

Contemporary Skepticism and the Cartesian God

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Although Descartes presents himself as an adversary of skepticism, in contemporary epistemology he is celebrated much more for his presentation of the skeptical problem than for his efforts to solve it. The 'Cartesian skepticism' of the evil genius argument remains a standard starting point for current discussions, a starting point that is seen (by contextualists, for example) to provide such a powerful challenge to knowledge that while one as much as contemplates such arguments one loses the right to ascribe knowledge to anyone.¹ Even Descartes's less radical skeptical arguments are still widely credited as having tremendous force: Barry Stroud, for example, argues at length that no satisfactory response has yet been given to the dream argument of the First Meditation.² The Cartesian response to skepticism, on the other hand, is not nearly so warmly received. In the current literature on skepticism one does not find much resistance to Stroud's assessment of the

1 See David Lewis, 'Elusive Knowledge,' *Australasian Journal of Philosophy* 74 (1996) 549-67; Keith DeRose, 'Solving the Skeptical Problem,' *The Philosophical Review* 104 (1995) 1-52. In what follows, references to the works of Descartes will be to the translations of Cottingham, Stoothoff and Murdoch, *The Philosophical Writings of Descartes* (Cambridge: Cambridge University Press 1984), and will be abbreviated by CSM followed by the volume and page number. References to the correspondence will be to the translations of Cottingham, Stoothoff, Murdoch, and Kenny (Cambridge: Cambridge University Press 1991), abbreviated CSMK.

2 This is the main aim of Stroud's *The Significance of Philosophical Skepticism* (Oxford: Clarendon 1984).

Cartesian response to skepticism as utterly unpromising,³ nor to his diagnosis of its central fault: the Cartesian response depends on a series of theological claims that Descartes does not (or perhaps cannot) show to be plausible, let alone true.⁴ Perhaps motivated by charity, contemporary epistemologists do not even discuss one of Descartes's most peculiar theological claims — the claim that God is simultaneously incomprehensible and yet clearly and distinctly understood. The aim in what follows is to argue that Descartes's often overlooked development of the contrast between comprehension and understanding both makes the role of God in his epistemology more interesting than is perhaps commonly thought, and constitutes an advance against skepticism with continuing relevance for current epistemology.

The paper is divided into three sections. The first section aims to shed light on the motivations of Descartes's claim that God is incomprehensible and yet known by setting it against a historical background of skeptical arguments about the difficulty of knowing God, arguments maintaining that whatever is incomprehensible would be unknowable. Using some rather odd expressions about 'submission to the infinite,' Descartes describes the recognition of our inability to comprehend God as itself a source of knowledge of him; section two aims to explain how that recognition of a limit of our cognitive powers is supposed to yield knowledge of anything other than ourselves. This section addresses the manner in which Descartes distinguishes comprehension from understanding, and how each of these is supposed to qualify as a kind of knowledge. Section three aims to give a partial account of the role that awareness of the limitations of our cognitive powers is supposed to play in anchoring our knowledge of other things, and to show how such an approach to knowledge could still contribute to the development of a response to skepticism in the contemporary context.

3 Indeed, the provisional negative results of the First Meditation so greatly overshadow the positive attempts of the Sixth for Stroud that he is ready to describe the claim that there are external things as 'something Descartes thought that we could never know,' and to maintain that 'Descartes reflected on human knowledge and reached the conclusion that no one could ever know anything about the world around him' (*The Significance of Philosophical Skepticism*, 175, 174). Where Stroud does discuss Descartes's own attempt to rebut skepticism he concludes that 'I think most of us simply don't believe it.' 'Understanding Human Knowledge in General' in *Knowledge and Skepticism*, Marjorie Clay and Keith Lehrer, eds. (Boulder: Westview 1989), rpt. in *Understanding Human Knowledge* (Oxford: Oxford University Press 2000), 114.

4 Among other places: 'Understanding Human Knowledge in General', 114-15.

I The Incomprehensible God of the Pre-Cartesian Skeptics

In claiming that scientific knowledge depends on an awareness of an incomprehensible and yet clearly known God, Descartes stands in sharp contrast to the pre-Cartesian skeptics, and on this point it is surely the earlier skeptics who initially appear to have the more intuitive view. While 16th-century skeptics as Michel de Montaigne and Francisco Sanches⁵ were pleased to endorse the notion that God is beyond human comprehension, they found it obvious that we cannot know what we cannot comprehend, and further concluded that seeing nature as governed by an incomprehensible being should help to extinguish any pretensions to scientific certainty on our part. Descartes took such thinkers seriously, commenting in the Seventh Replies that 'we should not suppose that skeptical philosophy is extinct. It is vigorously alive today,' and adding that it was the leading philosophical position among those who would join him in rejecting the scholastic approach, finding 'nothing to satisfy them in philosophy as it is ordinarily practiced.'⁶ Pre-Cartesian skeptics present some particularly vigorous arguments on the unknowability of God, and it is useful to examine some of these before turning to Descartes's efforts to rebut them.

Even a cursory examination of Francisco Sanches' 1581 essay *That Nothing is Known* turns up a number of ways in which it is similar to Descartes's *Meditations*. Sanches starts on an auto-biographical note, with a description of the author's youthful appetite for knowledge, and his disappointment with what he was taught. The next lines describe a path that Descartes was also to follow:

5 Identified by Richard Popkin as the only skeptics of the century leading up to Descartes who were widely known for their intellectual achievements — see *The History of Skepticism from Erasmus to Spinoza* (Berkeley: University of California Press 1979), 36-7. Descartes had read Montaigne (CSMK 302, 303); it seems he likely read Sanches as well, although there is no decisive proof of this. Henri Gouhier speculates that Descartes read the 1581 Lyon edition of *Quod Nihil Scitur* during his time at La Flèche (Henri Gouhier, *Les Premières Pensées de Descartes* [Paris: Vrin 1958], 116fn.); Elaine Limbrick agrees that Descartes may have read Sanches at La Flèche, and adds that he might also have picked up a copy of the 1618 Frankfurt edition when he was in Frankfurt in 1619, and that his recent reading of this work partly inspired his meditations on method and his choice of metaphors in the *Discours*. Francisco Sanches, *That Nothing is Known*, D.F.S. Thomson, trans.; introduction and notes, Elaine Limbrick (Cambridge: Cambridge University Press 1988), 83. Henceforth cited as Sanches.

6 CSM II, 374

Subsequently I withdrew into myself; I began to question everything, and to examine the facts themselves as though no one had ever said anything about them, which is the proper method of acquiring knowledge. I broke everything down into its ultimate first principles. Beginning, as I did, my reflection at this point, the more I reflected the more I doubted.... (Sanches, 167)

Like Descartes, Sanches then leads the reader into gradually widening doubt, provoking uncertainty about a considerable range of points on which we might have thought we possessed knowledge. He then embarks on a quest for certainty, in the course of which he contrasts our knowledge of external things with our more immediate knowledge of our own cognitive activity:

... the understanding of external objects, acquired by the senses, is outdone in *certainty* by the kind of understanding that is drawn from internal objects that either exist, or originate, *within* ourselves. For I am *more* sure that I possess both inclination and will, and that I am at one moment contemplating *this* idea, at another moment shunning and abominating *that* idea, than I am that I can see a temple, or Socrates. (Sanches, 244)

One can have greater certainty, then, of the nature of one's present act of cognition, than one can have of any (apparently) perceived external object. Like Descartes, Sanches invokes a series of standard skeptical arguments, starting with the fallibility of sense perception to provoke doubt concerning our knowledge of external material objects (see 246-7). But for Sanches, what lies within our minds turns out to be an equally poor foundation for certainty, despite initial appearances to the contrary. In introspection, Sanches argues, we ultimately find only an elusive flux: 'the understanding finds nothing which it can grasp, and dashes this way and that, groping like a blind man to find if it can lay hold on anything...' (Sanches, 244). According to Sanches, the nature of mind is 'not merely full of obscurity but also murky, stony, abstruse, trackless, attempted by many and mastered by none — and not of a sort to be mastered at all' (Sanches, 240). In their search for certainty, Sanches and Descartes start along the same path, but for Sanches there is no route to sure knowledge through our awareness of our own mental activity: nothing is known, whether internal or external.⁷

Sanches is driven toward these conclusions by an underlying commitment he shares with Descartes; namely, taking the inquiry into the

7 Indeed, Sanches contends that we know not even that nothing is known; he claims he can only 'infer' this, confessing that he does not know how it might be decisively established, a failure which he takes as additional (but of course inconclusive) confirmation of his skepticism (Sanches, 172-3).

existence and nature of God as ‘the foundation of other inquiries’ (Sanches, 223). According to Sanches, research into these fundamental questions is ‘very necessary to the understanding of all other things, and ignorance of these leads immediately to lack of knowledge in respect to other inquiries’ (ibid.). If we take God as the source and sustainer of all things in the universe including ourselves, a true science of nature or man will have God’s action as its ultimate subject matter, Sanches thinks: to seek the rules governing things in the universe is to seek the regularities of God’s command of nature. In seeking to gain knowledge on this frontier Sanches encounters a problem:

