

Descartes on the Innateness of All Ideas

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I Introduction

Though Descartes is traditionally associated with the moderately nativist doctrine that our ideas of God, of eternal truths, and of true and immutable natures are innate, on two occasions he explicitly argued that *all* of our ideas, even sensory ideas, are innate in the mind (AT 8B 358, AT 3 418; CSM 1 304, CSMK 187).¹ One reason it is surprising to find Descartes endorsing universal innateness is that such a view seems to leave no role for bodies in the production of our ideas of them. For how could bodies be the origin of our sensory ideas if, as Descartes says in a 1641 letter to Mersenne, these ideas 'must have been in us before' the stimulation of the sense organs (AT 3 418; CSMK187)? This question has lately received considerable attention in the secondary literature, with the large majority of commentators arguing that, given a sufficiently nuanced account of what it means for sensory ideas to be innate, the universal innateness thesis does not preclude a significant causal role for

1 'AT' refers to Rene Descartes, *Oeuvres de Descartes*, 11 Volumes, Charles Adam and Paul Tannery, eds. (Paris: J. Vrin 1996); 'CSM' refers to Rene Descartes, *The Philosophical Writings of Descartes*, 2 Volumes, John Cottingham, Robert Stoothoff, and Dugald Murdoch, eds. (Cambridge: Cambridge University Press 1985); 'CSMK' refers to Rene Descartes, *The Philosophical Writings of Descartes: The Correspondence*, John Cottingham, Robert Stoothoff, Dugald Murdoch, and Anthony Kenny, eds. (Cambridge: Cambridge University Press 1991).

bodies in sensation.² The minority position, which is that in expounding the hyper-nativist doctrine Descartes intends to imply that bodies are not the efficient causes of our ideas, has had only a few proponents, most notably Janet Broughton.³ In this paper I aim to show that in spite of its

2 For instance, see Anthony Kenny, *Descartes: A Study of His Philosophy* (New York: Random House 1968), 104-5; Robert McRae, 'Innate Ideas,' in *Cartesian Studies*, R.J. Butler, ed. (Oxford: Basil Blackwell 1972), 50-3; Robert Adams, 'Where Do Our Ideas Come From — Descartes vs. Locke,' *Innate Ideas*, Stephen P. Stich, ed. (Berkeley: University of California Press 1975), 76-8; Desmond Clarke, *Descartes' Philosophy of Science* (Manchester: Manchester University Press 1982), 50-2; John Cottingham, *Descartes* (Oxford: Blackwell 1986), 147-8; Bernard Williams, *Descartes: The Project of Pure Inquiry* (London: Penguin 1987), 133-5; Nicholas Jolley, *The Light of the Soul: Theories of Ideas in Leibniz, Malebranche, and Descartes* (Oxford: Oxford University Press 1990), 36-42; Margaret Wilson, 'Descartes on the Origin of Sensation,' *Philosophical Topics* 19 (1991) 293-323, at 302-4; Daniel Garber, 'Descartes and Occasionalism,' in *Causation in Early Modern Philosophy*, Steven Nadler, ed. (University Park: Penn State University Press 1993), 22-3 and *Descartes' Metaphysical Physics* (Chicago: University of Chicago Press 1992), 365-6, n. 57; Steven Nadler, 'Descartes and Occasional Causation,' *British Journal for the History of Philosophy* 2 (1994) 35-54, at 47-51 and 'The Occasionalism of Louis de la Forge,' in *Causation in Early Modern Philosophy*, Steven Nadler, ed. (University Park: Penn State University Press 1993), 66-8; Stephen Gaukroger, *Descartes: An Intellectual Biography* (Oxford: Oxford University Press 1995), 408-10; Tad Schmaltz, 'Descartes on Innate Ideas, Sensation and Scholasticism: The Response to Regius,' in *Oxford Studies in the History of Philosophy, Vol. II: Studies in Seventeenth-Century European Philosophy*, M.A. Stewart, ed. (Oxford: Oxford University Press 1997), 34-44 and 'Sensation, Occasionalism and Descartes' Causal Principles,' in *Minds, Ideas and Objects: Essays on the Theory of Representation in Modern Philosophy*, Philip Cummins and G. Zoeller, eds. (Atascadero, CA: Ridgeview 1991), 42-9; Kenneth Clatterbaugh, *The Causation Debate in Early Modern Philosophy: 1637-1739* (New York: Routledge 1999), 38; Marleen Rozemond, 'Descartes on Mind-Body Interaction: What's the Problem?' *Journal of the History of Philosophy* 37 (1999) 435-67, at 449-62; David Scott, 'Occasionalism and Occasional Causation in Descartes's Philosophy,' *Journal of the History of Philosophy* 38 (2000) 503-28, at 516-20; Nancy Kendrick, 'Why Cartesian Ideas of Sense are Innate,' *The Southern Journal of Philosophy* 37 (2000) 413-28, at 414.

3 See Janet Broughton, 'Adequate Causes and Natural Change in Descartes' Philosophy,' in *Human Nature and Natural Knowledge*, Alan Donagan, Anthony Petrovich, and Michael Wedin, eds. (Dordrecht: D. Reidel 1986), 116-19. Kenneth Winkler is another author who seems inclined to the non-causal interpretation, though his position is more guarded than Broughton. Winkler writes that Descartes 'is uneasy about the further claim that they [bodies] play a causal role, not because he wants to deny it, but because he is not prepared to specify the sense in which it is true' ('Grades of Cartesian Innateness,' *British Journal for the History of Philosophy* 1 [1993] 23-44, at 32). John Yolton, in *Perceptual Acquaintance from Descartes to Reid* (Minneapolis: University of Minnesota Press 1984), 30 and *Perception and Reality: A History from Descartes to Kant* (Ithaca: Cornell University Press 1996), 193-209; and Daise Radner, 'Is There a Problem of Cartesian Interaction?' *Journal of the History of*

recent unpopularity, and notwithstanding its revisionist implications for our understanding of Cartesian mind-body interaction, the non-causal interpretation remains the more plausible. To this end, I will first argue that the most detailed causal readings are inadequate in a variety of ways. Next, I will provide an updated defense of the non-causal approach, improving on earlier versions and answering recent objections. We will see that the issue turns as much on Descartes's notion of causation as on his notion of innateness. Finally, I will address a fundamental difficulty with my interpretation. Critics of the non-causal reading have argued that if bodies are not the causes of our sensory ideas then our knowledge of the external world is completely undermined. Against this objection, I attempt to show that Descartes himself came to recognize that his proof of the existence of the external world does not require the assumption that our sensory ideas come from bodies, and that we can be confident that our sensory ideas present us with reliable information about a world of material things even if the source of those ideas is the mind itself.

II Causal Interpretations of the Universal Innateness Thesis

Descartes's most detailed defense of the universal innateness thesis is given in the 1648 *Comments on a Certain Broadsheet*, his point-by-point response to a list of criticisms published the previous year by his erstwhile disciple, Regius. One of the assertions in Regius's pamphlet is that since all of the common notions, along with the idea of God, 'have their origin in the observation of things or in verbal instruction' it follows that the mind has no need for any innate ideas (AT 8B 345; CSM 1 295). Descartes was familiar with this sort of empiricist objection to innatism since he had faced versions of it in both Hobbes's and Gassendi's published objections to the *Meditations*.⁴ Considering this familiarity, his reply to Regius in the *Comments* is surprisingly strong. In order to answer Regius, it would have been sufficient simply to enlist familiar arguments leading to a modest brand of innatism about the idea of God and certain

Philosophy 23 (1985) 227-31 also argue, though on the basis of very different considerations from one another, that Descartes cannot regard bodies as simply the efficient causes of ideas. But neither of them addresses in any detail the question of universal innateness. See also S.V. Keeling, *Descartes*, 2nd ed. (London: Oxford University Press 1968), ch. 6.

4 Hobbes: AT 7 186-8; CSM 2 130-32; Gassendi: AT 7 279-88; CSM 2 195-201

common notions, as he had done in his responses to Hobbes and Gassendi.⁵ Instead, Descartes offers a general argument for the innateness of all ideas:

If we bear well in mind the scope of our senses, and what it is exactly that reaches our faculty of thinking by way of them, we must admit that in no case are the ideas of them presented to us by the senses just as we form them in our thinking. So much so that there is nothing in our ideas which is not innate to the mind or the faculty of thinking, with the sole exception of those circumstances which relate to experience such as the fact that we judge that this or that idea which we have immediately before our mind refers to a certain thing situated outside us. We make such a judgment not because these things transmit ideas to our minds through the sense organs, but because they transmit something which, at exactly that moment, gives the mind occasion to form these ideas by means of the faculty innate to it. Nothing reaches our mind from external objects through the sense organs except certain corporeal motions, as our author himself admits in article nineteen, in accordance with my own principles. But neither the motions themselves nor the figures arising from them are conceived by us exactly as they occur in the sense organs, as I have explained at length in my *Optics*. Hence it follows that the very ideas of the motions themselves and of the figures are innate (*innatas*) in us. The ideas of pain, colors, sounds and the like must be all the more innate, if on the occasion of certain corporeal motions, our mind is to be capable of representing them to itself, for there is no similarity (*similitudinem*) between these ideas and the corporeal motions. (AT 8B 358-9; CSM 1 304)

A shorter version of the same argument is given in an earlier letter to Mersenne: 'Altogether, I think that all those [ideas] which involve no affirmation or negation are innate in us; for the sense organs do not bring us anything which is like the idea which arises in us on the occasion of their stimulus, and so this idea must have been in us before' (AT 3 418; CSMK 187).⁶

5 See the arguments for the innateness of the idea of God in the *Mediations* (AT 7 51; CSM 2 35), and in the replies to Hobbes (AT 7 188-9; CSM 2 132) and Gassendi (AT 7 364-5; CSM 251-2), as well as the argument for the innateness of the idea of triangularity in the replies to Gassendi (AT 7 381-2; CSM 2 262).

