plausible. If the woman merely introspects, she will find no explanation for her experience of pain or for the damage caused to her foot (unless of course she chose to step on the nail); it will seem to have come to her unawares. However, if she studies her foot and considers the circumstances under which these changes to her foot took place, she will readily find an explanation for the changes both to her body (i.e., the damage) and her mind (i.e., the feeling). I will not attempt to give that explanation in detail here, but it will clearly have something to do with the nail penetrating her foot. It is worth noting that earlier in the same letter to Arnauld, Leibniz writes that "we attribute pains to the motions of bodies because we can in this way reach something distinct, and this suffices for us to produce the phenomena or prevent them" (GP II 70). This "something distinct" that we find in the body, he says, allows us to produce or prevent the phenomena. Thus if we understand these phenomena to be the damage to the body and the corresponding pain in the soul, then this

remark fits nicely with the suggestion that what the body represents more distinctly is the reason for the changes taking place. For knowing this reason (roughly that a sharp object penetrated the flesh) is precisely what would allow us to produce or prevent these phenomena.

4 Leibniz's Proposal Revisited

With Leibniz's approaches to interaction among simples and between simples and composites now outlined, we are in a position to see what light they may shed on his attempt to justify the claim that empirical concepts, though strictly speaking born within us, can truly be said to come to us from without. Recall that he makes this attempt in §27 of the Discourse, the goal of which is in part to explain "how our notions come from the senses" (GP II 14). The essence of his rather terse explanation is this: "we can say that we receive knowledge [concepts] from the outside by way of the senses, because some external things contain or express more particularly the reasons that determine our soul to certain thoughts." Clearly the explanation is incomplete, yet given the obvious affinities between this remark and the accounts he gives of interaction involving simples, it would seem that he has something similar in mind. To begin with, it is plausible to suppose that when he speaks of external things expressing certain reasons "more particularly," what he means is that those external things represent these reasons more distinctly, i.e., in a more explicitly contentful way, than does the soul that has the thoughts. Thus, the soul's being determined to these thoughts could be said to be caused in a sense by those external things (cf. NE 74); for if there is an element of divine accommodation here as in the other instantiations of this explanatory strategy, then God would have adapted the soul to those external things, determining it to have those thoughts precisely so as to bring it into harmony with them. Yet

the explanation of the sense in which concepts can be said to come to us from without remains incomplete, since at most this shows only that something external is responsible for the soul's being determined to certain thoughts, and thoughts, as Leibniz himself points out on many occasions, must be sharply distinguished from concepts, given that we can have a concept or idea of something even when we are not thinking of that thing.[13]

To complete the explanation we need to understand how it relates to concepts. If we found in some external thing the reason why a soul is determined to certain thoughts, then on Leibniz's proposal this would show that the external thing in a sense acts upon the soul, inasmuch as it is the external thing's distinct representation of the reason that leads God to accommodate the soul to it by determining the soul to these thoughts. But how does this action of the external thing on the soul vindicate the thought that some of our concepts come to us from the outside by way of the senses? This is not a question Leibniz addresses, but we can plausibly suppose he would answer it in roughly the following way. Though concepts must be distinguished from thoughts, the fact remains that concepts come to exist (qua concepts) through thoughts. Since all concepts are ideas, they are strictly speaking all present in us from the beginning (DM 26). But a concept is an idea that has actually been formed or conceived (DM 27), and the formation or conceiving of a concept evidently involves a thought, since one's conceiving of a thing involves thinking of it. We can therefore say that a mere idea is raised to the level of a concept by a thought. And it is precisely that sort of thought, I would suggest, that Leibniz has in mind when he speaks of the soul being "determined to certain thoughts." His idea, that is, is simply this: if the thought that raises a mere idea to a concept is caused (ideally) to occur in the soul by some external object, then we can say that the object is the reason why that concept has come to

[13] Cf. GP VII 263; DM 26; NE 109, 119.

be (qua concept) in the soul. Hence, there is a sense in which the concept can be said to come to us from without.