... the substance of certain things is so vast that it cannot be perceived by us at all. Such is the philosophers’ “infinite,” if there *is* such a thing, and — in our own realm — God, of whom there can be no measure or limit, and hence no comprehension by the intellect. And rightly so; for there should be a certain proportion in size between the comprehending subject and the comprehended object, so that he who comprehends is either greater than the thing comprehended or at least equal to it (though it may seem scarcely possible that an equal should literally ‘comprehend,’ or embrace some other thing equal to itself, as we shall see in my treatise on Space — but let us allow this for the moment); to us, however, there is no proportion in relation to God, since there can be no proportion between the finite and the infinite, or the corruptible and the eternal; in a word, compared to Him we are nothing, rather than something. (Sanches, 224-5)

It is not uncommon to see comprehension explicated through spatial metaphors of grasping and containment, but Sanches is tremendously literal in his application of the metaphor. God knows all things, Sanches goes on to explain, because he is higher and greater than everything in creation. We are too limited to grasp either the infinite or God (note that for Sanches these are distinct), and as a consequence we can comprehend neither the infinite, nor God, nor the principles of God’s action. Drawing no distinction between knowing and comprehending, Sanches concludes on the basis of his remarks about failure of comprehension that ‘whatever things approach more closely to this Supreme Artificer are for that very reason also unknown to us’ (Sanches, 225). As far as God’s existence and nature are concerned, Sanches ends up a fideist. The consequences for the project of discovering the foundations of science are bleak.

As Sanches was writing *That Nothing is Known*, Michel de Montaigne was working on an extended discussion of the same problem in his ‘Apology for Raymond Sebond.’ When we try to explain or discuss the nature of God, Montaigne argues, we have no alternative but to try to describe his nature in human or finite terms, but this way of speaking will always be inadequate for our intended subject matter. Sensing the limitations of our mode of cognition, we attempt to describe God

through metaphors and analogies, yet Montaigne urges that such efforts bring us no closer to knowledge of the divine:

What can be more vain, for example, than trying to make guesses about God from human analogies and conjectures which reduce him and the universe to our own scale and our own laws, taking that tiny corner of intellect with which it pleases God to endow the natural Man and then employing it at the expense of his Godhead?⁸

Having posited that God is independent of us, indeed, that he stands above us as our free creator, we have no reason to suppose that he should be limited by (and therefore understandable in terms of) the principles according to which he has chosen to structure our way of understanding things.

The error of rational theology, according to Montaigne, is the supposition that God's reasons can be uncovered through our reason:

We wish to make God subordinate to our human understanding with its vain and feeble probabilities; yet it is he who has made both us and all we know. "Since nothing can be made from nothing: God could not construct the world without matter." What! Has God placed in our hands the keys to the ultimate principles of his power? Did he bind himself not to venture beyond the limits of human knowledge? ('Apology,' 94)

The metaphor of comprehension as containment is at least partly unpacked here. Rules that are self-evident for us need not bind God; we have no reason to think that God has shown us the limits of his power in giving us certain rules of thought. Our inability to circumscribe God rationally has direct consequences both for knowledge of the divine and for the scope of any system of natural science we might hope to construct. Montaigne continues this passage by arguing that experience shows us only what he dubs 'municipal laws,' which we then rashly take to be universal. But all of the regularities we claim to know about nature — that the sun continues in its ordinary course, that the seas and dry land keep separate, that water flows, that a wall is impenetrable to a solid body — all of these rules are freely made for us by God, and might at any moment be suspended. Why should an all-powerful God have restricted his forces in any way, Montaigne asks; in favor of what should he have renounced his privilege? ('Apology,' 95) Montaigne then argues for the unbounded omnipotence of the

⁸ Michel de Montaigne, 'An Apology for Raymond Sebond,' M.A. Screech, trans. (London: Penguin 1987), 81

divine, claiming that because we cannot trap God's power under the laws of our language, even our mathematical principles should not be seen as constraining God's power: Montaigne urges that it would be wrong of us to claim that God is unable to prevent two times ten from being twenty ('Apology,' 100). On Montaigne's view, even if we could know any principles to be built into our way of thinking, admitting the existence of an omnipotent God would leave us unable to establish that these principles of ours were rational rather than, say, pathological; there are no means by which we might prove that reality would have to conform to our ways of thought.

Having argued that our powers of reason do not have absolute validity and cannot reveal the true nature of the operations of the prime mover, Montaigne is also pessimistic about the foundations of science. Our science is a reflection of our parochial principles; we might be radically mistaken about the way things really are in nature. Might nature one day reveal itself to us, Montaigne writes, what errors and misconceptions we should find in our poor science.⁹

II The Cartesian Response

In setting out to construct a firm foundation for science, Descartes decides to accept one of the main conditions that led Sanches and

9 'Apology,' 111. The position Montaigne lays out is not in fact very far from the position Harry Frankfurt ascribes to Descartes in his paper 'Descartes and the External Truths,' a position in which 'we cannot presume that what we determine to be logically necessary coincides with the ultimate conditions of reality or truth. The necessities human reason discovers by analysis and demonstration are just necessities of its own contingent nature' (*Philosophical Review* 86 [1977], 45). Frankfurt emphasizes those passages in which Descartes discusses the incomprehensibility of God as arising from his power over the eternal truths, perhaps at the expense of the passages in which Descartes insists that our idea of God is 'the truest and most clear and distinct of all my ideas' (CSM II, 32), and in which we are said to understand God 'in his very truth and as he is' (CSMK 378). Indeed, at one point (44) Frankfurt reads Descartes as holding that although we know that an infinitely powerful God exists we do not understand him, where our inability to 'comprehend or conceive' God is offered as evidence for an inability to understand him. If I am right to see Descartes as keeping *comprehendere* and *intelligere* in contrast as far as God is concerned, we have grounds to distinguish a failure of comprehension from a failure of understanding here. On this point see also Jean-Marie Beyssade's 'On the Idea of God: Incomprehensibility or Incompatibilities?' in *Essays on the Philosophy and Science of René Descartes*, Stephen Voss, ed. (New York: Oxford University Press 1993).

Montaigne to conclude that this project was impossible: that to understand the foundations of science we must have knowledge of God. Indeed, he claims in an early letter to Mersenne that he would have been unable to discover the foundations of physics if he had not searched for them by first seeking to know God (CSMK, 22). Fourteen years later, in the *Principles*, he is still advancing the claim that science begins with God: 'it is very clear that the best path to follow when we philosophize will be to start from the knowledge of God himself and to try to deduce an explanation of the things created by him' (CSM I, 201). Having accepted that the foundations of science first require knowledge of God, one might expect Descartes to counter the skeptics by arguing that God is not incomprehensible after all, that the divine can perhaps be understood in terms of prior metaphysical or logical laws. On the contrary, he starts by conceding to the skeptics the very points they thought crucial to the strength of their position: Descartes allows that God is incomprehensible, and he agrees with Montaigne that the 'eternal truths' of our thought are God's free creations, and should not be seen as prior restrictions on his power. Two significant developments are required for Descartes even to embark on his project of accepting the relevant skeptical premises while avoiding the skeptics' conclusions.

Where the skeptics moved freely between knowledge and comprehension, Descartes introduces a distinction, making comprehension (or 'grasping') a more restricted notion, applicable only to what is limited, while leaving a wider scope for understanding. To grasp or comprehend something is to recognize its limits, and more specifically, I shall argue, to see it as limited against the background of the infinite, knowledge of which must be secured in a quite different manner (to be discussed shortly). Simultaneously, Descartes erases a distinction that the skeptics had found plausible. Sanches separates 'the philosophers' "infinite," if there *is* such a thing,' from God; Descartes makes God and the infinite interchangeable, claiming that he will 'apply the term "infinite," in the strict sense, only to that in which no limits of any kind can be found; and in this sense God alone is infinite.'¹⁰ The term 'indefinite' is used to apply in geometrical and mathematical contexts in which we might be tempted to speak of infinite measures; according to Descartes what we have in these cases is 'merely some respect in which I do not recognize

10 CSM II, 81. The claim that God is the only truly infinite being also appears in a number of other places, notably at I.27 of the *Principles* and at CSM II 253-4 of the fifth replies. On the novelty of Descartes's treatment of the infinite, see Alexandre Koyré's *Essai sur l'idée de Dieu et les preuves de son existence chez Descartes* (Paris: Leroux 1922; facsimile rpt. Garland, 1987), 126.

a limit' (CSM II, 81). A line extended without end in Euclidean space is infinite in a sense, and yet it is not utterly boundless; it is restricted to one dimension; indeed, we can understand it by grasping how it is bounded, for example by seeing it as the intersection of two planes. The unique being that is 'limitless in every respect,' on the other hand, cannot be grasped or comprehended: Descartes maintains that 'if I can grasp something, it would be a total contradiction for that which I grasp to be infinite. For the idea of the infinite, if it is to be a true idea, cannot be grasped at all, since the impossibility of being grasped is contained in the formal definition of the infinite' (CSM II, 253).

