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The *Cogito* and the Foundations of Knowledge

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escartes was clearly, in some sense, a foundationalist. He thought that among our beliefs, some are based on other beliefs we have, whereas others are not. The ones not based on others we can call *basic beliefs*. The ones based on others we can call *derivative beliefs*. Our basic beliefs provide the foundations for our system of beliefs; our derivative beliefs are the superstructure. This metaphor of our system of beliefs as a building, which has foundations and a superstructure, and might collapse if the foundations were not solid, is prominent both in Descartes' *Discourse on Method* and in his *Meditations*. It is there, for example, in the opening lines of the *Meditations*:

Some years ago now I noticed how many falsehoods I had accepted as true in my earliest years, and how doubtful the things were which I had subsequently built on them. I realized that it was necessary, once in my life, to overturn all my beliefs, from the bottom up, and start again, from the first foundations, if I ever wanted to establish anything firm and lasting in the sciences. (AT vii, 17)

There is a more elaborate version of the foundationalist metaphor in the *Discourse* (AT vi, 13–14).

When I say here that one belief is *based on* another, and ultimately on one or more basic beliefs, I mean that the basic beliefs are the beliefs we might ultimately offer as reasons for our derivative beliefs if we were asked to give as full a justification for them as we could. If we take one belief as a reason for another, then we think that the second belief can be inferred from the first by some legitimate means of inference. And we also think that we are somehow entitled to hold the first belief.

As so far described, foundationalism may seem innocuous. It may even seem inevitable, obviously true. But the account so far raises important questions which it does not answer. What are the 'legitimate means of inference' we use to justify our beliefs? How can we justify the claim that they are legitimate? And

what entitles us to hold the belief we use as a reason for the belief we are trying to justify?

These questions are troubling because it looks as if there might be infinite regresses in the offing. Suppose we justify belief p by appealing to another belief, q. Our belief in q cannot, it seems, provide much justification for p unless our belief in q is itself justified. So what justifies us in believing q? That we have inferred it by legitimate means from some other belief, r, which we are also entitled to believe? Perhaps, but this will, of course, prompt the same question about r. On the plausible assumption that we cannot break off the threatened regress by going back to p and using it to justify r (or s, or t, or whatever belief it is we are trying to justify in this apparently circular way), and that we cannot go on indefinitely justifying one belief in terms of another which itself requires justification, it looks as though the only way we can have justified beliefs is to find some beliefs we are entitled to hold without our inferring them from other beliefs we are entitled to hold, some beliefs which are, as some would now say, properly basic.

There is, of course, a similar problem about justifying the principles of inference we use in this argument. Suppose r is an inferential principle we use to move from our justified belief in p to a justified belief in q. If r is not itself properly basic, then we must try to justify it by appealing to an argument, which will have at least one premise and at least one inferential principle. And the same questions will arise about the premise(s) and inferential principle(s) of that argument. So a crucial problem for foundationalism is that of explaining how our premises and inferential principles can be properly basic.

On a popular interpretation of Descartes, his answer to this question was that beliefs are properly basic when they are either *self-evident* or *incorrigible reports of the contents of our consciousness*, and not otherwise. If this is correct, then Descartes will say that all of our justified derivative beliefs can be traced back, via finite, legitimate inferential paths, to justified basic beliefs of one or the other of these two kinds. Outside of mathematics, the basic beliefs which provide our foundation will normally include both kinds of properly basic belief. Within mathematics, the only basic beliefs required are those which are self-evident.

I think that common interpretation of Descartes is wrong – or at least, wrong about the *mature* Descartes, the Descartes of works like the *Discourse* and the *Meditations*, works he liked well enough to publish. It is not, in my view, wrong about Descartes' earliest substantial attempt to formulate a theory of knowledge, the *Rules for the Direction of the Mind* (for short, the *Regulae*). But I think Descartes came to see that the version of foundationalism he advocated in the *Regulae* was not a position he wanted to defend. That is why he left it unfinished and never published it. And I think he came up with a more interesting version of foundationalism in the works he did publish.

In Rules I–III of the *Regulae* Descartes lays out a program for reducing all the separate sciences to one science, modeled on mathematics, which would start with assumptions known by intuition, and derive the rest of knowledge from those

initial assumptions by deduction. Descartes conceives intuition as a faculty of intellectual perception – the conception of a clear and attentive mind – which enables us to know the simplest truths with absolute certainty. He conceives deduction as a process in which we infer something 'as following necessarily from some other propositions which are known with certainty' (AT x, 369). As Descartes conceives it, deduction itself depends on intuition, since it is ultimately intuition which provides us, not only with our properly basic beliefs, but also with the principles of inference we use in getting to the derivative beliefs. The legitimacy of those inferences is not a matter of their formal validity. Descartes has little use for formal logic. He thinks syllogistic reasoning, for example, is doomed to sterility because it is inevitably question-begging (AT x, 406).

In the *Regulae*, Descartes holds that we should reject all merely probable knowledge, and take as our starting-points truths we know perfectly, truths which cannot legitimately be doubted. We know these indubitable truths by intuition. Among the truths so known he cites (AT x, 368–9) such propositions as:

- 1 I exist
- 2 I think
- 3 A triangle is bounded by just three lines
- 4 2 plus 2 equals 4
- 5 3 plus 1 equals 4

and

6 that it follows from (4) and (5) that 2 plus 2 equals 3 plus 1.