This point can be illustrated with an example. Imagine a man who has lived his entire life in a land with no heat, and who knows nothing of such things as energy or molecules or any other things in terms of which we might explain the nature of heat. Suppose one day this man encounters for the first time a source of heat, a fire, let us say, and as a result he comes to have a concept of heat.[14] Now on Leibniz's view this man has always (speaking in metaphysical rigor) had an idea of heat, for all ideas are in us from the beginning. However, it takes this experience of the fire for that idea to be elevated to a concept, that is, for the man to actually form or conceive that idea, and this experience is nothing other than a perception or thought.[15] Hence the man comes to have the concept only because he has the thought of fire. Further, this thought will be a confused one, and consequently external circumstances will express more distinctly why the man was determined to have this thought. If he reflects upon his own internal states, he will look in vain for a reason why he had this thought. He will have been determined to have this thought given his past thoughts and the laws of appetites, but given that the present thought is confused and therefore has a content that is mostly implicit and inaccessible, he will be unable to grasp why that thought should follow from previous ones. However, if he looks to things that exist outside of him, he will readily find an explanation for his experience. In the heat case, for instance, the man will very quickly realize that his feeling of heat correlates with the state of his body being close to the fire. He moves away from the fire, and the feeling goes away; he moves back, and it returns, the intensity of the feeling being inversely proportional to the distance between his

[14] The example is a variation of one Leibniz discusses in A VI, iv, n. 366.
[15] In accordance with Leibniz's usual way of speaking, even sensory perceptions count as thoughts, specifically confused thoughts. See, e.g., GP II 71, IV 574-77; T 66, 124, 289.

body and the fire. Thus, the man will find in facts external to him, in particular facts pertaining to the location of his body relative to the fire, a ready explanation for why he had the thought involving the concept of heat at just that time. External objects can therefore be said to contain or represent more distinctly the reasons for the changes in the man's mental state, and given that in creating the world God adapted the man's mental states in order to bring them into harmony with these objects, we are justified in saying that the man's concept of heat came to him from without through the senses.

Something similar will be the case with all confused concepts. In Leibniz's terminology, concepts are confused, like perceptions, in the sense of having implicit content. We can think of the content of a concept (except in the case of primitive ones) as consisting in the various simpler concepts that constitute it, as the concepts rational and animal enter into the concept man. But such constituents or ingredients of a concept are often not manifest within it, and in such cases Leibniz calls the concept confused. Thus he claims that "sensible ideas appear simple because they are confused and thus do not provide the mind with any way of making discriminations within what they contain." He illustrates this point by noting that the idea of green, though composed of the ideas of blue and yellow, is regarded as simple because we are unaware of any divisions within it (NE 120). That is, what makes an idea confused, according to this passage, is that we are unable to discern its ingredients within it. Similarly, Leibniz remarks that "We now have a complete analysis of green into blue and yellow, and almost all our remaining questions about it concern these ingredients; yet we are quite unable to discern the ideas of blue and yellow within our sensory idea of green, simply because it is a confused idea" (NE 403; cf. GP III 247, IV 550). But notice that when a concept confused in this sense arises, it will arise naturally enough by way of a thought or perception that is also confused in this sense. For instance, if

we come to have a confused concept of green, that concept will on Leibniz's view have as constituents the concepts of yellow and blue, though those ingredients will not be discernable within it. And surely a concept with this character would have arisen through a perception of green which, though itself composed of perceptions of yellow and blue, would not be such as to allow the percipient to discern these ingredient perceptions within it. Hence, the perception that introduces the confused idea of green would itself be confused in precisely the same sense. Further, if the perception has a content that is implicit, then we will not be able to grasp how or why this perception arose from any previous perceptions, since doing so would require being able to grasp its content. We will not, then, find within ourselves any reason why this thought occurred, and so we can justifiably conclude that whenever the concept is confused, the reason why the conceiver was determined to form that concept just when he did will always have to be found in some external thing.

Contrast this with cases in which one comes to have a distinct concept. Leibniz's view appears to be that such concepts always come to us through reasoning.[16] Consider his favorite example of a distinct concept: the assayer's concept of gold. This concept is distinct in the sense that it makes explicit the "marks" or distinguishing features of gold, such as its heaviness, resistance to cupellation, insolubility in aqua fortis, and solubility in aqua regia. (Viewed another way, the concept is distinct in the sense that it makes explicit that the concepts of these marks are among its constituents.)[17] But this concept does not just appear in the assayer's mind out of nowhere. Rather, it arises out of the assayer's running certain tests or experiments: "I am to blame for the confusion in a case where distinct ideas are