With these changes to the skeptical position in place, Descartes aims to take the incomprehensibility of God not as an obstacle to our knowing him, but as a source of knowledge. If it is part of the formal definition of the infinite that we should fail to grasp it, then recognition of our failure to grasp something can be instructive. In a letter to Clerselier, Descartes says:

... it is sufficient for me to understand *the fact that God is not grasped by me* in order to understand God in his very truth and as he is, provided I judge also that there are in him all perfections which I clearly understand, and also many more which I cannot grasp. (CSMK 378, his emphasis)

Whereas for Sanches the realization that we are unable to comprehend God led directly to the conclusion that we should give up hoping to gain knowledge of him, for Descartes, this realization is part of understanding God 'in his very truth and as he is.' Descartes draws a positive connection between the nature of God and his incomprehensibility. Because our comprehending something is a matter of assessing its limitations, we should expect not to comprehend infinite beings: 'Since the word "grasp" implies some limitation, a finite mind cannot grasp God, who is infinite' (CSM II, 273).

The trick of understanding something by recognizing its incomprehensibility is not one that can be repeated for any object other than God; indeed, this feature of God is supposed to put knowledge of him (and his attributes) on a different footing from knowledge of anything else. Nothing other than God is properly said to be incomprehensible in the Cartesian scheme: all created things can be accounted for in terms of the eternal truths (CSMK 25), and these are all supposed to be comprehensible — indeed, 'there is no single one that we cannot grasp if our mind turns to consider it' (CSMK, 23). While we may contingently fail to comprehend something other than God, according to Descartes, nothing other than God is strictly speaking incomprehensible for us; that is, something real is incomprehensible if, and only if, it is divine (or, equivalently for Descartes, strictly infinite). So knowledge of God 'in his

truth and as he is' requires not only that we happen to fail to comprehend him, but that our idea of God should be recognized as exhibiting something that uniquely distinguishes God from all other entities; namely, the fact that God lies beyond the limits of comprehension. Where Montaigne had argued that the nature of God had to be unknown to us because an incomprehensible being would be completely independent of the rules of our finite rationality, Descartes sees God's incomprehensibility as a positive link between God's nature and the limits of our rationality. It is at least partly in virtue of some kind of self-consciousness about the nature of our own cognitive activity that we are supposed to see that there is something that exceeds our powers of comprehension.

Here one might wonder exactly how we are supposed to sense the limits of our powers of comprehension, and how a sense of these limitations might be useful to the subsequent acquisition of knowledge. A significant interpretative constraint is that Descartes wants to contend that awareness of God or the infinite must support 'the certainty and truth of all knowledge' (CSM II, 49). He also claims both that all comprehension involves limitation, and much more specifically, that this limitation must be understood against the backdrop of the infinite: rather than starting with finite things and building up to a sense of what is involved in the infinite, for Descartes an idea of the infinite is prior to all ideas of finite things, and 'all limitation implies a negation of the infinite' (CSM II, 252). In addition, Descartes endorses the spatial metaphor of comprehension or grasping as containment, writing in a letter to Mersenne that 'it is possible to know that God is infinite and all powerful although our soul, being finite, cannot grasp or conceive him. In the same way we can touch a mountain with our hands but we cannot put our arms around it as we could put them around a tree or something else not too large for them' (CSMK 25). But the notion that God is 'too large' for our powers of comprehension is not supposed to imply that he is beyond the bounds of what we can know: 'To grasp something is to embrace it in one's thought; to know something, it is sufficient to touch it with one's thought' (*ibid.*). These remarks leave open the exact relation between embracing something in thought and merely touching it, and contain no explicit statement of why Descartes should claim that nothing can be embraced or comprehended without a prior perception of the infinite. What I shall argue is that the most promising way of making sense of this whole set of claims would be to read Descartes as offering us a broader version of the metaphor of comprehension as containment: so, in every act of comprehension one starts with the infinite, and then places restrictions upon it. Just as our assignments of spatial location make sense only if they are not mutually independent acts (one must take oneself to be working with a single, unified framework in figuring

out the positions of a series of physical objects)¹¹ so, more generally, all rational acts of comprehension are constrained by a basic requirement of unity in being directed at a single world. The determinacy of our beliefs about particular finite objects rests on a recognition of the limitations of those objects, where these limitations cannot be assessed independently for each such object, but can only be recognized within a unified framework: all finite objects must be measured against a single backdrop.¹² My aim in what follows will be to argue that, for Descartes, awareness of God is to serve exactly the function of awareness of this requirement of unity.¹³

This equation is not stated explicitly anywhere in the text. However, some measure of speculation is inevitable on the issue of just how the infinite is prior to the finite, given Descartes's rather cryptic presentation of the topic. Drawing this identification between awareness of God and awareness of the unity underlying judgments about finite things can be shown both to be consistent with the key texts on this issue, and to work as a viable philosophical move in its own right, given the role subsequently assigned to God in Cartesian epistemology. It is because the same starting point is a background to each of our acts of comprehension

11 A point most famously argued in Kant's *Critique of Pure Reason*, at A24/5-B39.

12 The following sections say more about this idea of unity and its textual support in Descartes, and while I hope to show it as plausible enough to be philosophically interesting, it is beyond the scope of the present paper to give a full-blown philosophical defense of the idea itself. There are some interesting and I think relevant arguments about determinacy in general, and the relationship between judgments of location and thoughts about physical objects in particular, both in Bill Brewer's *Perception and Reason* (New York: Oxford University Press 1999) and in John Campbell's *Reference and Consciousness* (New York: Oxford University Press 2002).

13 Such an emphasis on unity is more commonly associated with Kant than with Descartes, although it should be noted that Kant himself saw such an idea in Descartes. In 'What is Orientation in Thinking?' Kant identified 'the source of the Cartesian proof of God's existence' as follows: 'Since reason needs to assume reality as given before it can conceive the possibility of anything, and since it regards those differences between things which result from the negations inherent in them simply as limits, it finds itself compelled to take a single possibility — namely that of an unlimited being — as basic and original, and conversely, to regard all other possibilities as derivative.' Although Kant contends that such proofs 'accomplish nothing in the way of demonstration,' he maintains that 'they are not for this reason by any means useless' (*Kant: Political Writings*, H. Reiss, ed. [Cambridge: Cambridge University Press 1970], 241). Thanks to Hans Lottenbach for this reference, and discussions on its relevance. The last section below endorses the reading of Descartes's argument as non-demonstrative, and takes up the question of what use it might nonetheless have.

that these acts are not understood as isolated and mutually independent psychological episodes (whose coordination would be something of a mystery) but as a series of coordinated efforts at making sense of one reality. Where the pre-Cartesian skeptics had emphasized the limitations of the various individual things we can comprehend, placing the overall basis of comprehension (if there could be such a thing) out of our epistemic reach, Descartes's position refuses to restrict our epistemic reach to what we can comprehend: not only are we aware of limited things through grasping their limitations, but we also come to know the infinite because we can discover, through reflection on the systematic nature of our own cognitive activity, that it is what is invariably presupposed as the single backdrop to any meaningful act of comprehension.

If this reading of Descartes can be sustained, Descartes and the skeptics will stand in sharp contrast on the relation between God and knowledge. The skeptics present God as a figure who could tamper with nature at various unknown points; on their view, God's relation to any particular object, judgment or act of comprehension is a matter of uncertainty. What is striking about Descartes's view, or, to be more precise, the aspect of Descartes's view emphasized here, is the effort to try to draw an initial presumption about the infinite uniformly into every judgment we make. On this account the Cartesian God is not an epistemic interloper inserted between the soul and nature 'designed precisely so as to guarantee that everything that Descartes says is true,'¹⁴ as if a special act of divine providence ensured the veridicality of each of our appropriately rational beliefs. Reducing the Cartesian God to a friendly interloper would leave one hard-pressed to explain how Descartes could ever be in a position to claim *knowledge* of this being's special arrangement for us, and one might readily conclude that Descartes has slender positive resources for the struggle against skepticism, particularly in a contemporary climate less hospitable to claims about divine benevolence.¹⁵ Emphasizing the proto-Spinozistic aspects of the Cartesian God, on the other hand, not only situates Descartes's idea of God closer to the contemporary idea of nature, but also suggests fresh possibilities for its role in a theory of knowledge.¹⁶ Still, if contemporary epistemologists have tended to over-

14 Bas Van Fraassen, *The Empirical Stance* (New Haven: Yale University Press 2002), 1

15 In his 'Understanding Human Knowledge in General,' Stroud offers a forceful version of this criticism of Descartes. See especially 112-20.

16 Since Descartes considers God an infinite spiritual substance distinct from matter, there is of course still considerable distance between his view and the contemporary view of nature; in particular, his talk of all that is real being found in God cannot be

look the epistemic role that might be played by a Cartesian God whose unique infinitude is emphasized, it is fair to allow that some effort is needed to articulate this role, and to show how this view of God is consistent with the relevant texts.