Notice that this last example is not as simple as the first five, but concerns the logical relationship between two propositions and a third proposition. It can be regarded as a substitution instance of the general proposition "Things equal to the same thing are equal to each other." But, as we will see later, there is a reason why Descartes gives us the substitution instance, not the more general proposition.

Descartes' mature work, I claim, is not content to simply regard such propositions as the self-evident products of an infallible faculty of intellectual perception. It seeks to justify those basic beliefs – though not, of course, by deducing them from other justified beliefs. Why did the mature Descartes reject the version of foundationalism he had originally embraced?

In Curley (1978), I conjectured (under the influence of Richard Popkin: see Popkin 1964) that sometime in the late 1620s Descartes came to feel the impact of Montaigne's skepticism, which did, in the *Apology for Raymond Sebond*, extend even to basic principles of logic, mathematics, and metaphysics. I would not suggest that Descartes first discovered Montaigne in the late 1620s. Montaigne's work was so widely read that it is hard to imagine that Descartes did not have

some familiarity with it before then. But I do think that by the winter of 1628–9, when he retreated to The Netherlands to begin writing the treatise on metaphysics which was to become the *Meditations*, he had come to take Montaigne seriously and had abandoned the *Regulae*, realizing that the theory of knowledge faced deeper problems than those he had up to that point identified in scholastic philosophy.

Montaigne had questioned even basic principles of logic, using the liar paradox, for example, to cast doubt on principles as evident as *if p, then p*:

Let us take the sentence that logic itself offers us as the clearest. If you say "It is fine weather," and if you are speaking the truth, then it is fine weather. Isn't that a sure way of speaking? Still it will deceive us. To show this, let us continue the example. If you say "I lie," and if you are speaking the truth, then you lie. (Montaigne 1965: 392)

He also used the incomprehensibility of God's power to cast doubt on such simple propositions of arithmetic as $2 \times 10 = 20$:

In the disputes we have at present in our religion, if you press your adversaries too hard, they will tell you quite shamelessly that it is not in God's power to make his body be in paradise and on earth, and in several places at the same time. And that ancient scoffer [Pliny the Elder], how he takes advantage of it! At least, he says, it is no slight consolation to man to see that God cannot do everything: for he cannot kill himself even if he wished, which is the greatest privilege we have in our condition; he cannot make mortals immortal, or the dead live again, nor can he arrange that the man who has lived shall not have lived, or that the man who has had honors shall not have had them; he has no other power over the past than that of oblivion. And to bind this association of man to God further by comical examples, he cannot make two times ten not be twenty. That is what he says, and what a Christian should avoid having pass out of his mouth. (Montaigne 1965: 393)

It is irreverent for a Christian to say anything of the form "God cannot do X," no matter what X is, and no matter how incomprehensible it may be to us that God should do that. Montaigne applies this pious dictum, not only to simple mathematical truths, but also to metaphysical principles like the fixity of the past: it is no less irreverent to say that God cannot arrange that a man who has lived shall not have lived than to say that he cannot make two times ten not be twenty.

That Descartes had come, by early 1630, to have considerable sympathy with Montaigne's view will be evident from his correspondence with Mersenne in April and May of that year (AT i, 144–53). I suggest that he came to think he could not simply claim that our knowledge is based (in substantial part at least) on our possession of an infallible faculty of knowledge, which enables us to identify propositions so evident in themselves that they require no argument. If each claimant to knowledge were permitted to pick his own ultimate principles, on no better

grounds than that the propositions in question were just obvious (i.e., obvious to him), the theory of knowledge would be an anarchic mess. If there are no standards for a properly basic belief other than strength of conviction, then any belief whatever might be claimed to be properly basic, no matter how controversial. But declaring your favorite controversial principle to be properly basic is much too quick a way of dealing with non-believers. And Descartes wants to deal with non-believers (AT vii, 1–2).

The term "self-evident," of course, appears frequently in English translations of Descartes' mature works (for example, at AT vii, 69, 111, 112, 115, 138, 140; AT viiiA, 6, 8, 19, 70). But that seems to me an unhappy tradition among the translators. The Latin in these cases is always *per se notum* or some variant thereof (*per se manifestum*, *per se patet*). If the work was written in French, the French is normally *évident* (for example, at AT vi, 7). But these phrases do not, for Descartes, have the connotations that the English term "self-evident" has had since the days of Locke; that is, producing "universal and ready assent on hearing and understanding the terms" (*Essay Concerning Human Understanding*, I, ii, 18). Descartes will apply the phrase *per se notum* and its equivalents to propositions which he knows full well do not generate universal and ready assent as soon as the terms are understood, such as the proposition that God exists (AT vii, 69, 163–4, 167), or the basic laws of motion (AT viiiA, 70). Things which some people can see clearly without argument, others cannot see until they are freed of prejudice.