6 Notice that in both of these arguments Descartes exempts certain kinds of judgments (affirmations and negations about the referents of our ideas) from the scope of the universal innateness thesis. In the *Comments* he distinguishes between 'innate,' 'adventitious,' and 'made-up' ideas as follows: 'I did however observe that there were certain thoughts which neither came to me from external things nor were determined by my will, but came solely from the power of thinking within me; so I applied the term "innate" to the ideas or notions which are the forms of these thoughts in order to distinguish them from others, which I called "adventitious" or "made-up"' (AT 8B 358; CSM 1 303). Judgments are not adventitious since they do not come from external things, and they are not innate since they depend on the will. Hence in so far as an idea involves a judgment, such as my belief that my

At first glance, these arguments might seem to give the mind full responsibility for sensory ideas, with bodies serving as merely 'the occasion' for the mind to 'form' and 'represent to itself' innate ideas at just the right moment. Yet most recent commentators have held that Descartes's view is that sensory ideas are innate in only a weak sense that is compatible with those ideas being externally caused. For example, Anthony Kenny attributes to Descartes a 'capacity' definition of innateness: 'No matter what X may be, the idea of X is innate in the sense that the capacity to think of X, imagine X, feel X, experience X, is inborn in us and not given to us by the stimulus that on a particular occasion makes us think of or experience X' (104). On Kenny's interpretation, external stimuli are fully causally responsible for our particular sensory ideas, but they are not causally responsible for our being capable of having those ideas. This is all Descartes intends when he says in the *Comments* and elsewhere that all of our ideas are innate.⁷

This modest conception of innateness was famously disparaged by Locke as saying 'nothing different from those who deny innate principles'⁸ since it effectively collapses the distinction between innate and adventitious ideas. After all, who can deny that the mind naturally has a capacity for its ideas, including those that originate in external things? Innateness in this weak sense is certainly compatible with Regius's brand

sensory ideas refer to external things, it may be considered made-up. For criticism of this sort of account, see Scott (524).

7 This interpretation is also favored by Gaukroger (408-10). Similarly, McRae proposes that in the *Comments* our sensory ideas are innate only because they depend on an innate faculty of judgment: 'It is the faculty of judging which is innate to the mind, and if we speak of the conceptions which we form through judgment as innate, it is only because they are formed through that innate faculty, not produced by what comes through the senses' (53). As Murray Miles, *Insight and Inference: Descartes's Founding Principle and Modern Philosophy* (Toronto: University of Toronto Press 1999), 503, n. 4, notes, it is hard to reconcile McRae's conception of innateness with Descartes's suggestion in both the *Comments* and the letter to Mersenne that ideas based on judgments are *not* innate: 'there is nothing in our ideas which is not innate to the mind or the faculty of thinking, with the sole exception of those circumstances which relate to experience such as the fact that we judge that this or that idea which we have immediately before our mind refers to a certain thing situated outside us' (AT 8B 358-9; CSM 1 304); 'Altogether, I think that all those [ideas] which involve no affirmation or negation are innate in us' (AT 3 418; CSMK 187). Furthermore, although McRae argues that for Descartes our ideas of the position, distance, size, and shape of bodies involve judgment, Descartes says in the *Comments* that even our ideas of pains, colors, and sounds are innate.

8 John Locke, *Essay Concerning Human Understanding*, Peter H. Nidditch, ed. (Oxford: Oxford University Press 1975), 50

of empiricism, which holds simply that ‘the mind has no need of ideas, or notions, or axioms, which are innate: its faculty of thinking is all it needs for performing its own acts’ (AT 8B 345; CSM 1 295). Indeed, Descartes himself observes that his disagreement with Regius is purely terminological if all that is at stake is the mind’s capacities:

When he says that the mind has no need of ideas, or notions, or axioms, which are innate, while admitting that the mind has the power of thinking (presumably natural or innate), he is plainly saying the same thing as me, though verbally denying it. I have never written nor taken the view that the mind requires innate ideas which are something distinct from its faculty of thinking. (AT 8B 357; CSM 1 303)⁹

But although Descartes here grants that the mind does not require innate ideas that are ‘distinct’ from the faculty of thought, he hastens to block any suggestion that innate ideas could come from without. Thus, he explains that the term ‘innate’ properly applies only to ideas that arise entirely from the mind and not from external things:

I did, however, observe that there were certain thoughts within me which neither came to me from external objects nor were determined by my will, but which came solely from the power of thinking within me; so I applied the term “innate” to the ideas or notions which are the forms of these thoughts in order to distinguish them from others which I called “adventitious” or “made up.” (AT 8B 358; CSM 1 303)

So the dispute with the empiricist Regius is a substantive one after all. Descartes does not think that an innate idea could have its origin in observation, much less that our faculty of thought must rely on the sense organs. Thus, he ridicules Regius for moving from the plausible assumption that the mind needs nothing distinct from its own faculty of thinking to the ‘extraordinary’ conclusion that it ‘could never perceive or think anything except what it receives ... from the senses’ (AT 8B 358; CSM 1 304). Contrary to Kenny’s capacity definition of innateness, Descartes would apply the term ‘adventitious’ to any idea that derives from an external source and reserve ‘innate’ for those which come solely from the power of thought.¹⁰

9 See also AT 8B 366, AT 3 430, AT 8B 166, AT 4 187-188; CSM 1 309, CSMK 194, CSMK 222, CSMK 248.

10 Thus he explains to Voetius: ‘But notice that all those things whose knowledge is said to be naturally implanted in us are not for that reason expressly known by us; they are merely such that we come to know them by the power of our own intelligence, without any sensory experience’ (AT 8B 166; CSMK 222). Clarke distinguishes between two senses of innateness in Descartes (50-2). *Innate*₁ ideas are

In any event, the structure of the argument for universal innateness strongly suggests that something more than the mere capacity for having sensory ideas is at stake. For according to Descartes, the reason our ideas must be innate is because the contents of those ideas are all so dissimilar from their putative external causes. But it is hard to see how this dissimilarity between my ideas and the corporeal motions of the sense organs could bear on the question whether the bare capacity to have those ideas is inborn. Even if my capacity to have sensory ideas was somehow acquired, along with the ideas, from without, so that my ideas were not innate in even Kenny's weak sense, that would not seem to give me any special reason to assume that what I find in my ideas is similar to external things. On the other hand, if my ideas are nothing like external things then I have at least *prima facie* reason to doubt whether the contents of those ideas came from external things.

A more promising way of preserving a causal role for bodies in sensation is to hold that although the *contents* of sensory ideas is somehow innate in the mind, the *occurrence* of the ideas depends on the direct influence on the mind of certain corporeal motions. When Descartes says in the *Comments* that sensory ideas are not 'transmitted' into the mind

'irreducible to the type of reality which triggers them in the mind'; *Innate*₂ ideas are 'independent of experience in so far as the mind can come to have these ideas by reflection on its own intellectual capacities.' Clarke holds that when Descartes says in the *Comments* that all sensory ideas are innate he means *innate*₁; they are triggered by corporeal motions though their contents are not reducible to such motions. I criticize this 'triggering model' of the universal innateness thesis at length below. My view is that Descartes's position in the *Comments* is that all ideas are innate in a sense closer to *innate*₂ since they all 'come solely from the power of thinking within me.' But, unlike Clarke, Descartes does not seem to require (at least not in the *Comments*) that in order for an idea to be innate in this sense it must be the result of reflection. Rather, Descartes says simply that the mind 'forms' its ideas on the occasion of sensory stimulation. Miles (ch. 18) develops a detailed 'reflexive-dispositional' theory of innateness, which attempts to preserve the best features of McRae's and Clarke's interpretations, and also illuminate Descartes's theory of the mind as a whole. But Miles does not attempt to apply this theory to the *Comments* thesis of universal innateness. Rather, he thinks that the universal innateness thesis expresses a 'rather misleading' conception of innateness (Miles, 293). For another useful discussion of the various 'grades' of innateness in Descartes's writings, see Winkler. Winkler ties Descartes's conception of innateness closely to his conception of a person's 'nature,' but admits that this conception does not seem to be at work in the arguments for universal innateness (31). Finally, Deborah Boyle, 'Descartes on Innate Ideas,' *The Modern Schoolman* 78 (2000) 35-51, attempts to account for Descartes's disparate uses of the term 'innate idea' in terms of his different senses of 'idea,' though again she does not discuss the universal innateness thesis in any detail.

from external things, his target seems to be the scholastic model of sensation whereby a resembling image or 'species' of the sensed object is transported into the intellectual soul via the air, the sense organs, and the brain. For he refers us back to his *Optics* where the scholastic model is subjected to a sustained attack.¹¹ But perhaps bodies can act as the triggers, if not the transmitters, of ideas. Thus, Bernard Williams holds that sensory ideas 'are "triggered off" by external bodily causes, but their content, and hence their occurrence, can never be adequately explained in terms of that causation: the innate potentialities of the mind make an essential contribution' (133). In developing a similar interpretation, Daniel Garber presents a useful analogy. A select keystroke will bring up a colorful screen-saver image on my computer monitor. Of course, the content of the image does not 'come from' the keystrokes; it is already fully encoded in the memory of my computer. 'But,' says Garber, 'one probably would not want to infer from that that the keystrokes are not in some sense the direct cause of the picture appearing, that the keystrokes did not really elicit the picture' ('Descartes and Occasionalism,' 23). Similarly, Garber concludes, Descartes's main point in the *Comments* is simply that the contents of sensory ideas cannot come from the external motions that cause them.¹²

In order to evaluate this sort of interpretation, I will examine the most detailed triggering model in the literature, the one that has recently been presented by Marleen Rozemond. According to Rozemond, the treatment of sensation in the *Comments* is intended to solve a certain 'Dissimilarity Problem,' which is that there is an inexplicable and apparently arbitrary difference between the contents of our sensory ideas and the states of the brain which seem to cause them. As Rozemond sees it, the universal innateness thesis is Descartes's solution to the dissimilarity problem: 'the mind itself is their [sensory ideas'] source in the sense of being the source of their representational content' (457). This leads to the question that interests us: what role does universal innateness leave for brain states in the production of ideas? Rozemond's answer is that brain states are 'triggering causes' which explain not the contents of ideas but the time of their occurrence: 'So the role of the body is simply to explain the *occurrence* of particular sensory ideas at a particular time. It explains why the mind's disposition to form a particular type of sensory idea is activated at one time rather than another' (458).