The metaphysical claim that what is real must be situated within the infinite crops up in a number of places in the *Meditations*, in the Fourth Meditation's mention of 'the true God, in whom all the treasures of wisdom and the sciences lie hidden' (CSM II, 53). and most notably in the Third, where Descartes claims that 'whatever I clearly and distinctly perceive as being real and true, and implying any perfection, is wholly contained in [the idea of God]' (CSM II, 32). However, the epistemological claim that our comprehension of any finite thing always requires the presupposition of such a backdrop is a much stronger claim, and as such, is harder to defend. One might be particularly concerned that Descartes himself has already given us an example of a finite thing comprehended in isolation: the meditator claimed knowledge of his own existence in the Second Meditation before even addressing the question of God in the Third. However, when he reflects back on his knowledge of his existence in the Third Meditation, Descartes writes that 'my perception of the infinite, that is God, is in some way prior to my perception of the finite, that is myself' (CSM II, 31). This seems surprising; he hadn't drawn our attention to the prior perception at the time, and in fact it might have seemed that his earliest self-knowledge had no prior presuppositions whatsoever, and was secured against doubt for just that reason.

The whole passage from the Third Meditation runs as follows:

... I must not think that, just as my conceptions of rest and darkness are arrived at by negating movement and light, so my perception of the infinite is arrived at not by means of a true idea but merely by negating the finite. On the contrary, I clearly understand that there is more reality in an infinite substance than in a finite one, and hence that my perception of the infinite, that is God, is in some way prior to my perception of the finite, that is myself. For how could I understand that I doubted or desired — that is, lacked something — and that I was not wholly perfect, unless there were in me some idea of a more perfect being which enabled me to recognize my own defects by comparison? (CSM II, 31)

On the face of it, this argument does not seem very compelling: it seems particularly strange to assert that even in order for me just to understand

understood to mean literal spatial containment in any ordinary sense. But given that all finite things have necessary truths as their essences, and these truths are all ideas in the mind of God, it is fair to say that God contains the organization of all finite things.

that I doubt, I must possess the idea of a perfect being. It would be hard enough to claim that in order to be aware that a doubting or desiring creature is finite, I must possess an idea of the infinite; Descartes is here making the stronger claim that in order to understand that I doubt at all, I need a prior perception of God. One might wonder whether I could not come to some understanding of the fact that I now doubt (or desire) simply in virtue of my possession of some feeling, say, without regard to how I might be compared to other beings. Furthermore, even if comparison were required, it is still hard to see why it should have to be comparison with an infinite being; Descartes himself seems to suggest that something less could suffice by mentioning only 'a more perfect being' on the second gloss.¹⁷ What is there in Descartes's original search for self-knowledge that might indicate the need for a prior perception of the infinite?

Returning to the relevant passages in the Second Meditation one finds no direct statements about a God against whose perfection my doubting can be recognized. However, even if Descartes's presuppositions about the infinite are not made explicit, a closer examination of the structure of the argument can support the claim that these presuppositions are in play, and in fact must be in play if the meditator is to claim knowledge of the self as a proper object, as something real, something potentially capable of taking on various states.¹⁸ The meditator does not simply call

17 Janet Broughton presents a forceful summary of the difficulties for Descartes on this point in chapter 8 of her *Descartes's Method of Doubt*, drawing attention not only to the apparent weakening of Descartes's position in this passage, but also to the comment in the Third Replies that the idea of God's understanding could be arrived at by extending one's idea of one's own understanding (Princeton: Princeton University Press 2002). I am strongly inclined to agree with Broughton that there is something incomplete or even misleading in the remark from the Third Replies; to be consistent with what Descartes says elsewhere about God's infinite attributes, extending one's idea of one's own understanding could at most be a device for conjuring up one's existing idea of God's understanding, and not a means by which we could initially form that idea. Broughton argues very plausibly that Descartes's considered position is better revealed in the Fifth Replies, where he rejects the notion that one could form the idea of God by amplification: 'it is formed all at once and in its entirety as soon as our mind reaches an infinite being which is incapable of any amplification' (CSM II, 256). My differences with Broughton on the apriority of the idea of God center on the nature of comprehension, although my position will still aim to be compatible with her overall strategy of taking the idea of God to be one of the necessary conditions of the possibility of rational doubt. In fact, I want to argue for a stronger position in which the idea of God is a necessary condition of rational thought more broadly.

18 The parallel in the Second Meditation between the robust existence of the wax, as

attention to some phenomenal qualities of his inner life and claim that these goings-on imply the desired conclusions: the move is not just from feelings of doubt to knowledge that one is doubting, or for that matter, knowledge that one exists. The original argument is divided into cases covering the various possible origins of the doubts of which the meditator is aware: first the meditator contends that 'if I convinced myself of something, then I certainly existed.' Then he raises the possibility that he is subject to chronic deception, but 'In that case I too undoubtedly exist, if he is deceiving me.' It is a vital presumption of the argument that the doubting of which one is conscious is something that needs a cause; doubting on its own is taken to be something that is incomplete, something that demands an explanation in terms of some source, whether internal or external. Here Descartes must be concerned with a skepticism in which the causal origins of my doubts (or representations, more broadly) are unknown; this argument does not meet the demands of a more radical skepticism in which we worry that there are no causes at all.¹⁹ If one is permitted to assume that doubting is an incomplete phenomenon, something that points to the need for a cause outside of itself, then this cause might be either me or not-me (with the evil genius offered as the worst-case version of what the not-me alternative could imply for knowledge of anything). If sheer consciousness of the mental activity of doubting were enough to establish the existence of the self, then reflection on either case would be sufficient for the conclusion about one's existence, but the mediator takes pains to reflect on both cases before deriving his conclusion: 'So after considering everything very thoroughly, I must finally conclude that this proposition, *I am, I exist*, is necessarily true whenever it is put forward by me or conceived in my mind' (CSM II, 17). That one must consider *everything* is crucial here: it is not until one has engaged in a systematic series of judgments that one is able to claim knowledge of any finite thing, even oneself. Doubting

something capable of taking on various shapes, etc., and the robust existence of the self, capable of various modes of thought, is nicely examined by Amy Schmitter in her essay 'The Wax and I: Perceptibility and Modality in the Second Meditation,' in *Archiv für Geschichte der Philosophie* 82 (2000) 178-201.

19 The more radical skeptic is nicely described by John Campbell: 'The key skeptical possibility, he may say, is that the perceptions I have may not be caused at all. They may have no external cause. Perhaps there is only a sequence of images. Perhaps all there is, constituting the entire universe, are images and the void' ('Berkeley's Puzzle,' in *Conceivability and Possibility*, Hawthorne and Gendler-Szabo, eds. [Oxford: Oxford University Press 2002], 132). One might think that the final skeptical argument of the First Meditation obliges Descartes to refute this more radical form of skepticism directly; the last section of this paper will argue that it does not.

has to be taken as incomplete, and then the two ways in which this doubting could be set in a complete context (caused by me, caused by something else) have to be exhaustive. This constructive dilemma argument depends on the presumption that this completeness is required (so that awareness of doubting must be awareness of something incomplete) and that it is available (so that the disjunction can be seen as exhaustive, and there is no possibility of a third situation in which the doubting simply has no cause). It is only with these conditions in place that consciousness of doubt affords knowledge of something as robust as the existence of the self.

Where Sanches had seen the mind as dashing back and forth in introspection, attempting to survey an 'abstruse, trackless' terrain and finding nothing to grasp, Descartes is optimistic about the prospects for a genuinely systematic approach. A feeling of doubt on its own does not afford me knowledge or understanding of my own existence, or even the full-blown *understanding that I doubt*; one needs to consider an organized sequence of possibilities even to be aware of the 'I' as a genuine object about which knowledge or understanding could be possible.²⁰ To reach a conclusion that will be sheltered from doubt one cannot see oneself as having had a few disjointed thoughts: one has to see one's various efforts at comprehension as excluding doubt in a systematic fashion. One's thoughts must be properly united and directed at a single reality in order to yield secure knowledge of an object.²¹

The relation of self-knowledge to knowledge of God is taken up again in the conversation with Burman; in response to the charge that self-

20 By the same token, it is exactly the claim to have re-identified a single united object in a succession of introspective judgments that generates the possibility of Humean challenges to claims of knowledge here.