Nevertheless, if Descartes left every proposition liable to a demand for extrinsic justification, he faced the threat of an infinite regress, as Montaigne had not failed to point out (Montaigne 1965: 454). What to do? As I read Descartes, he came up with an ingenious strategy for shifting the burden of proof. He would concede to the skeptic that any proposition whatever was in principle subject to reasonable doubt, even those which a more conventional foundationalist might have claimed to be self-evident. But he would insist that the skeptic provide a reasonable ground for doubting it. To qualify as reasonable, a prospective ground of doubt would not have to satisfy any stringent evidential requirements. In particular, it would not have to be *known* to be true, or *probable* on the evidence. It would not even have to be something the inquirer *believed* to be true. The only evidentiary requirement a ground of doubt would have to satisfy is that it *not* be *known to be false*. If a proposition survives attempts to cast reasonable doubt on it, when the evidential requirements for a reasonable ground of doubt are set *that* low, then the skeptic cannot dismiss its acceptance as arbitrary and dogmatic.

We see this dialectic at work in Meditation I. Early in the Meditation, Descartes proclaims his intention to reject any of his past beliefs which he can find *some* reason for doubting. It need not be what we would ordinarily consider to be a *strong* reason. So he rejects sense-based beliefs, even when they are about ordinary-sized objects in his immediate vicinity, because he recalls having been deceived in the past by dream experiences which were as distinct as his most vivid waking experiences. He makes no claim to *know* that his recollection of these deceptive

dreams is accurate; it is sufficient that this is how he remembers them. That recollection provides him with *some* reason for doubting his previous sense-based beliefs because it opens up some possibility that they may be mistaken.

Then he rejects beliefs not based on the evidence of the senses, even when they are about simple mathematical matters, because he believes he has been created by an omnipotent being, who *might* have made him in such a way that he would be deceived even about things like the sum of two plus three. This doubt is based partly on beliefs he holds (that he has been created by an omnipotent being) and partly on beliefs he does not hold, but does not know to be false (that the omnipotent being who created him might be deceiving him). He of course believes God to be supremely good; but when he reflects on how often he makes mistakes, he recognizes that he does not *know* that God is not a deceiver. If he was created by an omnipotent, supremely good being, it must be consistent with that being's goodness to permit him to be deceived. And that is sufficient, it seems, to generate a reasonable doubt about *all* his former beliefs.

Descartes stresses three points about the doubt toward the end of Meditation I (AT vii, 21–2):

- 1 that none of his former beliefs is indubitable (i.e., not such that no doubt can properly be raised about it);
- 2 that his doubt concerning the things which have formerly seemed most evident to him is not frivolous, but based on powerful and well-thought out reasons (validas & meditatas rationes, raisons très fortes et mûrement considérées); and
- 3 that the beliefs he doubts are nevertheless (in some cases at least) highly probable; in spite of the "powerful" grounds he has to doubt them, it is much more reasonable to believe them than to deny them.

Eventually Descartes will reformulate the hypothesis of a deceptive creator as the supposition that he was created by an omnipotent being who is evil, not good, a malicious demon. He does not *believe* that such a being exists, or think it likely. It is enough that he *does not know* that such a being does *not* exist. This is sufficient to justify the doubt even about those things which formerly seemed to him most evident.

Since the evidential requirements for reasonable doubt are set so low, the question naturally arises whether they are not so low that Descartes will never be able to escape from universal doubt. Is he doomed to the position that he can assert nothing, since anything he might be tempted to assert is subject to reasonable doubt? That is the danger which threatens him at the end of Meditation I. He escapes that danger, or so it seems, in Meditation II, when he decides that, in spite of what he had said in Meditation I, his own existence is an exception to the generalization about his former beliefs: it is not subject to reasonable doubt.

The reason he escapes, on my reading of the *Meditations*, is that the very weak evidential requirements for reasonable doubt are not the only requirements

reasonable doubts must satisfy. There is also an explanatory requirement. A reasonable ground of doubt must explain, at least conjecturally, how error is possible. The grounds of doubt considered in Meditation I all met this requirement. The dream doubt explained how sense experience might deceive us by reminding us of deceptive experiences most of us have had which cannot be distinguished with any certainty from the experiences we take to be non-deceptive. The deceiving God hypothesis explained how we might be mistaken in all our other beliefs because we do not know the origin of our belief-forming mechanisms, and have no reason to assume them to be reliable. This is true even of the atheistic hypothesis Descartes flirts with briefly after he first introduces the hypothesis of a deceiving God. If the cause of my beliefs is an infinite series of impersonal causes, which had no prevision of the effects they were producing, how could I expect my cognitive faculties not to be very imperfect?

A skeptical hypothesis which offers even a conjectural explanation of the possibility of error must presume that there is thinking going on, which it alleges to be subject to error. So it must entail that I think. This explanatory requirement is what is doing the work in the *cogito* argument of Meditation II. Suppose

there is I-know-not-what deceiver, supremely powerful, and supremely cunning, who deliberately and constantly deceives me. Then I too undoubtedly exist, if he is deceiving me. And let him deceive me as much as he can, he will never bring it about that I am nothing, so long as I think that I am something. (AT vii, 25)

The hypothesis that a demon is deceiving me about my own existence is self-defeating, and therefore not a valid ground of doubt, because it entails the very proposition which, in this case, it is intended to cast doubt on.