11 See AT 6 85, 112-14, and 130-1; CSM 1 153-4 and 165-7.

12 See also Adams, 76-8; Clarke (50), Cottingham (147-8), Schmalz ('Descartes on Innate Ideas,' 40), and Scott (523-4).

But it is unclear why Descartes would need causal triggering in order to explain why sensory ideas occur when they do. This can be adequately explained simply by the fact that God has established a nomological correlation between brain states and the ideas that arise on their occasion. Thus, Descartes argues in the Sixth Meditation and elsewhere that the goodness of God alone ensures that there will be a regular association between brain states and sensations: 'So it is reasonable that this motion in the brain should always indicate to the mind a pain in the foot rather than in any other part of the body' (AT 7 89; CSM 2 61).¹³ And positing a causal connection between brain states and ideas, in addition to the regular association, would add nothing to this explanation since, as Descartes points out, God could have just as well made us such that 'this particular motion in the brain indicated something else to the mind' (AT 7 88; CSM 2 60). So if it seems arbitrary that a given brain state is regularly associated with the occurrence of a given idea, this cannot be made to seem less arbitrary by a triggering relation given that the triggering relation will depend on the will of God no less than the regular association. Moreover, if one insists that only a cause (other than God) would explain why the mind should produce a given idea at a given time, we might just as well say that the triggering cause is the mind itself.¹⁴

This suggests a further question. Why doesn't the Dissimilarity Problem arise just as seriously for bodies-as-triggers as it does for bodies-as-sources-of-content? In response, Rozemond says, first, that this question is based on a misunderstanding of the problem:

It is not the case that the problem arises because Descartes assumes that cause and effect must resemble each other. Rather, it arises because, as a result of this particular type of dissimilarity of brain state and idea (with respect to its representational content), their connection seems arbitrary and the brain state itself can't account for the idea. (461)

13 Descartes's account of the regular or nomological association between brain states and mental states is discussed in greater detail below.

14 In support of the triggering approach, Rozemond points out that there are other works in which Descartes says explicitly that brain states cause ideas (459). But the fact that Descartes elsewhere speaks of the mind as the cause of ideas might be just as well be taken as evidence that he would surely have said the same thing in the *Comments* if that was what he intended. In any case, these other passages in themselves count as much (or as little) against the view that the *contents* of ideas are not caused by bodies, which is Rozemond's interpretation of the *Comments*, as that their *occurrence* is not triggered by bodies.

But if what makes dissimilarity a serious problem is that it suggests arbitrariness, then the question has gone unanswered. For if the connection between a certain corporeal motion and the content of the idea it triggers seems arbitrary, then surely it should seem at least as arbitrary that the same body should trigger the mind to produce the same idea with the same content *at this particular time*. So we have no less reason to be puzzled about how bodies could trigger the occurrence of ideas than about how they could produce the contents of ideas.

Rozemond's other response is that the Dissimilarity Problem does not arise for the triggering cause because the brain state does not explain 'all by itself' the causal power it triggers:

The idea of a triggering cause is that such a cause does not account for an effect all by itself but instead sets in motion a preexisting causal mechanism. A triggering cause also does not by itself explain the activity of that mechanism because the mechanism itself contributes causal power: that's the point of speaking of a triggering cause. And for this reason the Similarity Problem does not arise anew. (461)

It is not clear why the fact that the triggering cause is not a total cause makes the Dissimilarity Problem less applicable. But the reply is beside the point in any case. According to Rozemond, what the triggering cause is supposed to explain is 'the *occurrence* of a particular sensory idea at a particular time.' But this connection is still arbitrary since there seems to be no reason why *this* body, rather than some other, is the one that triggers the mind to produce the idea. And if it is simply a brute fact that particular bodies trigger the mind to produce ideas at particular times then it might just as well be a brute fact that certain bodies directly produce ideas with particular contents.

Aside from particular difficulties with Rozemond's approach, there is a more basic textual problem with triggering interpretations of the *Comments* passage and letter to Mersenne: Descartes simply does not say that our sensory ideas are 'triggered' or 'elicited' by external stimuli. On the contrary, though the *Comments* passage represents one of Descartes's most detailed philosophical accounts of the origin of sensation, he avoids any straightforwardly causal language in characterizing the role of bodies.¹⁵ Thus rather than triggering our sensory ideas, bodies 'give the

15 This point is also stressed by Broughton (118). David Scott has recently insisted that on at least four occasions in the *Comments* passage 'Descartes either explicitly or implicitly affirms that motion is transmitted to our mind.' The four supposed affirmations of transmission into the mind identified by Scott are (a) 'if we bear well in mind the scope of our senses and what exactly it is that reaches our faculty of thinking by way of them, we must admit'; (b) 'there is nothing in our ideas which

mind occasion to form these ideas by means of the faculty innate to it' (AT 8B 359; CSM 1 304). Even more minimally, bodies are not active at all: ideas simply arise in us 'on the occasion of certain corporeal motions' (AT 3 418; CSMK 187). In this respect, Garber's analogy to the way in which a keystroke triggers a computer program to form a monitor image is inapt. For it would be perverse to say that a certain keystroke 'presents my computer with an occasion to form' the screen-saver image at just the right moment, or that the image 'arises on the occasion' of the keystroke, if what I mean is simply that the keystroke directly produces a certain electrical event which eventually leads to the appearance of an image on the monitor. And there seems to be no reason why Descartes would not have said that bodies trigger the production of innate ideas if that were the relation he envisioned. Hence, Garber's suggestion that

is not innate to the mind, with the sole exception of those circumstances which relate to experience'; (c) 'We make such a judgment not because these things transmit the ideas to our minds through the sense organs, but because they transmit something'; (d) 'nothing reaches our mind from external objects through the senses except certain corporeal motions' (Scott, 518-19). But the most that can be inferred from (a), (c), and (d) is that corporeal motions are transmitted to, or reach, our minds through the sense organs. Yet bodies can certainly transmit motions through the sense organs to the pineal gland without thereby transmitting those motion into the mind, just as a taxi could bring me to the door of a hotel without transporting me inside. To insist that transmission through the sense organs implies transmission into the mind itself is simply to beg the question against non-causal readings of the *Comments*. Furthermore, the reason Descartes concludes that our sensory ideas are innate is because 'neither the motions themselves nor the figures arising from them are conceived by us exactly as they occur to us in the sense organs' (AT 8B 359; CSM 1 304). Thus the issue of the *Comments* is the *dissimilarity* between the ideas in the mind and the *corporeal motions in the sense organs*. But if Scott were right that motions are successfully transmitted into the mind, then the issue would be the dissimilarity between these 'mental motions' and the ideas that arise. As for passage (b), this is left incomplete in Scott's quotation. What Descartes says is: 'So much so that there is nothing in our ideas which is not innate to the mind, with the sole exception of those circumstances which relate to experience, *such as the fact that we judge that this or that idea which we now have immediately before our mind refers to a thing located outside us*' (AT 8B 358; CSM 1 304; I have italicized the part of the sentence omitted by Scott). Once completed, the relevance of this passage to Scott's case is unclear, since it does not concern the transmission of corporeal motions at all. Rather it says that certain circumstances relating to experience, namely our judgments about the referents of our ideas, are not innate. Perhaps Scott's assumption is that if such judgments are not innate, they must be adventitious and involve a transmission of corporeal motions into the mind. But this certainly does not follow. Judgments are not adventitious since they do not come from without. Rather they depend on the will and fall into the category of ideas that are 'made-up.' (See note 6 above.) Furthermore, the relevant judgments concern ideas that are assumed to be already 'immediately before the mind,' and therefore do not presuppose any kind of transmission.

bodies are somehow the 'direct cause' of our innate ideas seems to involve a stronger conclusion about the physical origin of sensation than Descartes himself is prepared to draw.

One might respond to this textual criticism of the triggering account by maintaining that 'giving occasion to' is itself a causal relation. Steven Nadler, for example, has argued that the relation between bodies and ideas described in the *Comments* is one of 'occasional causation.' Occasional causation is a notion that was invoked by some later Cartesians, such as Louis de la Forge, to denote 'the entire process whereby one thing, **A**, occasions or elicits another thing, **B** to cause **e**' (Nadler, 'Descartes and Occasional Causation,' 39). The idea is that whereas **B** produces **e** by efficient causation, the action by which **A** occasions **B** to act is weaker than efficient causation, though it is 'still a *real* causal relation' ('Descartes and Occasional Causation,' 42). Although it should be noted that Descartes himself never uses the term 'occasional cause,' something like Nadler's notion is suggested in the section of the *Comments* that immediately follows the defense of universal innateness. In this section, Descartes is concerned with Regius's contention that the idea of God could be derived from verbal instruction or observation of things. Descartes comments:

It is easier to recognize the error of this assertion if we consider that something can be said to derive its being from something else for two different reasons: either the other thing is its *proximate and primary* cause, without which it cannot exist, or it is a *remote and accidental* cause, which gives the primary cause occasion to produce its effect at one moment rather than another. Thus, workers are the primary and proximate causes of their work, whereas those who give them orders to do the work, or promise to pay for it, are accidental and remote causes, for the workers might not do the work without instructions. (AT 8B 360; CSM 1 305; my emphasis)

Nadler maintains, first, that 'remote and accidental causation' is occasional causation and, second, that Descartes's implicit position in the argument for universal innateness is that bodies are the occasional causes of our ideas.¹⁶

I would like to examine these two proposals in turn. First, is Descartes's notion of remote and accidental causation the same as Nadler's notion of occasional causation? Apparently, a thing or event **A** is the remote and accidental cause of an effect **e** if **A** gives some other thing or event **B** an occasion to produce **e** through proximate and primary

16 These two claims are endorsed by Scott (515 and 522), although Scott does not accept Nadler's account of the precise role of bodies as occasional causes. See also McRae (51).

causation. **B**'s part in this nexus is relatively clear since proximate and primary causes are just efficient causes which operate immediately and are necessary for the effect. Indeed, Descartes appears to use the phrase 'proximate and efficient' interchangeably with 'proximate and primary'.¹⁷ But the relation between the remote and accidental cause **A** and the proximate and primary cause **B** (the key relation of giving occasion to) is much less evident. One possibility is that **A** is the proximate and primary cause of **B**'s acting to bring about **e**, so that being a remote and accidental cause is simply a function of relative position in a chain of efficient causes and any cause is thereby remote and accidental with respect to the effects of its effects. The problem with this analysis is that it makes **A** as necessary for **B**'s acting as **B**'s acting is necessary for **e**, and consequently the remote and accidental cause itself becomes necessary for the ultimate effect. But Descartes seems to think that the remote and accidental cause is not necessary for the effect. For presumably if 'the workers might not do the work without instructions' then it is also true that they might do the work without the instructions. In fact, Descartes's example of the workers indicates that remote and accidental causes bear a much weaker relation to their associated primary and proximate cause, and hence to the ultimate effect, than the primary causes bear to the effect. The boss's orders are not the cause of the worker's decision to work to the same degree that the decision is the cause of the work. For whereas an effect absolutely requires its primary cause ('without which it cannot exist'), the primary cause relies on the remote cause strictly for scheduling convenience ('occasion to produce its effect at one moment rather than another').¹⁸ Whatever the nature of the influence that **A** exerts on **B**, it cannot be remote and accidental causation, of course. For that would presuppose an additional primary cause between **A** and **B**, and between **A** and that cause, and so on *ad infinitum*.