21 Objection: it is one thing to speak of a systematic series of judgments, and another to leap all the way to the presupposition of a complete unity or a single, infinite reality. More will be said about the manner in which one aims to be systematic; the hope is to establish that merely making several judgments in the same manner, or several mutually compatible judgments, would be insufficient for knowledge. That this is Descartes's aim is suggested in the passages in which he places very strong constraints on knowledge, for example, in his remarks on the atheist geometer in the Second Replies: 'The fact that an atheist can be "clearly aware that the three angles of a triangle are equal to two right angles" is something I do not dispute. But I maintain that this awareness of his is not true knowledge, since no act of awareness that can be rendered doubtful seems fit to be called knowledge' (CSM II, 101). The ideal Cartesian strategy would aim to establish that judgments that were only partly systematic could always be rendered doubtful. These issues are taken up in the last section below.

knowledge really was prior to knowledge of God, Descartes is reported to have countered that in the relevant part of the *Meditations*:

... the author recognized his own imperfection by recognizing the perfection of God. He did this implicitly if not explicitly. Explicitly, we are able to recognize our own imperfection before we recognize the perfection of God. This is because we are able to direct our attention to ourselves before we direct our attention to God. Thus we can infer our own finiteness before we arrive at his infiniteness. Despite this, however, the knowledge of God and his perfection must implicitly always come before the knowledge of ourselves and our imperfections. For in reality the infinite perfection of God is prior to our imperfection, since our imperfection is a defect and negation of the perfection of God. And every defect and negation pre-supposes that of which it falls short and which it negates. (CSMK 338)

This passage concedes that the meditator made no explicit mention of the perfection of God in his discovery of his own finitude. Here we see again not only the metaphysical claim that imperfect beings are dependent on perfect ones (and in fact that their limitations are negations or restrictions on what is found in the infinite), but also the epistemological claim that knowledge of perfection must always precede knowledge of the imperfect or finite, at least *implicitly*. Implicit knowledge is seldom a transparent topic; here Descartes's meaning is not easy to follow, but some of the implications of the passage can be sorted out. Again there is the assertion that imperfect or limited beings are not known in isolation: knowledge of them is enabled by the presupposition of something greater, indeed here it is full-blown perfection that is required as an initial presupposition. This presupposition is specifically a requirement on *knowledge* of the self, not just thought of the self, or the capacity to direct attention to the self. Knowledge of a finite thing (that is, anything other than God) requires the capacity to judge how it is limited, or how it can fit in among the other limited things that together constitute reality as a whole. One way of describing the presumption that the various finite things we encounter can always be situated this way or comprehended as parts of a single system would be to say that we are always presupposing a single perfect being as the context of the limited things we comprehend.

Negative remarks on how God is not to be understood are easier to find than positive ones. Descartes takes pains to distance himself from the suggestion that he is imagining God to be 'like some enormous man,' as he puts it in the Fifth Replies (CSM II, 252), a being among other beings, or something that one might grasp in some ordinary fashion. One of Descartes's rare positive ways of characterizing the cognitive approach appropriate to God is to insist that it is in some sense passive, rather than active. In the First Replies he writes:

... God cannot be taken in by the human mind, and I admit this, along with all theologians. Moreover, God cannot be distinctly known by those who look from a distance as it were, and try to make their minds encompass his entirety all at once. ... But those who try to attend to God's individual perfections and *try not so much to take hold of them as to surrender to them*, using all the strength of their intellect to contemplate them, will certainly find that God provides much more ample and straightforward subject-matter for clear and distinct knowledge than does any created thing. (CSM II, 81-2, my emphasis)

The language of surrender is odd, but it fits with the idea that awareness of God is always there in the background (although not necessarily more than implicitly recognized by those who have yet to make the turn to Cartesianism), presupposed as the condition for the comprehension of any other thing. The notion that the real has a certain unity — so one's dreams, for example, are not giving one veridical knowledge of a parallel world, an objectively fragmentary world, or a different world every night — is not another optional judgment one makes (or might refrain from making) in the course of acquiring knowledge of various particular things, but a presupposition one simply finds oneself having made, and cannot help but make if one's mundane acts of comprehension are to have their ordinary objective import. The good Cartesian has become self-conscious of the need to subject himself to this requirement. The atheist, or the person who is attempting to grasp the notion of God incorrectly, could still find herself attempting to ensure the unity and consistency of her judgments, and even gain something that counts as comprehension of particular mundane objects in this fashion, but as long as she fails to recognize the systematic nature of her cognition these particular acts of comprehension do not add up to understanding. To the extent that her considered judgments about particular things are made to align with one another, this is from her perspective a happy accident, perhaps a product of good but unreflective natural cognitive instincts. By contrast, what the Cartesian thinker has would be a deeper reflective understanding of his own cognition, in virtue of which his particular acts of comprehension do not stand as isolated mental acts but yield a science, furnishing him with something that counts not just as comprehension, but also as proper understanding of the particular objects they address.²²

22 Cf. John Carriero's characterization of the atheist geometer in his *Descartes and the Autonomy of the Human Understanding* (New York: Garland 1990): 'the atheistic geometer lacks an ability to refute the evil genius hypothesis. But to lack this is to lack a lot. It is not just that the atheistic geometer is unable to handle a particular piece of sophistry that might come his or her way. Rather, I hold that to lack *scientia* is to lack a satisfactory argument for the connection of one's cognition to the world: it is to lack a defensible understanding of what one's geometrical activity comes to' (99).

The results achieved by the merely instinctive rationality of the atheist are subject to the possibility of being unsettled by apparently reasonable skeptical doubts, as reflection is brought to bear upon those natural instincts. The results of the self-conscious Cartesian, on the other hand, can be fortified against this form of skepticism, if the Cartesian can establish that rational reflection does not pose the same threat to his acts of comprehension.

Before giving direct attention to the question of shelter from skepticism, however, it is worth examining a few more points at which Descartes discusses the role of the infinite God. Descartes certainly considered his understanding of God to be both genuinely novel and little understood; in an early letter to Mersenne he urges his correspondent to publicize his view, adding that 'I want people to get used to speaking of God in a manner worthier, I think, than the common and almost universal way of imagining him as a finite being' (CSMK 23). A decade later, Descartes continues to insist on the importance of understanding God as properly infinite, and continues to claim that almost no one has yet managed to make this turn. In another letter to Mersenne early in 1641, Descartes criticizes an outlandish proof of the existence of God. But the author's major failing, according to Descartes, is his way of attempting to understand the infinite:

I have read M. Morin's book. Its main fault is that he always discusses the infinite as if he had completely mastered it and could comprehend its properties. This is an almost universal fault which I have tried carefully to avoid. I have never written about the infinite except to submit myself to it, and not to determine what it is or is not. (CSMK 172)

This is the core of Descartes's attitude to the infinite: he claims never to have written about it *except to submit himself to it*. Morin commits what he describes as an 'almost universal fault' in discussing the infinite as though it were an object of comprehension, something to be grasped or mastered rather than surrendered to. The Cartesian strategy of submitting oneself to the infinite is (on the reading favored here) a matter of being conscious that one is subject to the requirement that all of one's ensuing acts of comprehension must be directed at the same unified reality. If Descartes is right about a perception of the infinite being prior to every other cognitive achievement, there should be no philosophical argument starting from more basic premises that will lead us to agree that there is such a thing as this real unity: this idea cannot be actively derived or constructed out of other material in the mind. Nevertheless, we can read the Meditations as including, among other things, an effort to show us the force of this demand for unity in our cognition.

Emphasizing the manner in which one is properly to gain understanding of the infinite makes sense of what otherwise seems like a rather contradictory shift in the *Principles*. At I.24, Descartes explains that we acquire ‘the most perfect scientific knowledge’ by reasoning from knowledge of God to knowledge of created things, ‘bearing in mind as carefully as possible both that God, the creator of all things, is infinite, and that we are altogether finite’ (CSMI, 201). We are least likely to go wrong, Descartes argues, if we keep the infinitude of God firmly fixed in our minds as we philosophize. And yet it soon seems to be the case that this supposedly helpful awareness of the infinitude of God will be of no use at all: two paragraphs later, Descartes contends that we cannot base our arguments on the nature of the infinite, and is happy to claim that ‘we will never be involved in tiresome arguments about the infinite’ (CSM I, 201-2). Descartes then sounds a familiar note in explaining this stance: ‘since we are finite, it would be absurd for us to determine anything concerning the infinite; for this would be to attempt to limit it and grasp it.’ This progression in the text only makes sense if there is another manner to keep the nature of God fixed in our minds other than by circumscribing it or attempting to make the infinite another object of comprehension alongside the finite things we judge.

It remains to be seen what ground is gained against skepticism by developing this sort of account of comprehension, or what exactly the epistemic value of its built-in appeal to the infinite might be. No doubt it would help to develop the vague talk of a unified reality into something more definite. So far we have only the suggestion that comprehension is not simply the ingestion of an isolated image but the act of circumscribing the limits of a finite thing which forms part of reality, where reality is not a random collection of things but something unified. To explain this idea of unification, the natural Cartesian move is to bring clear and distinct ideas into play: to say that reality is unified is to say that its parts are intelligibly related, or related according to rational principles. For Descartes, the relevant principles would include notions of causal and mathematical order; indeed, he can be read as partially anticipating Kant in considering reality unified insofar as physical objects are geometrically organized in a single space, and subject to a thoroughgoing causal order. God can be said to guarantee the truth of clear and distinct ideas like the causal principle, insofar as nothing could be real, or figure as a component of that unity, if it were to violate the relevant rules of the unity — if it were to be uncaused, or violate the mathematical principles of determinate magnitude, for physical things, and so on. We sort out what is real, in the ordinary course of comprehension, by means of these principles; if we do so well we gain knowledge of the world.