[16] At GP VI 502-3, Leibniz discusses how we come to form distinct concepts of substance, being, and truth. Though the accounts he gives are incomplete and somewhat obscure, it is not hard to see that in these cases too the mind must make certain inferences in order to arrive at the concepts.
[17] Cf. NE 255-56; GP VI 499-500.

within my power and it matters that I should have them, for example if I accept spurious gold as genuine because I have not conducted the tests which bring out the marks of real gold" (NE 255-56). But to arrive at the marks of real gold through tests, it will be necessary to reason, to draw conclusions from premises. In particular, the assayer will infer from some premises that gold is that material which has such and such properties, and it will be his perception or thought of this truth that introduces the distinct concept. Further, the same thing will hold for any thought that gives rise to a distinct concept: namely, it will be a perception of a truth of the form '<u>X</u> is just that sort of thing with properties <u>Y</u>, <u>Z</u>, etc.', and this truth will have been inferred from other truths perceived by the person. Consequently, when a person first forms a distinct concept, he will always be able to find within himself the reason why he formed that concept (i.e., the reason why he had that thought). So whereas confused concepts always arise under circumstances that can only be explained in terms of external things, distinct concepts are always introduced through thoughts the occurrence of which can be given an internal explanation. Combine this with the idea that when one thing explains some changes distinctly, God adapts other things to bring them into harmony with it, and the result is that all (and only) confused concepts can truly be said to have an external source, even though they are also innate.

5 An Apparent Tension

I hope to have made clear in the preceding sections in what sense Leibniz thinks it true to say that some of our concepts come to us from the outside through the senses. In the remainder of the paper, I want to consider two difficulties for the account I have ascribed to Leibniz. The first arises from his claim that even our thoughts involving distinct ideas, including those of necessary truths, must be occasioned by the senses. He claims in the <u>New</u>

Essays that though the mind draws necessary truths from its own depths, "the senses are necessary to give the mind the occasion and attention for this, and to direct it towards certain ones rather than others" (NE 80; cf. NE 50). What he has in mind here can be illustrated with an example from Plato to which Leibniz himself adverts at NE 77. In the Meno (82b-85d), Socrates leads a slave boy to discover a certain geometrical truth just by drawing diagrams in the sand and asking certain questions. According to Socrates, this shows that these truths were innate to the boy, because he discovered them without them having been communicated to him. Yet the boy was only able to summon them from his depths because of Socrates' questions and diagrams; had not those questions been asked and those diagrams constructed, the boy may have never brought forth these truths. Accordingly, the boy's sensory experience (specifically his perceptions of certain sounds and shapes) gave him the occasion and attention for thinking of these truths, and guided him to these truths rather than others. This appears to be the sort of thing Leibniz has in mind when he claims that thinking of necessary truths always requires some sensory experience. But notice that it is not just our perception and thought of such truths but also our distinct conceivings that must be occasioned, if not guided, by the senses. For on Leibniz's view "the soul inherently contains the sources of various notions and doctrines, which external objects merely rouse up on suitable occasions" (NE 48); further, "there are ideas and principles that do not reach us through the senses, and which we find in ourselves without having formed them, though the senses give us occasion to notice them" (NE 74). Now the problem here is simply this: if the thoughts that raise distinct ideas to the level of concepts are themselves occasioned by sensory experience, it would seem that the things sensed, which are external, would provide a reason why those thoughts occurred. But if so, then on the account I have imputed to Leibniz even our distinct ideas would have to be said to come to us from without through

the senses; and that is a conclusion Leibniz would surely reject. Hence either I have gotten his view wrong, in which case it is unclear what account he should be viewed as offering, or else his overall position on the origin of concepts is incoherent.

In considering this difficulty we must take care not to confuse the role the senses play in occasioning our thoughts with the role they play in providing the materials for thought. According to Leibniz, even our most abstract thoughts such as those pertaining to mathematics and metaphysics require certain "characters" that must be provided by the senses: "we cannot have abstract thoughts that have no need of something sensible, even if only characters such as sounds and the shapes of letters, though there is no necessary connection between such arbitrary characters and such thoughts" (NE 77).[18] Just as we cannot write or communicate a truth such as '2 + 3 = 5' without the use of physical symbols, we cannot on Leibniz's view even think such a truth without doing so in terms of some kind of analogous mental symbols (perhaps mental images of certain shapes, sounds, etc.) provided by the senses. In fact, since our thoughts involving distinct ideas and concepts are abstract, it follows that "we could never consider the relevant ideas if we had never seen or touched anything" (NE 77). Distinct conception therefore presupposes that the senses have supplied us with suitable materials for thought (cf. NE 212). However in addition to providing the mind with symbols, the senses must occasion our distinct thoughts, and it is this occasioning rather than the providing of symbols that gives rise to the tension under consideration.