This way of thinking about the *cogito* sheds light, I claim, on the perennial puzzle about the nature of Descartes' argument in Meditation II. In the *Discourse on Method* (AT vi, 32) Descartes had used the inferential formula which will be forever associated with his name: "I think; therefore, I exist." This way of putting his argument makes it look as though Descartes is deducing his existence from his thought. And on standard foundationalist assumptions, it raises the question: how do you know that you think? Indeed, the author of the Second Objections (Mersenne?) raised precisely that question about the argument of the *Meditations*, reinforcing it with the reminder that Descartes claims he cannot be certain of anything until he has a clear and certain knowledge of the existence of God, a result he cannot claim to have achieved by the beginning of Meditation II (AT vii, 124–5).

But in Meditation II, notoriously, Descartes does not use the formula he had used in the *Discourse*. He does not say "I think; therefore, I exist." In the *Meditations* the "cogito" passage concludes by saying: "So, having weighed all these matters very carefully, I must in the end maintain that this proposition, I am, I exist, must be true whenever I mention it or conceive it in my mind."

This has suggested to many readers that in the *Meditations* Descartes is claiming intuitive certainty for his own existence, as he had in the *Regulae*. So people ask: is Descartes' knowledge of his existence intuitive or inferential? It seems to be inferential in the *Discourse on Method*. It is clearly intuitive in the *Regulae*. And it seems to be intuitive again in the *Meditations*. And, of course, there are various other passages which can be used to support one or other of these alternatives.

I claim that the solution to this puzzle is that the *cogito* is, in a sense, both inference and intuition, though I hasten to add that Descartes tends to avoid talk of intuition in the works he wrote after the *Regulae*. I think the reason for this is that he does not want to appear to be resting anything substantive on his possession of a supposedly infallible cognitive faculty. So I prefer to say that the proposition "I exist" is *both* a first principle, insofar as it is a proposition which Descartes takes himself to be justified in accepting without its being the conclusion of an argument whose premise Descartes need claim to know, *and* the conclusion of an inference, whose premise is part of whatever *hypothesis* might be proposed as grounds for doubting it. I emphasize the word "hypothesis" here to make it clear that the "I think" is not a premise which Descartes is responsible for justifying.

When Descartes is writing in a popular vein, as he is in the *Discourse*, he is content to write "I think; therefore, I exist," though this is apt to prompt the skeptical query: "And how do you know that you think?" When he is writing more systematically, as he is in the *Meditations*, he is careful to keep the hypothetical status of his thinking clear: "If a demon is deceiving me, then I am thinking, and must exist. The same conclusion follows from any other skeptical hypothesis I might consider in an effort to cast reasonable doubt on my existence. Therefore, I am entitled to affirm, with certainty, but without further argument, that I exist."

I add that Descartes might offer exactly the same rationale for taking the proposition "I think" as a first principle. That too is entailed by any skeptical hypothesis we might entertain in an attempt to doubt it, if that hypothesis meets the explanatory requirement mentioned above. So Descartes *could* present the *cogito* as a demonstration of his existence from his thought. But there would be no advantage in doing so. If this way of justifying first principles is acceptable – that is, if you may take a proposition as a first principle whenever it is entailed by any reasonable ground you might consider in an attempt to doubt it (where the evidentiary requirements for a reasonable ground of doubt are set very low) – then the existence of the self is acceptable as a first principle, without needing to be presented as the conclusion of an inference from the proposition, "I think," which is neither more, nor less, justified than the proposition "I exist."

At some point even those who are sympathetic with this line of interpretation may object: "All right, I understand how Descartes might think he was entitled to assume the truth of the proposition 'I think' as a premise in the inference to his existence. But what about the conditional proposition 'If I think,

then I exist.' Isn't that a further assumption which is necessary for the validity of the inference of existence from thought, and which he must justify before he can make the inference? We needn't think of this as a suppressed premise; we can think of it as a principle licensing his inference, a principle allowing the legitimacy of that inference. But even if we think of it as an inference license, it's still a principle which foundationalism will require Descartes to justify. And he couldn't justify it in the way he justified his assumption that he thinks, could he? The conditional proposition connecting thought and existence does not seem to be entailed by any skeptical hypothesis which might be offered to cast doubt on his existence."

In the end, I think Descartes would agree that this is a reasonable objection and would have a procedure for dealing with it. But his acceptance of this requirement is obscured by his resistance to the idea that inferences must be formally valid if they are valid at all. He resists representing the *cogito* as a syllogism, having the form:

Whatever thinks exists. I think. Therefore, I exist.

He explicitly rejects that representation of the argument in the *Second Replies* (AT vii, 140), when he replies to the objection from Mersenne described above. There is a fallacy of relevance here, since Mersenne had *not* claimed that the *cogito* was a syllogism with a suppressed major premise. His question had concerned the minor premise. But it is interesting that Descartes sidesteps the question Mersenne actually asked to answer a question he did not ask.

One thing at work in this odd exchange is Descartes' antipathy to formal logic. He thinks that there are valid inferences whose validity is not a matter of form, and that those scholastic philosophers who insisted on making them formally valid were being unduly fussy. The inference "I think; therefore, I exist" is one of those inferences which are valid without being formally valid. So nothing but obscurity is gained by treating it as a syllogism. But part of Descartes' resistance to putting the *cogito* into syllogistic form comes from his sense that the universal premise the inference would have in that form does not make a substantive claim about the world. (This will perhaps be more clearly true, if we represent the argument not as a syllogism, but as an instance of *modus ponens*, with the suppressed conditional premise *If I think, then I must exist.*) It is rather a purely conceptual claim about the relation between thought and existence. So it is an assumption of an entirely different kind from the premise "I think."