Or so we hope. The skeptic means to challenge both our ordinary acts of comprehension, and more radically, the validity of the underlying principles of rational order. The First Meditation first raises worries about the accuracy of our judgments about small and distant things, and the location of particular things in space (am I in bed or before the fire?) and culminates in deeper worries, like the worry that our tendency to organize physical things geometrically in space at all is pathological, rather than rational; perhaps there really is 'no extended thing, no shape, no size, no place' (CSM II, 14), despite the subjective impression that all these are real. What is particularly disturbing about the skeptical worries of the First Meditation is that they suggest that reason is self-destructive: they are what one might call acute skeptical worries. To explain what acute skepticism is, it is useful to outline two other kinds first.

At the low end of the scale, one could have a merely capricious skepticism, in which one sometimes wonders whether perhaps one is somehow just getting it wrong, or even getting it all wrong, in some completely unspecified way. What if nature were suddenly to reveal herself to us and show our science to be wrong? What if God or an angel were to tell you tomorrow that you had been somehow mistaken? Capricious skeptical questions are not necessarily easy to answer, but one consolation is that there are few obvious positive reasons to motivate capricious skepticism. Occasional moments of capricious skepticism might encourage a healthy level of humility, perhaps, but it doesn't seem that one is under any obvious rational obligation to be capriciously skeptical. More systematic forms of skepticism have a stronger claim to being rationally motivated. A moderately gentle form of systematic skepticism is the mild skepticism motivated by the thought that, for any given belief, one can always ask about its grounds. The mild skeptic leaves open the possibility that a rationally satisfactory answer will ultimately be available for any challenged belief, and perhaps even that some beliefs can reasonably be characterized as self-justifying. The acute skeptic, by contrast, is the one who argues that a consistent, thorough application of rational procedures will deliver contradictory or self-undermining results.²³ The skepticism of the First Meditation aims to be

23 The division of skepticism into mild and acute forms is not meant to be exhaustive or exclusive; other kinds of skeptical worry are possible, and it is also possible to combine some degree of mild and acute skepticism. In contemporary discussions, acute skepticism is a particularly important variety, however, especially given the influence of contextualists such as Lewis and DeRose, who hold that in giving thorough rational attention to the concept of knowledge we create a context in which most ascriptions of knowledge are false. For these contextualists, the ascriptions of knowledge we intuitively find plausible are only valid in contexts in which we are

acute; for example, reason itself is characterized as giving rise both to the spontaneous judgments of arithmetic, geometry, and so forth, and to doubts about these very judgments, through the apparently rational argument concerning the origin of my nature. Unlike mild skepticism, which is compatible with a positive attitude to reason, acute skepticism aims to find reason self-destructive, or to show that perfect rationality would lead to massive suspension of belief.

The following section aims to show how the separation of comprehension and understanding can diminish the viability of acute skepticism. Properly analyzed into its active and passive aspects, reason itself does not recommend the worries of the First Meditation; these acute worries have at most the initial appearance of rationality. Attempting to deflate acute skepticism into mild skepticism may be a less ambitious goal than the original Cartesian goal of curtailing skepticism altogether, but if there are materials in Descartes's epistemology even for this more modest result, he still deserves more credit than is ordinarily accorded him for progress against the skeptic.

III Progress Against Skepticism?

To mark that the line of argument mapped out in what follows is Cartesian in inspiration rather than detail, it will be dubbed the 'broadly Cartesian' strategy against skepticism, and its advocate will be called 'the Cartesian' rather than 'Descartes.' The broadly Cartesian strategy begins by noting that in its properly active function, reason consists in acts of comprehension directed at finite objects, or things other than God; we comprehend these things by grasping their limits, and locating them relative to each other in the unified framework of what we accept as real. On the general spectrum of views about judgments of what is real, the Cartesian position lies far from views like that of James Pryor, who urges that our experiences give us immediate justification for our perceptual beliefs in virtue of 'the peculiar "phenomenal force" or way our experiences have of presenting propositions to us,'²⁴ and much closer to Rudolf Carnap's position in 'Empiricism, Semantics and Ontology.' According to Carnap, 'To recognize something as a real thing or event means to

failing to exercise perfect rational insight into the concept of knowledge. Thus there is a sense in which contextualists hold that it is only by being less than thoroughly rational that we can avoid almost total suspension of belief.

24 James Pryor, 'The Skeptic and the Dogmatist', *Nous* 34 (2000) 517-49, at 547

succeed in incorporating it into the system of things at a particular space-time position so that it fits together with the other things recognized as real, according to the rules of the framework.²⁵ Although the Cartesian attitude to 'the rules of the framework' is quite different from Carnap's, the Cartesian joins Carnap in insisting that judgments of reality must involve fitting things together in a systematic way.

The Sixth Meditation offers some indications of how this conception of comprehension as constrained by the consciousness of unity is to function in sorting out what is real. There Descartes argues that the doubts raised by the Dream Argument may be rejected because 'dreams are never linked by memory with all the other actions of life as waking experiences are.' Where one is thinking about real, as opposed to dream events, one is supposed to be able to organize them into a sequence that is completely integrated with all the other events one takes as real: 'when I distinctly see where things come from and where and when they come to me, and when I can connect my perceptions of them with the whole of the rest of my life without a break, then I am quite certain that when I encounter these things I am not asleep but awake' (CSM II, 62). Although the point of the passage is to quell the doubts of the Dream Argument, Descartes is advancing a particularly strong condition on rationally taking things as real. The idea here is not just that my perceptions must have some measure of coherence in order for me to take them as veridical, but that it must be at least in principle possible for me to connect my current perception in a *completely* thorough manner — 'with the whole of the rest of my life without a break' — if the perception is rationally to be taken as a perception of something real. With the demands of time and the infirmity of our nature such an exercise of connecting one's perceptions will never be done completely, or even rarely to any great extent, but the Cartesian recognizes the legitimacy of a standing demand to connect what is now taken as real with *all* the rest of what one now takes as real. No act of comprehension stands on its own, say, certified by an accompanying sentiment of psychological conviction; in order to be taken as real each individual finite thing that is grasped must be located within a single unified framework, and thereby given some position relative to all the other things one has successfully comprehended.²⁶

25 Rudolf Carnap, 'Empiricism, Semantics and Ontology' *Revue Internationale de la Philosophie* 4 (1950) 20-40, at 22. Note that Carnap will not make use of the active/passive contrast in the way that the Cartesian does.

26 The 'successfully' matters: new experience could doubtless prompt one to revisit and overturn some past act of comprehension, some past judgment about how one's

Any given finite object can reasonably be the target of active rational scrutiny: if there is a cup on the table in front of me I can take no end of steps to comprehend it better, testing it in its interactions with other finite objects to assure myself that it is the ceramic item I take it to be. Although we do make mistakes about the qualities and even the existence of particular finite objects, in mundane cases of error and illusion it at least seems to be the case that our errors and illusions tend to be corrigible with closer active scrutiny. Mild skepticism is certainly possible here: we may note that any particular empirical belief can be challenged, or wonder whether any particular empirical belief has received sufficient support, but typically there is no bar to gathering further support, and the cases in which further support is unavailable to us (e.g. beliefs about very distant objects) do not raise any particular alarm about the legitimacy of perceptual belief, or about reason in general. The skeptic who invites us to worry about our grasp of the entire external world, however, is (as has often been remarked) doing something rather different from pointing to the possibility of closer active attention to any or even many of the things we take ourselves to encounter in daily life. This radical skeptic urges that all of our acts of comprehension are fruitless; no amount of active probing could show us whether we were dealing with a real ceramic cup or just a part of a global illusion. What makes this skepticism acute is the suggestion that since rational scrutiny itself turns up this possibility of global illusion, properly thorough rational scrutiny of any particular empirical belief should tend to destroy, rather than increase, our confidence in it. It is only by forgetting or setting aside the perfectly rational possibility of global illusion that we are able to persuade ourselves we know the cup is on the table.

If the skeptic initially appears to be right that completely thorough rational scrutiny should erode confidence in any particular empirical belief, the Cartesian can maintain that this appearance stems from a confusion about 'rational scrutiny,' from a failure to distinguish its properly active and passive aspects. The Cartesian can begin by noting that if properly active rational scrutiny or comprehension consists in 'connecting up perceptions,' then comprehension itself does not in fact undermine my judgment that there is a cup in front of me in the scenario in which all my other perceptions accord with the current presentation

life had gone (I see only now that yesterday's 'oasis' was an illusion). The imperative is to connect perceptions to the rest of one's life, where this has factive force, not simply to what one has once judged one's life to be, or the rest of the judgments one happens to have made in the past, whether or not one is now prepared to endorse them. Complications involving coherent illusions will be discussed shortly.

of what seems to be a cup. As the skeptic himself is eager to press, when my perceptions all accord with one another, the sheer activity of fitting them together will not yield any results that outright contradict the empirical judgments I am initially inclined to make. As long as 'rational scrutiny' extends no further than this kind of effort at comprehension, and enough of my perceptions are orderly, rational scrutiny will not suffice to overturn any particular empirical belief conforming to that order.²⁷ Rational scrutiny in such a scenario is at worst ambiguous, rather than destructive. The Cartesian can even grant that this conception of comprehension does not on its own give us an unconditional right to reject skeptical worries; if one were to discover that one's perceptions simply could not be connected in a suitable fashion, then one might have rational cause for concern. For example, active rational scrutiny could properly lead us to worry in the kind of scenario James Pryor describes as threatening to *prima facie* empirical justification, for example one in which 'a ticker tape appears at the bottom of your visual field with the words "You are a brain in a vat"' ('The Skeptic and the Dogmatist,' 538). But to note that we might in such circumstances face rational worries about our grasp on things in the world is not to concede that those worries are already rational in our present circumstances, as long as rationality is restricted to the connection of one's actual perceptions.