I called attention above to Leibniz's remark that when the mind thinks of necessary truths, "the senses are necessary to give the mind the occasion and attention for this, and to direct it towards certain ones rather than others" (NE 80). However, there is reason to

[18] See also GP III 466; IV 559, 563, 574; VI 514, 626.

suspect that in saying this Leibniz may have misrepresented his considered view. For he seems to suggest precisely the opposite just three pages earlier. After discussing the aforementioned example from the Meno, Leibniz concludes: "One can therefore construct these [mathematical] sciences in one's study and even with one's eyes closed, without apprehending by sight or even by touch the necessary truths; although it is true that we could never consider the relevant ideas if we had never seen or touched anything" (NE 77). He admits, then, that we cannot discover necessary truths unless the senses have first supplied us with suitable symbols, but beyond this he recognizes here no essential role for the senses. In fact, his point in this text appears to be precisely that the senses are not needed in order to occasion or guide our thoughts of mathematical truths. But if that were so, then in at least some cases our distinct conceivings would not be occasioned by the senses and would therefore not be best explained by appeal to external things; in those cases, there would be no tension. Still, the fact remains that on Leibniz's view the senses nearly always occasion our distinct thoughts, including those thoughts which give rise to distinct concepts. So given that he wants all distinct concepts to be innate, the tension remains.

To my knowledge Leibniz never addresses this difficulty. In lieu of explaining how he did deal with it, then, I would like to suggest briefly how I think he would have dealt with it. On his account our perceptions of external things often occasion our distinct conceivings. For this reason it will often be possible to explain why we formed a certain concept when we did by appeal to external things. However, it does not follow that those external things provide the most distinct, most intelligible explanation of our conceiving. Consider again the slave boy from the Meno. Socrates leads him, through drawing and questioning, to discover that the side of a square with area twice that of another will be equal to the length of the diagonal of the latter square. Now as I have pointed out, sensory experience was necessary in

order for the boy to discover this truth, and therefore the various sounds and shapes produced by Socrates provide a partial explanation for why the boy thought just that truth at just that time. But Socrates did not simply communicate this truth to the boy; rather the boy inferred it on his own, as it were, from various other truths, some of which the philosopher was responsible for calling to mind, and which were themselves inferred from others, and so on. Thus, Leibniz could maintain with some plausibility that things internal to the boy provide a fuller, more distinct explanation for why he thought that truth just then. Perhaps external circumstances explain why the boy happened to be thinking of certain truths (premises), and why he thought to draw this particular conclusion from them rather than another. But the boy's own states provide us with a more explicitly contentful explanation of the reason why he drew that conclusion, inasmuch as they give the reason why he thought that conclusion to be true. Part of the explanation is therefore to be found outside, but a greater part is to be found inside, so that the thought is attributed to him rather than to any external thing. In the same way, Leibniz could maintain that whenever the senses occasion the forming of some distinct concept, the mind itself will express more distinctly than any external thing the reason why that concept was formed, so that all such concepts rank as innate.

6 The Trouble with Divine Accommodation

I now turn to what I take to be the fundamental difficulty raised by Leibniz's account of the sensory origin of confused concepts. It concerns the second part of the proposal, the idea that God adjusts each created substance so as to bring it into harmony with the others. Leibniz places great weight on this part of the proposal, and it seems essential to his explanatory strategy. However, I want to suggest that his talk of divine accommodation,

interpreted literally, squarely conflicts with certain of his own deeply held views and principles. In the first place, Leibniz maintains that no simple substance can cause internal changes in another. For as we have seen, such changes would have to result from a communication of either accidents or parts, which cannot take place. He therefore concludes that simples cannot interact because such interaction would be unintelligible. But consider the supposition that God effects internal changes in simple substances when he creates them. This sort of action is no more intelligible than the real action of one created simple on another. Indeed, since God is himself simple in the same sense as are created monads, his acting on them would constitute merely a special case of interaction among simples, which Leibniz considers unintelligible. Therefore, God's adapting one substance to another should be just as unacceptable in Leibniz's philosophy as one created substance exerting a real influence on another. (Of course, there is no special difficulty in supposing that God merely creates or actualizes some possible substance, inasmuch as bringing something into existence does not involve making any changes to its internal makeup. But when Leibniz speaks of God ordering substances to one another, he seems to be envisioning precisely such internal changes, and that he should find unintelligible.)