In the end, though, Descartes acknowledges that his argument does, in some sense, assume a general connection between thought and existence. He admits this when he presents his philosophy in synthetic form in the *Principles of Philosophy*:

When I said that the proposition I think, therefore I exist is the first and most certain of all those which occur to anyone who philosophizes in an orderly way, I did not thereby deny that one must first know what thought is, what existence is, and what certainty is, and that it cannot happen that what thinks does not exist. But because these are very simple notions, and ones which on their own provide us with no knowledge of anything which exists, I did not think they needed to be listed. (Principles I, art. 10, AT viiiA, 8)

When Burman questioned him about the apparent inconsistency between this passage and his rejection of the syllogistic representation of the *cogito* in the *Second Replies*, he reaffirmed the doctrine of the *Principles*, adding that the meditator who infers his existence from his thinking presupposes the general principle implicitly, but does not need to be explicitly aware of it. In fact, he discovers that general connection between thought and existence when he finds himself unavoidably making the inference from *his* thinking to *his* existence. Knowledge of particular cases must precede knowledge of general truths (AT v, 147).

I do not think this acknowledgment of the need for a general assumption about the relation between thought and existence represents a shift of doctrine between the *Meditations* and the *Principles*. Descartes indicates this in a remarkable passage in Meditation III. He had begun this Meditation by making what he evidently regarded as a false start. He enumerated a number of truths which he believed he could claim to be certain of: that he was a thinking thing; that he had thoughts of various kinds; that he affirmed some things, denied others, understood a few things, and was ignorant of many others; that he imagined some things; and even that he had sensations, provided he understood the word "sensation" as designating only a certain mode of thought, without implying the existence of any bodies whose alterations might be causally responsible for the sensations. He then asked himself what conclusion he might draw from these initial certainties. And since he thought that what made him certain of these truths was simply the fact that he perceived them clearly and distinctly, he was tempted to conclude that anything he perceived so clearly and distinctly must be true.

"Tempted to conclude," but not, in the *Meditations*, really ready to conclude. In the *Discourse on Method*, he had drawn this conclusion at this stage of his argument (AT vi, 33) and never looked back. But in the *Meditations* he permits himself a series of reflections which requires him to dig a little deeper. He recalls that there have been many things which he *thought* he perceived clearly and distinctly, but which he had nevertheless come to doubt. These included even the simplest truths of arithmetic and geometry, though they also included metaphysical principles, such as the principle of the fixity of the past. When he thinks concretely about these propositions, thinks about particular examples of mathematical or even metaphysical truth, he finds that he cannot doubt them:

Whenever I turn my attention to the things themselves which I think I perceive with utmost clarity, I am so completely persuaded by them that I spontaneously break out

in these words: let whoever can deceive me, he will still never bring it about that I am nothing, so long as I think that I am something; or that it should at some time be true that I have never existed, even though it is true now that I exist; or that two plus three should m ake more or less than five; or any other things in which I recognize a manifest contradiction. (AT vii, 36)

But when he thinks about these "evident" propositions in general terms, simply under the rubric "things I perceive as clearly as possible," and thinks at the same time about the supreme power of God, he cannot help but confess that it would be easy for God to cause him to err even about these things.

So even after the apparent establishment of a number of certainties in Meditation II, he is in a quandary. He concludes the overture to Meditation III with the reflection that, until he has examined whether God exists and can be a deceiver, and resolved these issues, he cannot *ever* be certain of *anything*. This is the stunning conclusion of the fourth paragraph of Meditation III:

To remove that [metaphysical reason for doubting], I ought, as soon as the opportunity presents itself, to examine whether there is a God, and if there is, whether he can be a deceiver. For so long as I do not know the answer to these questions, I do not seem to be able, ever, to be certain of any other thing. (AT vii, 36)

Notice that Descartes does *not* say: until I know whether God exists and can be a deceiver I cannot be certain of *anything except the existence of the self and its thoughts*. He says he cannot be certain of *anything*. When I first read this passage as a graduate student, I was astonished by it. Surely, I thought, he is not taking back the results of Meditation II. He is not telling us that he cannot be certain of *anything at all*, *including his own existence*. But by the time I published Curley (1978), I had decided, partly as a result of reading the work of Alan Gewirth (see Gewirth 1941), that Descartes means precisely what he says.

One persuasive consideration Gewirth adduced was the fact that when Descartes was enumerating those propositions he found he could not help but believe when he attended to them, but could doubt when he considered them under the general heading of "things I perceive with the utmost clarity," he included a principle equivalent to the inferential principle of the *cogito*: "let whoever can deceive me, he will still never bring it about that I am nothing, so long as I think that I am something." That is, if I think I am something, I must be something. I take it that Descartes is recognizing here that, without a proof of the existence and veracity of God, he cannot be certain even of the existence of the self, because he cannot be certain of the validity of the inferential principle he used to derive his existence from the hypotheses a skeptic might propose in order to cast doubt on his existence.

This is not a happy conclusion. Many critics of Descartes have argued that in the first two Meditations he dug himself into a hole he could not climb out of. He might have good grounds for regarding his own existence as certain, they conceded. But if he requires a proof of the existence and veracity of God before he can be certain of anything else, he cannot get past his own existence, cannot justify any ontological claim more meaty than solipsism. For how is he to construct his proof of the existence and veracity of God? Only, it seems, by making such metaphysical assumptions as: there must be at least as much reality in the cause as there is in the effect; or the cause of my ideas must possess at least as much formal reality as the ideas possess objective reality.