The advocate of the broadly Cartesian strategy could even concede that it is active rational scrutiny that turns up the possibility of the skeptical scenario, insofar as active reason is what enables one to learn about such things as odd causal chains that can produce misleading perceptions, through empirical investigation of perceptual psychology and so forth. However, given that active reason depends on inputs of appropriate supporting perceptions to reach its conclusions, mundane acts of comprehension are not threatened by the recognition of the mere *possibility* of extensive illusion in one's own case. One would need *actual* perceptions of the kind Pryor mentions to undermine any particular mundane act of comprehension in a way that would favor acute skepticism. Mundane acts of comprehension are of course undermined often enough in a way that does not favor skepticism; that is, when we

27 It is important to note that this claim is strictly negative; given that the skeptical scenario is specified so that no amount of empirical evidence will indicate whether it obtains, empirical evidence on its own does not tell against the hypothesis that I am presented with a cup. This is not to say that empirical evidence on its own settles the question the other way; to know that I am presented with something real, something more than empirical evidence or the deliverances of active reason is required. More on this shortly.

experience mundane failures to connect our perceptions adequately, the kinds of failures to connect that ordinarily enable us to identify and appropriately dismiss dreams and illusions, for example. To worry, in any given case, whether we have done this well is only mild skepticism. But as long as my reason is restricted to the properly active function of connecting my perceptions according to rules like those of causation and geometry, and enough of my perceptions are orderly, active reason does not produce the acute skeptic's contradictory results of urging both trust and doubt in any given empirical proposition at all.

The skeptic may now find it troubling that reason so conceived would function exactly the same way in what we take to be the real world and in an orderly illusion: unlike the question of whether the cup is ceramic or plastic, the question of whether the whole system of objects is real is one on which the activity of perception-connecting will be silent. If the skeptic points out that this kind of rational scrutiny is therefore inadequate to yield knowledge of the external world, the Cartesian can concede the point, while noting that on his account there is fortunately more to reason than the activity of perception-connecting. For the Cartesian, reason also includes the initial attitude of surrender to the infinite, the passive acceptance of the whole system of objects as real and intelligible. Now the question at issue between the Cartesian and the skeptic is whether it is right to characterize that surrender as rational. The skeptic can grant that we may have a very natural, even chronic, tendency to slip out of our skepticism and take things as real, while still worrying whether we could in any sense count as justified, as opposed to perhaps merely lazy, in succumbing to that tendency. More disturbingly, the acute skeptic will argue that reason itself, now construed more broadly to concern more than the connection of one's actual perceptions, turns up grounds for resistance to this surrender, first on the question of form, and then (once again) on the question of content.

As far as form is concerned, the acute skeptic could grant that we have a strong psychological tendency to assume that real objects are all spatio-temporally related, and so forth, and to make empirical judgments according to this form, but worry that rational reflection on these tendencies rationally obliges us to doubt their objective validity. Once these doubts are raised, the skeptic demands rational assurance that reality conforms to the form we find intelligible, or is unified in the way the Cartesian assumes, as opposed to being objectively chaotic (for example, spatio-temporally discontinuous in some radical way, so that my dreams are in fact veridical perceptions of another world not spatially related to this one). The Cartesian cannot respond to this challenge to prove that the universe is unified in the way he supposes with an ordinary direct proof from simpler premises; given that the Cartesian maintains that a perception of the infinite is prior to any other act of

thought, no such proof will be forthcoming. The best hope for the Cartesian is to dispute the acute skeptic's initial move: the Cartesian needs to show that rational reflection on our most basic cognitive tendencies does not raise the skeptic's doubts about their validity.

The skeptic's case is made out in the First Meditation argument concerning the origin of my nature. If I try to examine my nature rationally, I view it — as I would rationally view any other object — against the background of the infinite; that is, I ask what caused it, and where it fits in within the general order of things. If I note that I have certain psychological propensities to see things as spatio-temporally organized, etc., then, even leaving it as an open question whether these subjective tendencies of mine are a product of infinite or finite causes, as long as I view them as a contingent component of reality as a whole, it seems rational to wonder how this component aligns with the rest of reality, and to conclude that it is possible that my cognitive tendencies should fail to reflect what is objectively so.

The Third Meditation makes the case that one's rational nature, insofar as it contains an idea of the infinite, is not an ordinary contingent object. Viewed against the background of the infinite, one's idea of the infinite, in particular, has a special status, a status that should be recognized when one is being self-conscious about one's rationality. Measured against what one takes as the background of the infinite, one's idea of the infinite is not something that one can rationally see as contingently at variance with that background. The Cartesian has a ready explanation of the contrary appearance that there are rational worries about the divergence between one's rationality and the form of reality. The acute skeptic demands a proof that her rational tendencies are sound; she insists that reason itself requires that we have good grounds to believe that the universe is unified in the way presupposed by the form of her ordinary empirical judgments, an order in which, for example, objects must occupy a single spatio-temporal and causal order to be taken as real. The Cartesian's epistemology predicts that no satisfactory grounds will be found here: if our grasp of ordinary things is possible only through identifying them as limited aspects of this single system, our understanding of the nature of this system itself cannot be made possible in the same way.²⁸ We can comprehend particular contingent events and

28 Here there is another surface similarity with Carnap's approach, according to which 'To be real in the scientific sense means to be an element of the system; hence, this concept cannot be meaningfully applied to the system itself' (Rudolf Carnap, 'Empiricism, Semantics and Ontology,' 22). Note, however, that the broad Cartesian intends to use this move only against the skeptic who challenges the form of our

finite objects only by connecting them up to the other events and objects we take as real, asking how they fit in, where they are situated relative to the others, what other events in the series made them happen, and so on. Because our judgments are almost always directed at such objects, this style of reasoning is both so familiar we may forget that it is a constraint on comprehension, and so natural to us that it may seem inescapable, so we can easily fall into the 'almost universal fault' of attempting to apply it to the overall basis of comprehension itself. When we look at the system itself, it can seem reasonable to ask, what makes it happen? Is there some higher constraint on reality that would ensure that what is real will behave in a properly unified way, some *cause* that ensures that all objects are located in a single space, or that the familiar causal order should hold?²⁹

empirical judgments; as will become clear shortly, standard skeptics who worry about brains in vats are challenging content rather than form and will be dealt with somewhat differently.

- 29 These questions are not to be confused with a somewhat different sort of question concerning the details of the content of claims about the intelligible unity, rather than the initial fact of this unity; for example, the question of what sort of geometry is applicable to objects in space, or what sort of order obtains among events. Questions of this sort are not skeptical, and I although I think they can be accommodated within the basic form of 'the Cartesian strategy,' constructing an argument to show how this would be possible is a task well beyond the scope of the present paper. For present purposes I will work with a grossly simplified view in which objects are organized geometrically and events are organized causally in a way we assume we (roughly) understand, without specifying exactly what the details of this order might be, or discussing how we know those details. It should become clear in what follows why this is still playing fair against the contemporary skeptic. Note for now that such assumptions are not uncommon among those who see skeptical arguments as threatening to ascriptions of knowledge: David Lewis, for example, contends that all possible worlds are organized spatio-temporally or in a manner functionally very similar to spatio-temporal organization. That an either strictly or analogically spatiotemporal system of organization is a feature of all possible worlds is something he considers basic to our modal thinking; he also seems to find that we have no real choice but to suppose something of this sort (*On the Plurality of Worlds* [Oxford: Blackwell 1986], 72-3). If these questions are admitted as reasonable, the skeptic forces us into either regress or dogmatism. But the Cartesian maintains that these skeptical questions appear to be reasonable only because they would be reasonable questions for any other object, and are not reasonable questions when applied to the overall form of reality. The strategy advocates that the proper attitude to basic notions of objective order, such as the notion that real physical objects are all spatially related, is a passive one; this kind of constraint is something to which we must simply surrender if we are to comprehend the various finite things we encounter.

This response may seem disappointingly dogmatic, as though we have deliberately set out to define reasonableness to make the skeptic's question turn out unreasonable. But there are some grounds to think this is not the worst kind of dogmatism. Although this response does urge that the skeptic is asking for a kind of explanation that will not be possible, at least it offers some explanation of why it won't be possible, having introduced an analysis of comprehension. Even if she doubts that the concept could ever be instantiated, the skeptic who challenges the Cartesian account does help herself to some notion of epistemic success in the course of stating the skeptical problem, and can be asked to provide an account of what that would be. Constructing such an account while refraining from any underlying assumptions about the form of reality does not seem an easy task. Furthermore, one might attempt to embarrass the skeptic by asking exactly what sort of proof she might consider desirable: if she demands, for example, a *causal account* of the alignment between the form of our empirical judgments and the form of reality, then it seems she is inclined to admit the legitimacy of our thinking in terms of causes after all. The acute skeptic thinks that we are rationally obliged to worry about our most basic principles of intelligibility; the Cartesian counters that it is not clear that worries of that sort are rationally intelligible at all. If one can make a compelling case that our grasp of the world is enabled by certain basic principles, and thus that there are limits to the manner in which we can comprehend things, then one is well situated to defend the claim that there are limits to our ability to raise intelligible skeptical worries.