17 Thus, immediately after introducing the distinction by way of the boss and workers example, he applies it to the question of the origin of the idea of God and says that although verbal instruction is sometimes a remote cause of this idea no one can say it is the 'proximate and efficient' cause (AT 8B 360; CSM 1 305).

18 Schmalz ('Sensation,' 43-4) argues that Descartes regards bodies as remote, but not accidental, causes of sensory ideas since they, unlike remote and accidental causes, are necessary for the activity of the mind in producing sensory ideas. On this view, bodies are the efficient causes of the activity of the mind which in turn is the efficient cause of the sensory ideas. The problem with this approach is that it fails to explain the manifest difference in the way Descartes describes the role of bodies and the mind in the process leading to sensory ideas: whereas the mind 'forms' ideas, bodies merely serve as occasions for something else to act.

So what *is* the occasioning relation, according to Nadler's model? Although he concedes that 'there is no clear answer to this question,' he does say that occasioning involves a 'nomological correlation' between **A** and **e** that is not reducible to mere Humean constant conjunction:

What *is* clear is that the ground of the nomological correlation between **A** and **e** does not lie in *in rerum natura* (in particular, in the nature of the cause **A** and the effect **e**). That is, the relationship is not grounded on some ontically real power in **A**. This, I suggest, is what distinguishes occasional causation from efficient causation, where the lawlike correlation is based on some power intrinsic to the (efficient) cause (the correlation between **B** and **e**, for example, is grounded in **B**'s active power to cause **e**). ('Descartes and Occasional Causation,' 43)

Hence Nadler's view is that although occasional causes do not elicit their effects, or the causal power of the primary cause, by any real power of their own they are nevertheless necessary antecedents of lawlike correlations that terminate in the effects.

But understood in this way, occasional causation seems to be a very different relation from Descartes's remote and accidental causation. For, in the first place, Descartes's examples do not support the assumption that remote and accidental causes do not have 'ontically real' power. For although the workers themselves are more fully and directly the cause of the work, the bosses who gives the orders also exert real power. Similarly, in his only other explicit example of remote and accidental causation, Descartes notes that observation of religious icons can often act as remote causes 'which induce us to give some attention to the idea which we can have of God, and to bring it directly before our mind' (AT 8B 360; CSM 1 305). Even though the idea of God is innate, the iconic images possess a real power to bring us around to the idea. In the second place, whereas Nadler says that the occasional cause 'is not merely an accidental or coincidental element without which things would nevertheless have proceeded in the same manner' ('Descartes and Occasional Causation,' 43), Descartes implies that the effect might well exist without the accidental cause, though not without the primary cause, as we have already seen.¹⁹ On Descartes's understanding, there does not seem to be any 'nomological correlation' between the remote and accidental cause and the effect. This is evident in the religious icon example. For although the perception of an icon may help to explain why the idea of God should arise in a given person at a given time, it seems clear that in other

¹⁹ See also Nadler in 'The Occasionalism of Louis de la Forge,' where he says that occasional causes play a 'necessary role' in the production of ideas (67).

circumstances the idea could arise without the image and the image could fail to induce the idea.

Before turning to Nadler's second claim, that sensation is grounded on occasional causation, I want to remark on what might appear to be an inconsistency between Descartes's discussion of the remote and accidental cause of the idea of God and his defense, in the immediately preceding section of the *Comments*, of the universal innateness thesis. His argument for the innateness of the idea of God is that the content of this idea far outstrips anything that could be contained in ideas derived from verbal instruction and observation: 'no one can assert that we know nothing of God other than his name or the corporeal image which artists give him' (AT 8B 361; CSM 1 305). This argument seems to assume that we *do* receive at least some ideas from the senses, contrary to the universal innateness thesis.²⁰ But it is important to notice that the notion of remote and accidental causation is introduced by Descartes specifically in order to block Regius' claim (in article 14 of his pamphlet) that the idea of God 'has its origin' in sensation. (AT 8B 345; CSM 1 296) Accordingly, even though Descartes has already defended his strict position that all ideas are innate, he wants to show that *even if* our ideas of shapes and sounds came to us by means of the senses we would still have reason to consider the idea of God to be innate. Likewise, when Descartes adopts Regius's terminology and grants that 'verbal instruction or observation of things is often a remote cause which induces us to give attention to the idea which we can have of God and to bring it before our mind,' we may suppose he assumes this only in order to defeat the empiricist inference that our idea of God can be explained entirely in terms of sensory ideas. His own position, spelled out in detail in the preceding section of the *Comments*, is that *no* idea can be accounted for in terms of sensory stimuli. Furthermore, even if he holds to the strict position, Descartes can accept that innate ideas are triggered by sounds and sights without embracing body-on-mind causation. For he may hold that the sounds and images which induce us to think of God are themselves innate ideas rather than external things.²¹

20 It is a significant weakness of Broughton's defense of the non-causal interpretation of the *Comments* that she dismisses Descartes as simply being 'sloppy' in these later passages (118). This allows her to avoid the whole issue of remote and accidental causation. But the apparent similarity between remote and accidental causation and the model of sensation given in the preceding section of the *Comments* is too strong to be dismissed so lightly, and has naturally been emphasized by most recent proponents of the causal interpretation.

21 On this view, the remote and accidental causes of ideas are ideas which induce the

So there is good reason to reject Nadler's suggestion that Descartes's 'remote and accidental causes' are what the later Cartesians will call 'occasional causes.'²² These are very different relations. Whereas Descartes's remote and accidental causes are accidental but ontically real, occasional causes are necessary but not ontically real. What then of Nadler's second thesis, that in the section of the *Comments* defending universal innateness Descartes conceives of bodies as the occasional causes of sensory ideas? Recall that according to Nadler's theory, occasional causation is nomological correlation not grounded in a real active power of the occasioning cause. This indeed captures very well the account of sensation given in the *Comments*. For in that account Descartes carefully avoids attributing any active power to bodies, choosing to say that the mind produces its ideas 'on the occasion' of sensory stimulation rather than that motions in the sense organs induce or incite the mind to attend to its ideas. Just as in Nadler's model of occasional causation, the occasioning motions in the sense organs are not ascribed any intrinsic power at all. Furthermore, although he does not discuss this in the *Comments*, Descartes does conceive of the relation between bodily and mental states as lawlike. Thus he says that 'every time this part of the brain is in a given state, it presents the same signals to the mind' (AT 7 86; CSM 2 59-60) and that 'any given movement occurring in the part of the brain that immediately affects the mind produces just one corresponding sensation' (AT 7 87; CSM 2 60). Moreover, each sensation has associated with it a unique state of the brain 'so that the soul will have different sensations corresponding to the different ways in which the entrances to the pores of the internal surfaces of the brain are opened by means of the nerves' (AT 11 143; CSM 1 102). As Burman reports Descartes saying, the soul's awareness always follows upon the motions of the body as from 'a universal instrument' that always acts 'in accordance with its own laws' (AT 5 163; CSMK 346).²³ And this nomological

mind to produce innate ideas at one time rather than another. This account would explain, to some degree, their accidental quality. For it seems reasonable that whether or not a certain mental image or sound will induce a given person to think of God on a given occasion will depend on the previous experiences of that person, on their current mood, on what other ideas arise, and so on.

22 As far as I know, the notion of remote and accidental causation is invoked only once in all of Descartes's writings.

23 See also AT 6 114, 130, AT 11 346, AT 7 81, AT 4, 603-4; CSM 1 166, 167, 337, CSM 2 56, CSMK 307. So the corporeal motions in the brain are not 'accidental' to the subsequent sensory ideas in the way that the offer of pay is accidental to the work being done. For whereas the work might or might not get done without the orders,

relation has its ground in the will of God, who prefers an arrangement conducive to our survival, not in anything intrinsic to the occasioning states of the brain. God could have made our nature such that a certain motion in the brain was followed by some sensation other than pain. But in that case, our bodies would have been at much greater risk of extinction (AT 7 88; CSM 2 60-1).²⁴

So Cartesian sensation fits perfectly Nadler's model of occasional causation: it is a nomological relation grounded in something other than an 'ontically real' active power of the occasioning cause. However, to say that bodies are *causes* in this model is to stretch the notion of 'cause' far beyond anything Descartes would recognize. Nadler says that 'A's power to occasion e is simply the lawlike correlation between A and e as established by God' ('Descartes and Occasional Causation,' 43 n. 18). Now Descartes's most general notion of the 'cause' of a thing is that from which the thing 'derives its existence,' which he says is common to both efficient and formal causes. In efficient causes existence is derived from another thing; in formal causes existence is somehow self-derived (AT 7 238; CSM 2 166).²⁵ Even remote and accidental causes are regarded by Descartes as a way in which 'something can be said to derive its being from something else' (AT 8B 360; CSM 1 305). But it is hard to see how 'occasioning causes' qualify as causes even in this broadest sense. For although the effect is always preceded by the occasioning cause, this is not because the former derives its being from the latter, but simply because God has established a lawlike succession. Indeed, the occasioning cause has no real power to produce the effect. And that a given idea invariably arises on the occasion of some corporeal motion certainly cannot be *explained* by the causal power of the body since, understood as an occasional cause, the power of the corporeal motion is really *nothing*

there is a constant conjunction between the ideas and the brain motions. I thank Tad Schmaltz for discussion of this point. Cf. Schmaltz, 'Sensation,' 43-4.