Those are assumptions which it seems Descartes in fact makes in his arguments in Meditation III. Let us set aside the question whether they are plausible. Suppose they are. Nevertheless, Descartes' argument for the existence of God will be a *proof* only if the assumptions it makes are ones he can be certain of. And by his own admission, he cannot be certain of those assumptions unless he has a satisfactory proof of the existence of God. And this will be a problem no matter what the details of the argument he makes are. Any argument for God's existence must make *some* assumptions. And even if he comes up with an argument which is more attractive than the arguments of Meditation III are, the same question will arise: how can he claim certainty about the assumptions of that argument consistently with the position he takes at the end of the fourth paragraph of Meditation III?

Consistently with his own requirements, he can never provide the proof of God's existence and veracity which he needs in order to be certain of his clear and distinct ideas. This is the famous problem of the Cartesian circle. But on my reading of Descartes (and Gewirth), it looks like an even more serious problem than it is usually thought to be. For if what we have claimed is correct, he will not even be entitled to claim certainty about his own existence. To draw the conclusion he wants to from the skeptical hypotheses, and justify his taking his own existence as a first principle, he must assume that there is a necessary connection between thought and existence, a connection he will not be entitled to assume in the absence of a proof of God's existence.

I think this is a bullet we must bite. I think Descartes does have a plausible solution to the problem of the circle. The key, I think, lies in a certain feature of clear and distinct ideas which I have already alluded to: whenever we attend to a particular clear and distinct idea, we cannot help but assent to it. Descartes mentioned this in that passage from Meditation III which I quoted earlier, and he comes back to it again in Meditation IV, where he writes that "When I was examining recently the question whether something exists in the world, I noticed that, from the very fact that I considered that, it followed evidently that I existed, I really could not help but judge that what I understood so clearly was true" (AT vii, 58, emphasis added). Notice that Descartes does not claim here that what he understood clearly, and could not help but judge true, was the proposition that he exists. Rather, it is the logical connection between his thinking, his considering the issue of his existence, and his existence. It is that inferential principle, and others like it, which he needs his proof of God's existence and veracity to justify.

But how does it help that our clear and distinct ideas are assent-compelling, that when we attend to them, we cannot help but judge them to be true? Let

me introduce here the idea of an assent-compelling argument. By an assent-compelling argument, I mean one whose premises are assent-compelling, and whose inferential moves are assent-compelling. Suppose we have an assent-compelling argument from a premise, p, to a conclusion, r, via an intermediate conclusion, q; p must be assent-compelling in its own right, and q will become assent-compelling when we recognize that p is assent-compelling, and that the connection between p and q is also assent-compelling; similarly, r will become assent-compelling once we have recognized that q is assent-compelling, and that the connection between q and r is assent-compelling. I claim that what Descartes is trying to do in the *Meditations* is to construct an assent-compelling argument to the conclusion that God exists and cannot be a deceiver.

What good will that do? Cannot the skeptic just point out that the assent-compelling character of the premises and inferential moves does not justify us in being certain of the conclusion? After all, he might say, could not an omnipotent being cause us to be compelled to assent to false propositions? Do these assumptions possess anything more than psychological certainty? And have we not long ago rejected psychological certainty as a sufficient reason for accepting a proposition?

Now I think Descartes' response to this would be to say that once he has an assent-compelling argument to the conclusion that all our clear and distinct ideas (i.e., all our assent-compelling ideas) are true, it is no longer enough to claim, without supporting argument, that a demon might be deceiving us when we assent to these ideas. He is shifting the burden of proof again. In Meditation I, the unsupported claim that an omnipotent being might deceive us, even about those matters which seemed most evident to us, constituted a reasonable ground of doubt because we had no compelling argument to set against it. We may have had particular clear and distinct ideas, which we could not doubt when we focused our attention on them. But we did not find the general proposition that all our clear and distinct ideas are true assent-compelling. So we were vulnerable to skeptical suggestions that they may not be true, that a sufficiently powerful being might deceive us even about such matters as the simplest truths of mathematics.

By the end of Meditation IV we are supposed to have an assent-compelling argument against that skeptical hypothesis. So it no longer constitutes a reasonable ground of doubt. The validity of a ground of doubt is situational, in the sense that what constitutes a valid ground of doubt at one stage of the argument, when we have no assent-compelling argument against it, will no longer be valid when we do have such an argument. Descartes makes this clear in his reply to the *Seventh Objections*. Father Bourdin, the author of those objections, had fastened on Descartes' somewhat surprising rejection, midway through the third paragraph of Meditation II, of the existence of minds. That rejection is surprising, partly because Descartes will affirm the certainty of his own existence (presumably as a thinking thing) by the end of that very paragraph, but partly also because minds had not

been mentioned in the preceding Meditation. Bourdin, Descartes complains, seems to think that once Descartes has doubted something, he can never reverse himself.