Now one might be concerned that the most threatening skeptic is not the one who challenges the validity of our sense of what is intelligible, but the one who shares our sense of intelligible form and restricts herself to raising concerns about the content of our various judgments. The skeptic who points to the brain-in-a-vat scenario, for example, is not challenging the idea that events are subject to something like causal order, nor the idea that real objects are all spatio-temporally related to one another: the organ in the vat has a spatial position relative to all the other real things in the scenario, and its sensations are caused by some regular causal processes. This particular skeptical worry is rather that all the victim's efforts at unifying and making sense of those sensations will lead to results with no more than subjective value; his illusions may knit together into a perfectly coherent web while failing, as far as their content is concerned, to align with what an external onlooker would count as real. Indeed, the skeptic presses that rational reflection ought to convince any given subject that it is only a contingent matter that she is not being victimized in this fashion, and if any of her empirical judgments are to count as knowledge reason obliges her to furnish a proof that this contingency does not obtain.

The broadly Cartesian strategy sketched so far has a response to this last skeptical challenger, albeit a rather modest one. In fact, given the role played by passivity in the strategy, it is much more modest than most of the anti-skeptical strategies ordinarily attributed to Descartes.³⁰ If we distinguish a *good case* (in which things appear to the subject as they normally do, and are in fact so) from a *bad case* (in which the subject is a recently envatted brain to whom things appear as they do in the good case but are not so), then the skeptic argues that the subject's inability to know what is going on in the bad case undermines any such subject's claims to knowledge even in the good case.³¹ All sides can agree that the subjects in the good and bad cases, enjoying the same sensory appearances, make parallel efforts at comprehension. All sides can also agree that the subject in the bad case fails in all his rational efforts to grasp what is going on in the world.³² The skeptic then reasons that even if I am in the good case, I still have reason to worry: my epistemic condition is disturbingly similar to the epistemic condition of the subject in the bad case. Although beliefs produced by my ordinary acts of comprehension in the good case happen to be correct, given that exactly similar acts of comprehension fail in the bad case, the skeptic concludes that my beliefs about the world in the good case fail to have adequate rational support. The Cartesian will contend that my epistemic standing in the good case depends not only on my acts of comprehension, but also on the passive aspect of reason, my surrender to the reality of the whole system. The skeptic will immediately point out that my benighted counterpart in the bad case would be similarly passive, but with disastrous results. Having noted that rational powers very similar to mine would fail in certain peculiar circumstances, as a subject in a good case I should rationally recognize that I am only lucky that those circumstances do not obtain, the skeptic reasons. If I cannot produce a rational proof that my circumstances are good, my entitlement to my beliefs falls short of being fully

30 This remark is not intended to raise doubts about those attributions; as noted at the outset of this section, the Cartesian strategy does not aim to carry out all the intentions of the historical Descartes.

31 This presentation of the skeptic's challenge as relying on a worry about symmetry between the bad and good cases is based on Timothy Williamson's presentation of skepticism in chapter 8 of *Knowledge and Its Limits* (Oxford: Oxford University Press 2000).

32 Part of the modesty of the broadly Cartesian strategy is that its aim is not to show that the bad case is metaphysically impossible, but to argue that reason does not demand a demonstrative proof that one is not in the bad case.

rational. If reason has turned up both the need for such a proof and the impossibility of providing one, the acute skeptic has won the day.

To attack the acute skeptic directly, one might attempt to produce a positive proof that one's circumstances are good. But another alternative would be to make the purely defensive move of arguing that the appearance that a proof is rationally required here is illusory. The Cartesian strategy aims to do just that, partly by arguing that one's arrival at a certain conclusion can be rational even if it involves matters beyond one's control, and partly by arguing that the subject in the good case does not have to regard it as dumb irrational luck that he is in the good case, even if he can produce no demonstrative proof that his circumstances are favorable.

On the first point, the Cartesian is taking issue with a conception of reason in which the only thing that can matter to the determination of whether a given belief has been produced rationally or not is the character of our own subjective strivings, considered in isolation from the world. This 'subjective' conception of reason is characterized by John McDowell as one in which 'we ought to be able to achieve flawless standings in the space of reasons by our own unaided resources, without needing the world to do us any favours.'³³ Although such a conception of reason is often associated with the historical Descartes, the conception of rationality employed by the Cartesian strategy starts from a recognition of the limits of our own unaided resources: we are supposed to recognize that we are able to comprehend external objects only through interpreting perceptual inputs of them in a certain way, tracing their limitations in time, space and so forth, against certain background assumptions about the order of things. We acknowledge that we are ultimately passive as far as those fundamental assumptions are concerned, and need the world to do us the favor of complying with them; we are also passive in receiving the course of sensory stimulation we receive. Having acknowledged that our active rational powers are limited, it is unsurprising that such powers would fail in certain hypothetical circumstances, tailored precisely to exploit those limitations, but when our limited powers are exercised in favorable circumstances, the Cartesian contends that this exercise has every right to count as yielding knowledge.

33 John McDowell, 'Knowledge and the Internal,' in *Philosophy and Phenomenological Research* 55 (1995) 877-93, at 877. Cf. Ralph Wedgwood's presentation of the motivation for internalism in 'Internalism Explained,' *Philosophy and Phenomenological Research* 65 (2002) 349-69.

One can still wonder whether the Cartesian is rationally required to prove that his circumstances are favorable. The appearance that a proof is necessary here arises when I try to entertain the possibility of a perspective from which it would be rational for me to judge it a contingent matter whether I am in the good or bad case: I imagine viewing my brain from the perspective of an external onlooker, who sees it as receiving either a good or bad stream of sensory input. Whether the stream is good or bad is contingent on the conditions of the brain's environment: certain conditions in this environment (good lighting, visible objects, good perceptual mechanisms) would put the brain in the good case, where other conditions (a vat, some electrodes) would put the brain in the bad case. The fact that I can concoct an apparently coherent description of this onlooker's perspective might seem to suggest that I ought rationally to regard it as a matter of sheer luck whether my own stream of sensory input is good or bad. Ordinarily, pointing out that things would appear differently from another perspective does give me grounds to take the judgments made from that perspective as carrying the same rational worth as my own, not least because it is rationally recognizable as a contingent matter that I occupy this perspective rather than that one. The way things look from the doorway is as valid as the way they look from the desk; it is mere luck that I am sitting here and not there.

But this is no ordinary case: there is something unusual about the hypothetical perspective of the external onlooker, starting with an ambiguity about its location. Imagining how things are from the perspective of the hypothetical onlooker is not like imagining how things would look from some stable external point in one's environment that one might or might not happen to occupy. If I think of myself as being in the good case I can of course situate the possible onlooker in my actual spatial environment, say, ten feet away — close enough to me to hear my reports and see that I am perceiving veridically. If I think of myself as being in the bad case, however, there is no way of answering the question of where the possible onlooker might be: the external onlooker is not located among the phantasms that present themselves to the brain in the vat; he has no location at all in that merely apparent environment. In the bad case, I couldn't see the fact of my occupying what I take to be my present position rather than that of the onlooker as contingently depending on any of the things I would have been accepting as real. If the pressure to justify my belief that I am in the good rather than the bad case is coming from the possibility of an external onlooker who could make the call either way, it should be noted that relative to the spatial framework of things I have been accepting as real, a framework whose ongoing interpretation is dependent on the stream of sensory stimulation I have received, there actually is no single point of view correspond-

ing to the perspective of this onlooker. Ordinarily reason can require me to take into account how things look from other perspectives within what I take to be my environment; on the broadly Cartesian view, a perspective from which my entire environment is illusory is not situated at any point a real object could occupy, and the fact that I cannot occupy that perspective is something I should not rationally take to be a contingent matter.

The sort of response to skepticism is often considered unsatisfying, because the result that skepticism is not rationally required is so much weaker than the result that skepticism is self-contradictory, or even plain false. The skeptic is left free to point out that, even if the story about rational limitations is correct, so that it would not be rational for one to worry about being in the bad case, the Cartesian strategy has not demonstrated that it is metaphysically impossible that one is in the bad case. Indeed, no matter what account of human cognition might be given, one could always raise Montaigne's capricious worry that nature might at some point reveal herself to be at odds with what we have thought. But a worry about such a revelation, a worry that perhaps we'll discover we've just got it all wrong, is much less pressing than an argument to the effect that we can't get it right because the edicts of reason cannot be jointly satisfied. In their moments of acute skepticism, Montaigne and Sanches urge that human knowledge of the world would require prior knowledge of something humans could not know; if Descartes provides the materials to mount a defense against that sort of challenge to reason, his response to skepticism has some teeth after all.³⁴

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