24 See also AT 7 81, 143-4; CSM 2 56, 102-3.

25 This 'generic' sense of cause, as Clatterbaugh (*The Causation Debate*, 18) calls it, is broader than efficient causation since it does not presuppose a kind of influx or transference, which Nadler regards as part of the standard model of efficient causation. Thus Descartes says that God causes himself not by any 'positive influence,' but only by the immensity of his own power (AT 7 109 and AT 7 236-237; CSM 2 79 and CSM 2 165). For a recent analysis of the sense in which God could be his own cause, according to Descartes, see Daniel Flage and Clarence Bonnen, 'Descartes on Causation,' *The Review of Metaphysics* 50 (1997) 841-72. For an instructive overview of the 'metaphysics of causation' in Descartes see Clatterbaugh (*The Causation Debate*, ch. 2).

but its constant conjunction with the idea. So the fact that the *Comments* account of the origin of sensation is consistent with the historically later notion of occasional causation does not provide any reason to attribute a genuine causal role to bodies. On the contrary, if sensation is occasional causation, then bodies have no real power at all to bring about sensory ideas.²⁶

III Sensation Without Causation

If nothing else, the preceding discussion demonstrates that one cannot decide once and for all whether the *Comments* account of sensation provides a causal role for bodies without examining carefully Descartes's views on causation. Although Descartes had no fully developed 'theory' of causation, he did accept a number of causal assumptions as self-evident.²⁷ As we have just seen, the most basic of these assumptions is that a cause is that from which the being of the effect is derived.²⁸ Thus,

26 Scott proposes that the link between the occasioning cause and the activity of the mind in sensation is 'a kind of temporal cue or trigger for the mind's active thinking of ideas latent within itself' (523). Unfortunately, this notion of a 'temporal cue or trigger' is much more obscure than the relation it purports to explain. Scott says that although occasional causes in this sense are not efficient causes — he calls them 'inefficacious actions' (520) — they nevertheless depend on a transmission of motion into the mind. But it is hard to see how a body could transmit motion into the mind without being the efficient cause of that motion. Furthermore, how exactly does the motion transmitted into the mind trigger the mind's activity if not by efficient causation? Are we to assume, as the term 'cue' suggests, that the mind 'notices' that certain motions have been transmitted within? But why do the motions have to be transmitted into the mind in order to be noticed by the mind? More seriously, the model of temporal cueing fails as an account of sensation since it presupposes a kind of inner perception of the cues by the mind. As Descartes himself says in the *Optics*, we cannot hope to explain sensation by internalizing it — 'as if there were yet other eyes within our brain with which we could perceive' (AT 6 130; CSM 1 167).

27 For a discussion of Descartes's views on causation which is much more skeptical about their significance, and even their coherence, see Jonathan Bennett, *Learning from Six Philosophers: Descartes, Spinoza, Leibniz, Locke, Berkeley, Hume*, 2 Volumes (Oxford: Oxford University Press 2001), ch. 5).

28 Other closely related causal assumptions which he accepts are that nothing can come from nothing (AT 7 135; CSM 2 97); that whatever can do the greater can also do the lesser (AT 4 111-2; CSM 2 231); and that the more perfect cannot come from the less perfect (AT 7 41; CSM 2 28). He also holds that everything has a cause (AT 7 112; CSM 2 80) and that causes are not temporally prior to their effects (AT 7 108; CSM 2 78).

causes are the *source* of the reality of their effects: 'For where, I ask, could the effect get its reality from if not from the cause? And how could the cause give it to the effect unless it possessed it?' (AT 7 40; CSM 2 28).²⁹ Indeed, he argues that if there was anything at all in the effect which was not somehow pre-contained in the cause, then one would have to suppose, *per impossibile*, that something had come from nothing:

For if we admit that there was something in this effect which was not previously present in the cause, we shall also have to admit that this something was produced by nothing. And the reason why nothing cannot be the cause of a thing is simply because such a cause would not contain the same features as are found in the effect. (AT 7 135; CSM 2 97)³⁰

Since it is a common notion that nothing can come from nothing, it follows that causes are necessarily similar to their effects in the sense that 'whatever perfection or reality there is in a thing is present either formally or eminently in its first and adequate cause' (AT 7 165; CSM 2 116). In the case of ideas, the cause must contain (formally or eminently) whatever is contained objectively in the idea.³¹ One of his favorite illustrations of this principle is the idea of the 'highly intricate machine.' In Part I, Section 17 of the *Principles* he says that if someone has an idea of such a machine, then the cause of that idea must actually have all the intricacy of the idea, 'and it must be contained not merely objectively or representatively, but in actual reality, either formally or eminently, at

29 Mechanistic explanations of natural phenomena are to be preferred over traditional scholastic models for precisely this reason. For although we understand quite well how the size, shape, and motion of one body can produce properties of the same type in another body, yet 'there is no way of understanding how these same attributes (size, shape and motion) can produce something else whose nature is quite different from their own — like the substantial forms and real qualities which many philosophers suppose to inhere in things' (AT 8A 322; CSM 1 285).

30 See also AT 7 40-2; CSM 2 28-9.

31 This causal condition is found, in various forms, throughout Descartes's writings: AT 6 34, AT 8 11, AT 7 40-2, 104-5, 135, 161, 165, 168, 366, AT 3 274, 428, 545; CSM 1 128, 198-99; CSM 2 28-9, 76, 97, 114, 116, 118, 252; CSMK 166, 192, 211. For more detailed discussion of the principle, see Kenneth Clatterbaugh, 'Descartes's Causal Likeness Principle,' *Philosophical Review* 89 (1980) 379-402; Eileen O'Neill, 'Mind-Body Interaction and Metaphysical Consistency: A Defense of Descartes,' *Journal of the History of Philosophy* 25 (1987) 227-45; Geoffrey Gorham, 'Causation and Similarity in Descartes,' in *New Essays on the Rationalists*, R. Gennaro and C. Huenemann, eds. (Oxford: Oxford University Press 1999) and 'Descartes's Dilemma of Eminent Containment,' *Dialogue: Canadian Philosophical Review* (forthcoming); and Bennett (ch. 5).

least in the case of the first and principal cause' (AT 8A 11; CSM 1 199).³² A cause contains a perfection *formally* if it actually exemplifies it, that is, if it contains the perfection 'in a way which exactly corresponds to our perceptions of it' (AT 7 161; CSM 2 114). A cause contains a perfection *eminently* if the cause can 'fill the role' of objects that contain the perfection formally (AT 7 161; CSM 2 114). Eminent containment requires that the cause be of at least as high an order of reality or perfection as the perfections in the effect.³³ In Descartes's ontological hierarchy, substances are of a higher order of reality than modes and infinite substances are more real than finite substances (AT 7 165, 185; CSM 2 117, 130).³⁴

This causal condition, which we may call the 'similarity condition,' is invoked explicitly in the Third Meditation proof of God's existence, and also in the Sixth Meditation proof of the material world (AT 7 40-1, 79; CSM 2 28, 55). I think it is also tacitly relied upon in the *Comments* argument for the innateness of sensory ideas. For Descartes emphasizes there, as well as in the earlier letter to Mersenne, that the reason sensory ideas are innate is because they are not exactly similar to external things. His concern is not merely that bodies do not contain colors, sounds, etc. Rather, he takes himself to have shown in the *Optics* that there is *nothing* in the sense organs, not even their figures and motions, that is exactly like what we find in our ideas.³⁵ In other words, there is nothing in our ideas that is contained formally in bodies, i.e. 'in a way which exactly corresponds to our perception' (AT 7 161; CSM 2 114). If we assume, as Descartes seems to have done, that bodies contain no perfections at all eminently,³⁶ then it follows immediately that bodies are not the first and

32 The intricate machine example is also presented at AT 7 14, AT 7 105 and AT 7 134-5; CSM 2 10-11, CSM 2 76 and CSM 2 97.

33 Descartes uses the terms 'reality' and 'perfection' interchangeably to mean specific property. So he also seems to equate 'degree of reality' and 'degree of perfection.' Thus he says: 'what is more perfect — that is, contains in itself more reality — cannot arise from what is less perfect' (AT 7 41; CSM 2 28).

34 So I may eminently contain extension, shape, and motion since these mere modes of bodies while I am a thinking substance (AT 7 41; CSM 2 31). Likewise, if God is the cause of my ideas, he will contain eminently all that belongs to my ideas, since he is an infinite substance while my ideas are merely modes of thought (AT 7 79; CSM 2 55).

35 AT 6 112-4, 130-1; CSM I 165-6, 167. See also his discussion of the difference between our ideas of figures and the actual figures in our environment in the Fifth Set of Replies (AT 7 381-2; CSM 2 262).

36 In none of the passages discussing eminent containment does Descartes consider the possibility of eminent containment by material things. For example, after

adequate cause of our ideas. This explains why he concludes that all of our ideas are innate and, as such, 'come solely from the power of thinking within me' (AT 8B 358; CSM I 303). Since bodies literally do not have what it takes to produce ideas, they serve merely as the occasion for ideas to be formed by the mind at just the right moment.³⁷

This interpretation of the argument for universal innateness is supported by the fact that elsewhere in the *Comments* Descartes argues in very similar fashion — from dissimilarity to non-causality — for the innateness of the common notions and the idea of God. Thus, he regards it as 'absurd' to suggest that corporeal motions should be 'capable of forming' common notions with which they have no 'affinity' (AT 8B 360; CSM 1 305). And, as we have already seen, he argues that verbal instruction and observation cannot be the efficient causes of our idea of God since only an atheist, or someone otherwise 'totally lacking in intellect,' would hold that all we can understand about God is what he is called or what he looks like in paintings (AT 8B 360; CSM 1 305). His main premise here, as in the other innateness arguments, is that the idea of God has features not contained in ('over and above') what could be delivered by the sense organs. All three arguments depend crucially on the assumption that an efficient cause must be similar, in Descartes's technical sense, to its effect.³⁸

concluding in the Sixth Meditation that his ideas of bodies must be produced by a substance other than himself, he continues:

This substance is either a body, that is a corporeal nature, in which case it will contain formally "and in fact" everything which is to be found objectively "or representatively" in the ideas; or else it is God or some creature more noble than a body, in which case it will contain eminently whatever is to be found in the ideas. (AT 7 79; CSM 2 55. See also AT 7 42, 45, 135-136; CSM 2 29, 31, 97)

He ignores here the possibility that our ideas of bodies are caused by finite material things which contain the objective reality of those ideas eminently, but not formally. In fact, the passage strongly suggests that bodies could only cause the perfections of my ideas by formally containing them ('in which case...'). The notion of eminent containment is a notoriously difficult one. For discussion, see O'Neill; Thomas Vinci, *Cartesian Truth* (Oxford: Oxford University Press 1998), 70-6; David Hausman and Alan Hausman, *Descartes's Legacy: Minds and Meaning in Early Modern Philosophy* (Toronto: University of Toronto Press 1997), 42-7; and Gorham ('Descartes's Dilemma').

37 Other authors who see similarity as crucial to the argument for innateness are Jolley (41), Wilson (304), Hausman and Hausman (52), Rozemond (458-61) and Broughton (116-19). But of these, only Broughton holds that the conclusion of the argument leaves no causal role for bodies in sensation.