But this involves a fundamental misunderstanding of the method of doubt, as Descartes, with some exasperation, points out:

At the outset, when I was supposing that I had not yet sufficiently perceived the nature of the mind, I numbered it among the doubtful things; but later on, noticing that a thing which thinks cannot not exist, and using the term "mind" to refer to this thinking thing, I said that the mind existed. My critic proceeds as if I had forgotten that previously I had denied this very thing (when I was taking the mind to be something unknown to me); he talks as if the things I was denying earlier (because I found them doubtful), I must have thought were always to be denied, as if it was impossible that such beliefs could be rendered certain and evident to me. It should be noted that throughout he treats doubt and certainty not as relations of our thought to objects, but as properties of the objects which inhere in them permanently. This means that if we have once realized that something is doubtful, it can never be rendered certain. (AT vii, 473)

Bourdin's objections to the *Meditations* are prolix, and tiresome, and do not show a good or sympathetic grasp of Descartes' philosophy. As a translator, I can sympathize with that translator of Descartes who said that Descartes must have had a very strong desire to stand well with the Jesuits, to take Bourdin as seriously as he did. It is understandable that they should not have received very much attention from Descartes' commentators. (Alan Gewirth was an honorable exception to this generalization.)

Unfortunately, when we neglect Bourdin's objections, we also neglect Descartes' replies. In doing so, I believe, we miss an important clue to understanding the procedure of the *Meditations*. The preceding quotation from the *Seventh Replies* illustrates the point that the validity of a ground of doubt is situational, that it varies depending on the epistemic situation. But it does not say much about how a ground of doubt which is valid at one stage can become invalid at a later stage. The next passage helps to explain that:

There are reasons which are strong enough [satis validae] to compel us to doubt, even though these reasons are themselves doubtful, and hence are not to be retained later on . . . The reasons are strong so long as we have no others which produce certainty by removing the doubt. Now since I found no such countervailing reasons in the First Meditation, despite meditating and searching for them, I therefore said that the reasons for doubt which I had found were "powerful and well thought-out" [validas & meditatas]. But this is beyond the grasp of our critic, for he goes on to say "When you promised me powerful reasons, I expected certain ones, ones of the kind demanded by this little pamphlet of yours" – as if the imaginary pamphlet he has put together can be related to what I said in the First Meditation. (AT vii, 473–4)

Bourdin was not the last person to think that "powerful" grounds of doubt must be certain ones. Some critics of the dream argument make the same assumption when they ask Descartes: "How do you know you've had experiences just as vivid as your most vivid waking experiences, which you subsequently decided were illusory, because they occurred when you were asleep and dreaming?"

But the crucial point in this passage is the part where Descartes says: "The reasons [for doubt] are strong so long as we have no others which produce certainty by removing the doubt." My claim is that Descartes will have produced these reasons strong enough to remove the skeptical doubts when he produces an assent-compelling argument that God exists and is not a deceiver. It is sufficient that the premises of the argument and the inferential moves be psychologically compelling. It is not necessary for them to be indubitable in the strong sense which implies that they cannot properly be doubted.

In Curley (1978) I endeavored to justify this procedure as a kind of circumstantial argumentum ad hominem against the kind of Pyrrhonian skepticism you find in Montaigne. The Pyrrhonian advocates what he calls the principle of equipollence, according to which for every argument in favor of a proposition an equally strong argument against it can be found. As Montaigne puts it: "[The Pyrrhonians'] expressions are: 'I establish nothing; it is no more thus than thus, or than neither way . . . the appearances are equal on all sides; it is equally legitimate to speak for and against'" (Montaigne 1965: 373–4). The criterion of the strength of an argument here is its degree of psychological persuasiveness. The principle of equipollence is what is supposed to justify the characteristic Pyrrhonian resolution to suspend judgment about everything, and not, like the academic skeptics, to deny that we can have certain knowledge, but concede that some propositions may be highly probable.

When someone who holds the principle of equipollence is confronted with an assent-compelling argument in favor of the truth of our clear and distinct ideas, he can no longer cast doubt on that conclusion by simply postulating the possibility of deception by an omnipotent being. He must produce an equally strong argument, i.e., an assent-compelling argument, in favor of the opposite conclusion. In the absence of such an argument, Descartes is entitled to his conclusion.

So far my discussion has focused on two kinds of basic belief: necessary truths, like the inferential principle underlying the *cogito*, and two contingent truths, the propositions that I think and that I exist. But Cartesian foundationalism holds that there are other contingent truths which are also properly basic. On the popular interpretation of Descartes' foundationalism, which I mentioned at the beginning of this chapter, all my beliefs about my own mental states and activities are properly basic because they are incorrigible in the following sense: if I believe that I am in a particular mental state, or engaged in a particular mental activity, then necessarily I am in that state or engaged in that activity.

This is a view often ascribed to Descartes, along with the companion view that our mental states and activities are transparent, in the sense that if I am in a par-

ticular mental state, or engaged in a particular mental activity, then I know that I am in that state or engaged in that activity, by a continuous, direct, non-inferential awareness. Let us call the combination of these doctrines of transparency and incorrigibility the doctrine of our privileged access to our own mental life.