Further, the idea that in the beginning God literally orders substances to one another makes no sense in light of Leibniz's conception of the creation of the world. For either God orders certain possibles to one another prior to creation, or he orders certain actual substances to one another after creation. If he somehow adapts one possible to accord with another, then what he actually does is make that possible identical in every respect to some other possible already existing in his understanding. Given Leibniz's principle of the identity of indiscernables, however, these possibles would in fact be identical. So in adapting the one possible, God would just be changing it into another possible, something that seems to have

no point. In contrast, if God actualizes some possibles and then adapts the created substances to one another, this has the effect of making it the case that a different series of possibles was actualized. But what reason could God have for creating the one series of substances and then adjusting them to one another, when instead he could simply create those substances that are already by their nature in harmony with one another? It seems that the very idea of divine accommodation, understood literally, is one that Leibniz should by his own lights find unintelligible and pointless.

The significance of this difficulty for Leibniz's account of the origin of concepts should be clear. The point of that account, the reader will recall, was to establish a sense in which it is true to say that some of our concepts come to us from the outside. It purports to accomplish this by supposing that when external things represent certain reasons very distinctly, their doing so leads God to adjust the mind so that it is determined to form some concept. But notice that the divine accommodation element is essential to the success of this explanation. If God does not really adapt the mind to bring it into conformity with external things, then there is no real sense in which those things are the source of any of our concepts. They may still represent rather distinctly the reason why the mind forms a certain concept when it does, but unless there is divine accommodation, they will not thereby constitute the reason why the concept is formed. This is why we cannot rescue Leibniz's account simply by supposing that his talk of divine accommodation is rhetorical. It seems that for the account to work, the external things must truly influence the mind, at least ideally. But if God does not truly adapt the mind to these things, then there is no such influence and the account fails.

For the same reason, a metaphorical interpretation of divine accommodation seems unhelpful. One might suppose that when Leibniz speaks of God ordering one substance to

another, he means nothing more than that God selects a given possible for actualization because it happens by its nature to be such as to accord with certain other possibles. Accordingly, God does not properly speaking adapt actual substances; rather, he actualizes adapted substances. The effect, however, is the same: substances are created which are in harmony with one another, so that it is as if they had been adapted by God. Perhaps Leibniz's talk of divine accommodation amounts to nothing more than this. However, if God does not literally adapt the one substance to the other, then there seems to be no real sense in which the latter substance acts upon the former, and thus no real sense in which our confused concepts can justifiably be attributed to any external thing. A metaphorical reading of Leibniz therefore offers no help in rescuing him from this difficulty: it appears to be fatal.

7 Conclusion

In the preceding I have tried to make clear how Leibniz proposes to reconcile his philosophical system with the widely accepted opinion that some concepts come to us from the outside by way of the senses. If my criticisms of the idea of divine accommodation are on target, however, then this proposal must be judged to fail; for an essential component of it conflicts in multiple ways with views and principles to which he is deeply committed. Perhaps all is not lost, though. Leibniz himself likens his situation to that of a Copernican who speaks of the sun rising and setting. In speaking this way, of course, the Copernican says something that is literally false; yet he is nonetheless justified in speaking that way because doing so is both convenient and consistent with appearances. In like fashion, perhaps Leibniz could give a plausible practical justification for continuing to speak as if confused concepts have an external source. Perhaps our talk of confused concepts coming from without could be excused on the grounds that it is not only convenient but consistent

with appearances, the emergence of such concepts corresponding to certain changes in external things that provide us with the reason why those concepts arose when they did (cf. T 65). In that case, Leibniz would at least be able to satisfy his desideratum of preserving ordinary ways of speaking (cf. GP IV 486). However, even if such talk of concepts coming from without could be practically justified, we must remember that as with the Copernican's talk of the sun rising and setting, it must in the final analysis be judged false. Despite all his protestations to the contrary, then, the only position Leibniz can consistently hold on the origin of concepts is the rather radical one that all of them are without qualification innate.