38 In her version of the non-causal interpretation, Broughton assumes that these arguments are quite different from the argument for the innateness of sensory ideas, but does not explain what exactly she takes the main differences to be (118-19).

Before turning to a potentially serious textual difficulty facing this interpretation, it is worth noticing that the similarity condition does not prevent efficient causation in the mind-on-body direction.³⁹ Our minds act on our bodies primarily by producing motion in the pineal gland (AT 11 352; CSM 1 340). Minds do not possess motion formally, of course, but since they are substances they can eminently contain motion, or indeed any of the other modes of corporeal things (AT 7 45; CSM 2 31). This explains why we find a pervasive asymmetry in Descartes's characterization of the two directions of mind-body interaction, at least in his later works. While he quite frequently prefers to speak of sensation as merely 'giving occasion to' ideas,⁴⁰ when it comes to voluntary movement he never shies away from the language of ordinary efficient causation.⁴¹

A possible objection to this interpretation is that in the early scientific treatises, the *Optics* and *le Monde*, both composed in the early 1630s, Descartes seems to reject the assumption of causal similarity. In the

39 It is worth mentioning one other problem, to which Broughton devotes a great deal of attention. She finds there to be a 'puzzling inconsistency' between the causal principle and Descartes's account of physical collision (120). If in collision one body is the cause of motion in another, then according to the similarity condition the first body is the source of the motion that comes to be in the second. This seems to imply that motion somehow 'migrates' or is transmitted from one body to another. The problem is that in a letter to More Descartes explicitly denies that motion 'transmigrates' in physical collision (AT 5 405; CSMK 382). Broughton does not think Descartes was able to resolve this apparent inconsistency between his causal principle and his theory of physical collision. But it seems to me that the problem only arises if one assumes that in collisions bodies are the efficient causes of motion. And this assumption is suspect, since there are good reasons to regard Descartes as an occasionalist about purely physical interaction. In the *Principles*, for example, he says that the 'reciprocal impulses and transfers of motion' involved in collisions are a direct effect of God's continuous creation of the universe (8A 66; CSM 1 243). This conception is consistent with the causal principle since one may assume, as Descartes does, that God may contain motion eminently (AT 7 79; CSM 2 55) and thus continually impart it to bodies. On Descartes's (physical) occasionalism, see Garber ('Descartes and Occasionalism'), Clatterbaugh (*The Causation Debate*, ch. 2), and Bennett, 99-101.

40 AT 11 144, AT 9 114, AT 8B 358-60, AT 3 418, AT 9B 64; CSM 1 103, CSM 1 166, CSM 1 304-5, CSMK 187

41 See, for example, AT 6 59, AT 5 222, 347; CSM 1 141, CSMK 358, 375. Broughton assumes that 'mind-body interaction involves only formal [i.e. not eminent] containment' (111). But this leaves her with no way of explaining why Descartes's causal principle prevents interaction in the case of sensation (body-on-mind causation) but not in the case of voluntary movement (mind-on-body causation). For minds certainly do not formally contain motion.

Comments he refers us back to the *Optics* in support of the assertion that corporeal motions in the sense organs are not exactly like the figures in our ideas of bodies, but in that earlier work he does not draw the inference that sensory ideas are innate.⁴² The short answer to this objection is that these works pre-date Descartes's acceptance of the causal similarity condition, which appears only beginning with the 1641 *Meditations*.⁴³ Furthermore, while it is true that in these early works Descartes assumes that bodies are the efficient causes of ideas, his arguments about 'resemblance' are all concerned with the problem of the *representational content* of our ideas rather than their *causal origin*. Consider the discussion of resemblance in the *Optics*. Descartes thought that in order to establish an intelligible (i.e. mechanistic) account of visual perception he needed to refute what he took to be the scholastic conception of sensory representation as involving a picturing relation, i.e., that 'in order to have sensory perceptions the soul must contemplate certain images transmitted by objects to the brain' (AT 6 112; CSM 1 165). He assumed the only reason people accepted this conception was because they took it as obvious that pictures represent objects by resembling them and therefore assumed that visual perception depended on a resemblance between objects and 'little pictures formed in our head' (AT 6 112; CSM 1 165). Descartes's objections to this model are, first, that representation sometimes does not require *any* resemblance at all (as can be seen in the cases of words and signs), and never requires *perfect* resemblance: 'in no case does an image have to resemble the object it represents in all respects' (AT 6 112; CSM 1 165). His second objection is that the picturing model simply internalizes sense perception, 'as if there were yet other eyes within our brain with which we could perceive it [the image]' (AT 6 130; CSM 1 167). Both of these points are clearly aimed at showing that resemblance cannot by itself account for sensory representation. They have nothing to do with the nature of causation. Hence, they are consistent with the argument for innateness in the *Comments*, as I understand it. For one can accept that mental representation cannot be explained simply in terms of resemblance without accepting that causes, including the causes of our ideas, could have nothing in common with their effects.

42 In the *Optics* he says: 'there need be no resemblance (*resemblance*) between the ideas which the soul conceives and the movements which cause these ideas' (AT 6 131; CSM 1 167). See also AT 6 85; CSM 1 153 and (in *le Monde*) AT 11 4; CSM 1 81.

43 In the earlier *Discourse* (1637) Descartes relies in the causal proof for the existence of God not on the similarity condition per se, but rather on the more general principle that 'the more perfect cannot result from the less perfect' (AT 6 34; CSM 1 128).

That his arguments in the *Optics* and *le Monde* concern representation rather than causation explains why in these earlier works the problem is always put in terms of *resemblance* (French 'resemblance'), while in the *Comments* the issue is *similarity* (Latin 'similitudinem'). The former is an epistemic relation, relevant to representation, whereas the latter is a purely logical or metaphysical relation, relevant to causality.⁴⁴

Consider also a passage from *le Monde*, which is often cited as evidence that similarity is not necessary for causation:

Now if words, which signify nothing except by human convention, suffice to make us think of things to which they bear no resemblance, then why could not nature have also established some sign which would make us have the sensations of light, even if the sign itself contained nothing in itself which is similar to this sensation? Is it not thus that nature has established that laughter and tears, to make us read joy and sadness on the faces of men. (AT 11 4; CSM 1 81)

But Descartes himself immediately raises an important objection to the analogy between the recognition of words and emotional states and the perception of light. Strictly speaking, what words and faces make us think of are not the meanings signified by the words or the emotional states expressed by the faces, but simply certain sounds and shapes. Rather, the meanings are supplied by the mind itself, which 'recollects' them 'at the same time' the senses are affected. The point of the objection is that although sadness is in no way similar to the tears we perceive by the senses, it does not follow that the real cause of our notion of sadness is dissimilar from its effect, since sadness could be represented to the mind by a simultaneous process of recollection. Interestingly, Descartes

44 In a recent article, Nancy Kendrick argues, primarily on the basis of passages from the *Optics* and *le Monde*, that non-resemblance is not the basis for Descartes's commitment to innate sensory ideas. She holds that his fundamental point in these works is not so much that ideas do not resemble the bodies which cause them, but rather that such resemblance would not explain the origin of our ideas even if it did obtain: 'Descartes dismisses resemblance in the *Optics* because it is non-explanatory, not because it is inexact' (418). But her argument conflates the question of the causal origin of our ideas with the question of how they represent the world. For, as we have seen, what his complaints about the need for homunculi and 'eyes within our brain' are intended to show is that mere resemblance cannot account for how an idea can be a mental representation. As Kendrick observes, this is his main objection to the scholastic theory of sense perception. But that homunculi are presupposed by a resemblance theory of mental representation does not show that similarity is irrelevant to the issue of mind-body interaction. The former is an epistemic or semantic question, while the latter is metaphysical. And surely one might demand on metaphysical grounds that the cause of an idea must have something in common with its effect, even granting that this would not by itself explain intentionality.

is willing to grant this possibility and even extend it to the perception of light: 'I could reply that by the same token it is our mind which represents to us the idea of light each time our eye is affected by the action which signifies it' (AT 11 4; CSM 1 81). In this anticipation of the universal innateness thesis, Descartes emphasizes that since the idea of light might arise from the mind by way of recollection, we have no reason to suppose that the bodies which act on our senses at the same time are similar to the ideas. So he does not take himself to have established in *le Monde* that the causes of our ideas are dissimilar from their effects, only that we have no decisive reason to assume that our ideas resemble bodies. This is sufficient to undermine the scholastic model as he understood it. For the problem with that model is not that it grounds body-on-mind causation on similarity, but that it grounds mental representation on resemblance.

IV The Problem of the External World

My proposed reading of the *Comments* passage is that the mind is the efficient cause of our sensory ideas, while corporeal motions in the sense organs are merely the occasions for the mind to form ideas at one time rather than another.⁴⁵ A serious problem with such an interpretation, one not adequately addressed in earlier versions of the non-causal reading, is that it seems to invite skepticism about the external world.⁴⁶ Consider first the question of the *stability* of the relation between my sensory ideas and the various external things they represent. Since according to the *Comments* no bodies have the exact features contained in our ideas, there seems to be no intrinsic reason why one sort of body could not serve just as well as another as the occasion for a given idea. And if it is in this sense

45 A rather similar account is presented by Hausman and Hausman, though their concern is primarily the semantics of sensory ideas rather than their causal origin. Their view is that innate ideas, rather than bodies, 'provide us with the material for constructing our sense fields' (51). (It is not clear whether they think that brain states play a causal role of any kind.) They also argue that the semantic content of these innate ideas depends in turn on 'exemplars' which are not themselves contained in the mind. One problem with this approach is that Descartes says in the *Comments* that innate ideas are those 'which came solely from the power of thinking within me' (AT 8B 358; CSM 1 303). So the Hausmans are led to dismiss Descartes's suggestion in the Third and Sixth Meditations that he could be the cause of all his ideas of sense since he could eminently contain the contents of those ideas, as 'disingenuous' (46). I discuss the Hausmans' views in more detail elsewhere ('Descartes's Dilemma').

46 For a concise recent statement of this objection to the non-causal approach, see Scott (514-15). The importance of this problem was impressed upon me by Phil Cummins in the discussion period following presentation of an earlier version of this paper.

arbitrary which bodies serve as the occasions for which ideas, how can I have any confidence that what appeared like a cactus yesterday does not appear like a rose today?