I do not believe that Descartes consistently held to a fully general doctrine of our privileged access to our own mental life. In Curley (1978), I argued that the textual evidence is very mixed, but that sometimes Descartes explicitly rejects the doctrine of privileged access. A striking example occurs in the *Discourse on Method* when Descartes writes that to discover the opinions that people really hold we should attend to their actions rather than to their words, because "few people are willing to say everything they believe, and . . . many people do not know what they believe, since believing something and knowing that one believes it are different acts of thinking, and the one often occurs without the other" (AT vi, 23). Elsewhere, Descartes makes similar points about the difficulties we face in knowing our own passions. In Curley (1978), I argued that in passages like this Descartes showed himself to be part of a long tradition, counting among its members such philosophers and theologians as Plato, Augustine, Luther, and Calvin, who all regarded self-knowledge as a difficult achievement rather than something which was inescapable.

Nevertheless, I do think that Descartes held a weak version of the doctrine of privileged access. There are some of our mental states or activities which he thinks we can know with a certainty that it would not make sense to question. A prime example would be our own sensations, when sensation is construed properly, as a state which does not presuppose any physical occurrences, but involves only my being in a state in which it seems to me, sensorily, that something is the case. This is the argument of the second movement of Meditation II (AT vii, 25–9). I see a light (or so I think). If I think of this sensation as an awareness of an object external to me, mediated by the organs of my body, I may be mistaken about my seeing a light. It may be that there is no light there which is causing me to have the sensations I am having. It may be that I have no body. But I cannot be mistaken if I limit my claim to reporting the current state of my consciousness, that it seems to me that I see a light.

Why can I not be mistaken about this? Or, better, why does it not make sense to suppose that I am mistaken about this? My answer would be that if I try to cast doubt on my sensations, so understood, I must have a reason for doing so, and the skeptical hypotheses I might entertain in order to do that must meet the same explanatory requirement we discussed earlier, in connection with my knowledge that I think and that I exist. I say I see a light and the skeptic tells me I may be mistaken. "Perhaps," he says, "you only seem to see a light. Perhaps the visual experiences you're having now are a consequence of a blow to the head, or a pressure exerted on your eyeballs, or a chemical substance which someone put in your drink." But whatever the skeptic says, in attempting to explain how I might be mistaken, will imply that I'm having certain experiences which mislead me.

When I insist that "at least *it seems to me* that I see a light, that much is certain," he cannot go on to say: "Well, no, perhaps *it only seems to you that it seems to you* that you see a light; but that's consistent with the claim that it doesn't actually seem to you that you see a light." To attempt to iterate the "it seems to me" operator in that way is to talk nonsense, quite literally. It is to say things we simply cannot understand. But if the skeptic must concede my propositions about how things seem to me, I'm entitled to take those propositions as properly basic beliefs.

I do not think it follows from this line of reasoning that I am entitled to claim all beliefs about my present mental states as properly basic. In particular, propositions about what I believe do not seem to be apt for this line of defense. In many (if not all) judgments, I think, Descartes will want to say that part of what is going on is my being in a state in which something seems to me to be the case. For example, when I affirm that there is music playing now in my study, my ground for that belief is that it seems to me that I hear music playing. But the belief involves more than my just being in that state. As the analysis of judgment in Meditation IV implies, there is also an act of will involved, an act by which I assent to my sense impression. I could withhold that act of assent, in which case, though it would still seem to me that I hear music playing, I would not judge that I hear music playing. This extra element which is involved in belief, but not in mere sensation, does not seem to be something which would be open to being defended by the maneuvers I have used to defend our certainty about our sensations. So I think Descartes would have a principled reason for not treating all his beliefs about his own mental states as properly basic. This seems to me as it should be.

My account of Cartesian foundationalism, and of the role the *cogito* argument plays in that project, is now essentially complete. But there is one objection which someone might make to it which I would like to deal with, briefly. Some readers may find this defense of Descartes disappointing. They may say: "This works, if it works at all, only against a certain kind of skeptical opponent. You've presented Descartes' defense as a kind of *argumentum ad hominem* against Pyrrhonian skepticism, and attempted to capitalize on the Pyrrhonian's acceptance of the principle of equipollence. But this is an exceptionally radical form of skepticism, which will have little appeal to readers who have not been seduced by the charms of Montaigne. The argument won't, and can't, work against more moderate and credible forms of skepticism, which don't embrace the principle of equipollence."

No one to whom I have presented my interpretation of Descartes has ever said this to me. But it surprises me that they have not, since it seems to me a natural objection, much of which I agree with. My reply would be that, although Descartes' argument does seem to me to be designed for use against that particular form of skepticism, and limited in its effectiveness to that form of skepticism, this is not such a serious limitation. First, I would be quite happy to get from a critic the concession that Descartes' argument is, in fact, effective against that form of skepticism. Descartes' argument is so often dismissed as hopeless that getting such

a concession would seem to me no small accomplishment. Second, if Descartes does achieve a victory over Pyrrhonian skepticism, we might regard that as the first battle in a campaign which would then go on to attack the more moderate and credible forms of skepticism which the critic imagines to be more dangerous. In that campaign, we might find Montaigne useful, since his defense of Pyrrhonism involves a sharp critique of academic skepticism.

But I am not, in fact, prepared to say that Descartes' defense of knowledge achieves a victory even over the Pyrrhonian skeptic. All I have attempted to do is to show that Descartes has a defense against the charge of circularity, *if* he can produce an assent-compelling argument that God exists and is not a deceiver. I do not think he has produced that kind of argument for those conclusions. So the fact that he has a defense against the charge of circularity, while nice, does not vindicate his overall defense of knowledge.