The solution to this initial worry can be found, once again, in the Sixth Meditation. Descartes maintains that although there is no intrinsic similarity between the contents of our sensory ideas and particular bodies, we can nevertheless be certain that a kind of structural isomorphism obtains. From the fact that I know that there are 'in the vicinity of my body' some things to be sought out and some things to be avoided, and that I perceive a variety of differences in my ideas, it follows that 'I am correct in inferring that the bodies which are the source of these various sensory perceptions possess differences corresponding to them, though perhaps not resembling them' (AT 7 81; CSM 2 56). Hence, I can infer that the differences between yesterday's prickly sensation and today's soft sensation reflects a real and stable differences among bodies. The stability of this relation is ensured by the benevolence of God. For example, it happens that when I stub my toe this leads to certain motions in the brain and I subsequently experience a sensation of pain as occurring in my foot. Although not necessary, this association presumably encourages more care on my part about where I tread:

It is true that God could have made the nature of man such that this particular motion in the brain indicated something else to the mind; it might, for example, have made the mind aware of the actual motion occurring in the brain, or in the foot, or in any of the intermediate regions; or it might have indicated something else entirely. But there is nothing else which would have been so conducive to the well-being of the body. (AT 7 88; CSM 2 60-61)⁴⁷

Similarly, the delicate flavors of a fine wine today might just as well arise on the occasion of drinking poison tomorrow. And yet I know that God prefers a regular association between external things and ideas that is conducive to the survival of my body. It is true that such regular associations might occasionally mislead, as in the case of treacherous plots and certain rare illnesses. And yet without the associations, my material existence would be imperiled even in the ordinary course of events.⁴⁸ So while it is true that the relation between sensory ideas and the bodies which give them occasion to arise cannot be intrinsically

47 See also AT 7 81, 143-144; CSM 2 56, 102-3.

48 'It is much better that it [a certain sensation] should mislead on this occasion than that it should always mislead when the body is in good health' (AT 7 89; CSM 2 61). See also AT 5 163-4; CSMK 346.

necessary if the bodies are not the efficient causes of the ideas, God's benevolence will nevertheless ensure that the relation is relatively stable and beneficial.⁴⁹

But an even more serious skeptical worry remains. If, as I hold, the mind is the efficient cause of my ideas then it presumably could also serve, just as well as bodies, as the occasion of its own actions. But if that is right, what reason do we have to suppose that our ideas are associated with material things at all? Descartes's official Sixth Meditation proof of the external world might seem to be of little help here. For that proof relies on two assumptions that are inconsistent with the model of sensation presented in the *Comments*. First, Descartes maintains in the official proof that there must be an 'active faculty' distinct from our minds which produces our sensory ideas, since the ideas 'are produced without my cooperation and often even against my will' (AT 7 79; CSM 2 55). This seems to be flatly inconsistent with the *Comments*, where Descartes says repeatedly that the mind itself 'forms' its sensory ideas. Indeed, just before arguing that sensory ideas are innate he says that innate ideas come entirely from the power of thought within me but are not determined by my will.⁵⁰ Apparently, by 1648 he no longer holds that my sensory ideas can have an internal source only if they are voluntary.⁵¹ In this respect, the *Comments* reopens a skeptical possibility first raised in the Third Meditation, that there may be some 'unknown faculty' in me which produces my sensory ideas 'without any assistance from external things' (AT 7 39; CSM 2 27).⁵²

49 Hence, there is no need to suppose, as Broughton does, that the mind has an innate 'meta-faculty' which 'regulates the mind's faculty for having sense ideas so that just the right sense ideas appear at just the right times' (119).

50 'I did however observe that there were certain thoughts which neither came to me from external things nor were determined by my will, but came solely from the power of thinking within me; so applied the term "innate" to the ideas or notions which are the forms of these thoughts in order to distinguish them from others, which I called "adventitious" or "made-up"' (AT 8B 358; CSM 1 303).

51 This tension in Descartes's views about the origin of sensory ideas is evident also in the case of dreams, which he regarded as both involuntary and internally caused. Cf. David Fate Norton, 'Descartes on Unknown Faculties: An Essential Inconsistency,' *Journal of the History of Philosophy* 6 (1968) 245-56, and Wilson (305-6). For an interesting recent analysis of the official proof, which gives special attention to the unknown faculty problem, but which disagrees in several respects with the analysis offered here, see Lex Newman, 'Descartes on Unknown Faculties and Our Knowledge of the External World,' *The Philosophical Review* 103 (1994) 489-531.

52 Tad Schmaltz attempts to resolve this apparent inconsistency between the *Comments* and the Sixth Meditation by suggesting that Descartes's view in the *Comments* is that

Fortunately, this concern can be sidestepped. For the crucial assumption of the official proof, namely the benevolence of God, should be sufficient to establish the existence of bodies even if I cannot rule out *a priori* the existence within me of an unknown faculty. Descartes argues that the cause of our sensory ideas could not be God (or some creature more noble than a body):

For God has given me no faculty for recognizing any such source for these [sensory] ideas; on the contrary he has given me a great propensity to believe that they are produced by corporeal things. So I do not see how God could be understood to be anything other than a deceiver if the ideas were transmitted from a source other than corporeal things. It follows that corporeal things exist. (AT 7 79-80; CSM 2 55)

The condition of divine veracity invoked here precludes an internal origin for our sensory ideas just as much as a divine (or angelic) origin. For we have no better method for determining an involuntary, internal origin of our ideas than an external source in God. And either way we would presumably still have a great propensity to believe that corporeal things are the true sources from which our ideas are transmitted.⁵³ Hence, bodies exist if God is no deceiver.

Unfortunately, this move in the official proof points to a second inconsistency with the *Comments*. For Descartes's clear intention in the *Comments* is to *discredit* the instinctive belief that our sensory ideas are 'transmitted from' corporeal things into the mind:

We make such a judgment [that our ideas refer to things situated outside of us] *not because these things transmit ideas to our minds through the sense organs*, but because they transmit something which, at exactly that moment, gives the mind occasion to form these ideas by means of the faculty innate to it. (AT 8B 359; CSM 1 304; my emphasis)

I think the best explanation for this inconsistency is simply that by 1648 Descartes had come to appreciate that the proof of the material world does not require a divine certification of the dubious causal transmission

ideas arise in the mind from the combined effects of an active faculty in bodies and a passive faculty (of sensation) in the mind. The latter faculty would presumably not be subject to the Sixth Meditation prohibition against the production of ideas by active internal faculties (Schmaltz, 'Descartes on Innate Ideas,' 42-3). The problem with this approach is that the *Comments* seems to attribute an active role to minds, which 'form' and 'represent to itself' our ideas, and a passive role to bodies, which merely 'give the mind occasion' to form its ideas.

53 In the *Principles* version of the proof Descartes does not mention the unknown faculty hypothesis (AT 8A 40-1; CSM 1 223).

view of sensation. For granted we have a propensity to believe that sensations are produced by the action of bodies on our sense organs, this is not sufficient to establish the truth of that belief even if God is no deceiver. I do not mean to suggest that Descartes in any way relaxed the standard of divine veracity. For even according to the standard of the official proof, God does not confer a global certification upon our instinctive beliefs. Rather, in order for God to be considered a deceiver, he would have had to have provided me with 'no faculty for recognizing' that such beliefs are mistaken.⁵⁴ Consider for example that we believe wrongly, though by a 'spontaneous impulse,' that there is a close similarity between our sensory ideas and external things, such as that the sun is like our sensations of it. Despite this impulse, we can come to know by astronomical reasoning founded on innate concepts that our sensation of the sun 'which seems to have emanated most directly from the sun itself, has in fact no resemblance to it' (AT 7 39; CSM 2 27).⁵⁵ Though God is the source of our faculty of reason, he cannot be blamed if, neglecting this faculty, we continue to be led astray by the spontaneous impulse. For, as Descartes cautions, the nature God bestows upon us 'does not appear to teach us to draw conclusions from these perceptions about things located without us, without waiting until the intellect has "carefully and maturely" examined the matter' (AT 7 82; CSM 2 57).⁵⁶

Reason eventually leads Descartes to the conclusion that sensory ideas are not transmitted to him from external things, in spite of our natural propensity to believe that they are. The basis for this conclusion is already available in the *Meditations*. For he there holds it to be 'manifest by the natural light' that there must be at least as much reality in the total and efficient cause as in the effect (AT 7 40; CSM 2 28). And it follows from this, he says, that our ideas cannot contain objectively any features that are not contained in their cause:

For if we suppose that an idea contained something which was not in its cause, it must have got this from nothing; yet the mode of being by which a thing exists

54 See also the account of the condition of divine deception in the Fourth Meditation (AT 7 54, 62; CSM 2 37-8, 43) and Second Set of Replies (AT 7 144; CSM 2 103). In these accounts what would make God a deceiver is not simply that I should have an instinctive belief that is false, but rather that I should have from God a faculty that would lead me to falsehood, however judiciously I applied it.

55 Descartes says that there is a 'big difference' between a belief based on a spontaneous impulse and one based on the natural light: the former are fallible (AT 7 38; CSM 1 26-7).

56 See also *Principles* II, 3 (AT 8A 41-2; CSM 1 224).

objectively “or representatively” in the intellect by way of an idea, imperfect though it may be, is certainly not nothing and so cannot come from nothing. (AT 7 41; CSM 2 29)

This ought to have persuaded him that external bodies are not the total and efficient cause of our sensory ideas, since he was already convinced that many of our sensory ideas have little or nothing in common with bodies.⁵⁷ So there is no need to suppose that the official proof’s standard of divine veracity is later compromised or ignored in the *Comments*, where Descartes concludes that sensory ideas are not transmitted to us from bodies. Rather, he simply comes to realize that yet another of his instinctive beliefs must be revised in light of the divinely ordained faculty of reason.⁵⁸

The claim that Descartes reformulated the official external world proof so as to avoid reliance on causal transmission is further supported if we consider the statement of the proof given in the opening section of Part II of the *Principles of Philosophy*. Daniel Garber (‘Descartes and Occasionalism,’ 21-2) has called attention to an apparently significant divergence between the original 1644 Latin edition and the 1647 French translation. In the Latin edition God certifies the belief that our ideas come from external things: ‘we appear to see clearly that the idea comes to us from things located outside ourselves’ (AT 8A 41; CSM 1 223). In the French translation, which Descartes enthusiastically endorsed,⁵⁹ the divinely validated belief is much weaker: ‘it seems to us that the idea we have of it forms itself in us on the occasion [*se forme en nous à l’occasion*] of bodies from without’ (AT 9B 64). Given that the translation was prepared just one year prior to the publication of the *Comments*, it seems reasonable to

57 The dissimilarity between sensory ideas and external things is noted frequently in the *Meditations* (AT 7 39, 80, 81, 83; CSM 2 27, 55, 56, 57) and elsewhere (AT 11 4, AT 685, AT 6 130, AT 4 603-4; CSM 1 81, 153, 167, CSMK 307). For Descartes, this lack of similarity is not confined to our ideas of the so-called secondary qualities. He points out that distant bodies do not have the same size or shape as in the sensory ideas they cause (AT 7 39, 83; CSM 2 27, 57). See also his discussion of our perception of size and shape in the *Optics* (AT 6 140; CSM 1 172) and in the Fifth Set of Replies (AT 7 381-2; CSM 2 262).

58 There are other writings, besides the *Comments*, in which the inference from efficient causation to similarity (or from dissimilarity to lack of efficient causation) is straightforward: ‘Now God is the cause of me, and I am an effect of him, so it follows that I am like him’ (AT 5 156; CSMK 340); ‘Now any elements in our thought which do not resemble external objects manifestly cannot have originated in external objects’ (AT 7 188; CSM 2 132).

59 See his Preface to the French Edition (AT 9B 1; CSM 1 179).

infer that Descartes's doubts about the causal transmission model of sensation had led him to present the proof as not depending on, or validating, that model.⁶⁰

Since the revised version of the official proof establishes only that our sensory ideas are formed 'on the occasion of bodies from without,' and not that our ideas come from those bodies, it is consistent with the non-causal model of sensation presented in the *Comments*. Although Descartes presents only a sketch of this noncausal version of the argument in the French translation of the *Principles*, we can see how the argument must proceed. If we assume that the source of our sensory ideas is the mind itself, the skeptical possibility arises that those ideas occur not on the occasion of bodies but on the occasion of something internal. Now even if reason instructs us that the ideas are not actually transmitted from bodies, it remains that we have a strong propensity to believe that our sensory ideas typically arise when bodies are present. That is, I cannot help but believe that a certain kind of sharp pain is contemporaneous with an encounter between my toe and a blunt object (i.e. an object extended in three dimensions), even though I know that the pain cannot have literally originated at the site of that encounter. So there is a natural presumption in favor of the belief that bodies are at least the occasion for our beliefs. The question, then, is whether God has provided me any method or faculty for determining that *this* belief is false. Certainly, the empirical evidence could not tell us whether our ideas are 'occasioned' by bodies or by something in our own minds, since the actual contents of our sensory ideas would be the same either way. Furthermore, the occasioning event would be involuntary in either case, since Descartes assumes in the *Comments* that sensory ideas are involuntary even if they come solely from my own power of thought. And

60 David Scott disputes Garber's contention that we have evidence of a shift away from body-on-mind causation in the French translation. He points out that even in the French translation Descartes assumes, just as in the official proof, that ideas *seem* to come from an external source: 'we experience within ourselves that everything we sense comes to us from something other than our thought' (AT 9B 63, Scott's translation). But from this assumption — which of course is a *premise* of Descartes's argument, not its *conclusion* — Scott illicitly infers that 'Descartes is out to prove in the later version: "everything comes to us from something other than out thought"' (Scott, 510). But if that is what Descartes were out to prove, then Scott fails to explain why his explicit conclusion in the proof is much more circumspect and makes no claim at all about the actual causal origin of our ideas. Descartes's conclusion is: 'Now, since God does not deceive us, because that is contrary to his nature ... we must conclude that there is a certain substance, extended in length, breadth, and depth which now exists in the world, with all those properties which we manifestly know belong to it' (AT 9B 64).

whereas our belief in the transmission of ideas into the mind from bodies was ruled out on conceptual grounds — because there can be nothing in the cause which was not previously present in the effect — there seems to be no metaphysical constraint that would prevent bodies from being the occasions of our ideas. Since the occasioning relation is not causal, there is no need to assume that the occasioning event is exactly similar to the idea. So our faculty of reason affords us no method of falsifying the strong inclination to believe that bodies are present ‘in the vicinity’ of the sense organs when our sensory ideas arise. Finally, ‘the clear and distinct conception of them [bodies] includes extension’ (AT 7 79; CSM 2 55)⁶¹ and God ‘did not create in us an understanding of the kind which would be capable of making a mistake in its judgments concerning the things of which it possesses a very clear and very distinct perception’ (AT 9B 10; CSM 1 184). Therefore, according to the standard of the official proof, God would be a deceiver if extended things were not at least the occasions of our sensory ideas. It follows that extended things exist.

Granted, the non-causal version of the official proof ensures only that our sensory ideas of things typically arise when extended substances affect the senses, and not that our ideas perfectly reflect the particular features of those substances. But it should be noted that this conclusion has precisely the same scope as the conclusion of the official version of the proof:

It follows that corporeal things exist. They may not all exist in a way that exactly corresponds to my sensory grasp of them, for in many cases the grasp of the senses is very obscure and confused. But at least they possess all the properties which I clearly and distinctly understand, that is, all those which, viewed in general terms, are comprised within the subject-matter of pure mathematics. (AT 7 80; CSM 2 55)⁶²

61 See also the *Principles* version of the proof: ‘we have a clear and distinct perception of some kind of matter, which is extended in length, breadth and depth’ (AT 8A 40: CSM 1 223).

62 Similarly cautious conclusions are drawn elsewhere. Thus, *Principles* II, 3 states: ‘They [sensory perceptions] normally tell us of the benefit or harm that external bodies may do ... and do not, except occasionally and accidentally, show us what external bodies are like in themselves. If we bear this in mind we will easily lay aside the preconceived opinions acquired from the senses, and in this connection make use of the intellect alone, carefully attending to the ideas imprinted in it by nature’ (AT 8A 41-2; CSM 1 224). See also in the Sixth Meditation where Descartes says we have ‘no convincing argument’ for supposing that there are things in fire which resemble heat or pain; we can only conclude that there is ‘something in the fire, whatever it may eventually turn out to be, which produces in us the feelings of heat or pain’ (AT 7 83; CSM 2 57).

Thus our knowledge of particular material things is not significantly undermined if it turns out that our sensory ideas are all innate in the strong sense I have maintained. We still have reason to believe that there are extended things which give occasion to those ideas by affecting the sense organs (since God is not a deceiver), and we still have reason to believe that the actual correspondence between our ideas and the things which affect our senses will be stable and generally beneficial (since God prefers that our bodies should remain alive for a while).⁶³

Still, if bodies are not the efficient causes of our ideas, but merely provide the mind with an occasion to produce ideas at one moment rather than another, then sensation is not quite what it might have seemed. The flavor and bouquet I experience when tasting a good wine are not caused directly by the wine itself, since it contains nothing like these ideas. Rather, the presence of the wine is a timely occasion for my mind to bring forth the ideas as I drink. The same goes for the ideas of roundness and solidity, which arise in me as I hold the glass. But neither the contents, nor the occurrence, of those ideas depend on any similarity to bodies. For the contents come entirely from the mind.⁶⁴ We might even

63 A much more radical revision to the official argument, one which actually abandons dependence on God's veracity, has recently been suggested by Hausman and Hausman. They argue that given Descartes's *ex nihilo* causal principle (what I call his 'similarity condition'), the only way to account for the semantic content of our judgments about individual things, such as 'This is a cube,' is to posit the existence of a world of real physical things. Thus, 'Descartes's argument for the existence of such a world is at base a semantic one which depends not on the veracity of God, but on the necessity of the *ex nihilo* principle' (58). But, as the Hausmans recognize, strict adherence to the causal principle in this context threatens to prove too much, i.e., that all of our sensory ideas are not only meaningful, but true. For if the content of the judgment 'This is a cube' is explained by the existence of physical things which contain the same perfections, then it seems to follow that the judgment is true. Hence, the Hausmans infer that 'In order to account for the possibility of error, Descartes must abandon the principle when it comes to mind-body interaction' (63). On this reading, the *ex nihilo* principle is sufficient to establish the bare existence of physical things, but God's veracity is invoked to account for the truthfulness of some, but only some, of our ideas. Thus, the Hausmans reading of the argument has in common with the reading I have proposed that only the existence of bodies, and not the specific contents of our beliefs about those bodies, is validated. The advantage of my reading is that it does not assume that the causal principle is applied selectively or abandoned. For on my reading, the contents of our ideas comes from the mind, while error arises only from our tendency to assume that our sensory ideas are exactly similar to external things.

64 On this model, sensory ideas are like old memories which are stored in the mind until triggered by events with which they may have no apparent relation. In the case of Cartesian sensation, however, we do not need to assume that the stimulation of

say, as Descartes says to Mersenne, that the ideas were 'in us before' we held the glass (AT 3 418; CSMK 187). And the presence of those ideas at this time rather than another is explained by the fact that God has established a regular association between my ideas and bodies which is (mostly) conducive to my material well-being. Neither of these explanations depends on a causal relation between ideas and bodies. As for the intentionality of sensory ideas, this does not require similarity or body-on-mind causation either. For, as Descartes says repeatedly, my ideas may represent things in the ways signs and words do.⁶⁵ But signs and words do not have to be either similar to, or caused by, that which they represent.⁶⁶

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our senses actually triggers the innate ideas, since God has assured that they will arise at just the right time. Descartes himself drew attention to the analogy between innate ideas and memories. In the Fifth Meditation he observes that when he reflects on the nature of shape, number, motion, and so on, 'it seems that I am not so much learning something new as remembering what I knew before' (AT 7 64; CSM 2 44). And in the May, 1643, letter to Voetius he explicitly compares his account of how innate ideas arise in the mind with Plato's doctrine of *anamnesis* (AT 8B 167; CSMK 222-3). See also the opening of *le Monde*, where he entertains the possibility that the mind recollects and represents to us the idea of light each time our eye is affected by the corresponding external motions (AT 11 4; CSM 1 81), and the *Conversations with Burman*, where he is reported as having said that although there is 'certainly no relationship' between the four letters 'K-I-N-G' and the notion of power, the intellectual memory allows us to 'recall what the letters stand for' (AT 5 150; CSMK 336-7).

65 AT 11 4, AT 6 112, AT 4 604; CSM 1 81, 165, CSMK 307. For a detailed defense of the sign account of Cartesian intentionality see Yolton, *Perceptual Acquaintance* (ch. 1) and *Perception and Reality* (ch. 8).

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