THE problem of the Cartesian Circle is sometimes treated as though it were merely an exercise for scholars: Descartes fell into it, and their job is to get him out of it. But more is at stake than extricating Descartes. In its generalized form, the Cartesian Circle is none other than the Problem of the Criterion, a problem that any epistemology must face. Moreover, to solve the problem of the Circle one must answer questions about epistemic principles that are pivotal in contemporary debates between foundationalists and coherentists. There is reason to hope, therefore, that by examining Descartes’s problem we can throw light on problems of our own.

This paper is divided into two parts. In Part One I examine solutions to the problem of the Circle that are possible within Descartes’s own framework. In Part Two I show how what we learn in Part One may be used to resolve some contemporary disputes that hinge on the status of epistemic principles.

Part One

I

The problem of the Cartesian Circle arose for Descartes because he appeared to commit himself to each of the following propositions:

(1) I can know (be certain) that (p) whatever I perceive clearly and distinctly is true only if I first know (am certain) that (q) God exists and is not a deceiver.

(2) I can know (be certain) that (q) God exists and is not a deceiver only if I first know (am certain) that (p) whatever I perceive clearly and distinctly is true.

Obviously, if (1) and (2) are both true, I can never be certain of either p or q. To be certain of either I would already have to be
certain of the other. Yet Descartes said he was certain of both \( p \) and \( q \). How can this be possible?  

Any adequate solution to the problem of the Cartesian Circle will plainly have to deny either (1) or (2). In the next section I consider a famous solution that denies (1).

II

The solution I have in mind is the Memory Gambit, according to which God is called upon to guarantee not the truth of clear and distinct perceptions, but the accuracy of our memories. The most able recent defender of this solution is Willis Doney, who cites a number of passages that seem to show that this solution was Descartes's own. In these passages Descartes says that if I remember clearly and distinctly perceiving something that I do not now clearly and distinctly perceive, I can be certain of it if and only if I know that God exists and is not a deceiver. He also says that an atheist can know theorems of geometry if he is clearly and distinctly perceiving them at the time, but warns that doubts may arise later that only knowledge of God's veracity can remove. Doney concludes that the function of God is to guarantee the accuracy of memory, and that the atheist's plight is that in his ignorance of God's guarantee he cannot be sure that he really

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1 In presenting the problem this way I follow Willis Doney, “The Cartesian Circle,” *Journal of the History of Ideas*, 16 (1955), 324-38. Cf. Arnauld's "only remaining scruple" in Haldane and Ross (eds.) *Descartes: Philosophical Writings* (Cambridge: Cambridge University Press, 1911), Vol. II, p. 92. (Hereafter I shall refer to the Haldane and Ross volumes as HR I and HR II.)

The more generalized form would be this: how can I know any epistemic principles unless I first know some other propositions from which to derive them? But how can I know those other propositions unless I first know some epistemic principles? See R. M. Chisholm, *The Problem of the Criterion*, The Aquinas Lecture, 1973 (Milwaukee: Marquette University Press, 1973). I shall not address myself to this problem explicitly, but what I would say about it will become clear in Part Two.

2 Doney, op. cit. Passages often cited in this connection are HR I, 184; HR II, 38, 39, 114-15, and 245.

3 Throughout this paper I use "remember" in the sense of "ostensibly remember" so as not to ensure by definition that what is remembered is true.

4 Perhaps Doney does not wish to say that God guarantees that whatever we remember is true, but only that whatever we remember having perceived clearly and distinctly is something that we did perceive clearly and distinctly.
did clearly and distinctly perceive what he remembers so per­ceiving. Limited to what he can clearly and distinctly perceive at each moment, his knowledge will be “meager and fugitive.”

Although the Memory Gambit has some textual plausibility, Harry Frankfurt has convincingly argued that it is neither the solution Descartes intended, nor a very satisfying solution in its own right. I shall not repeat his case here, but I do want to point out an alternative explanation of the passages that make the Memory Gambit tempting. Consider the following sequence of propositions:

(1) I remember clearly and distinctly perceiving \( p \).
(2) So, I did clearly and distinctly perceive \( p \).
(3) So, \( p \) is true.

Descartes says that the atheist cannot argue from (1) to (3). According to the Memory Gambit, this is because he cannot take the step from (1) to (2). But another possible explanation is that he cannot take the step from (2) to (3). And if this is what Descartes had in mind, then he must have felt that a divine guarantee for clear and distinct perception was needed after all.

III

I pass now to solutions that deny (2). Interesting solutions of this type have been offered by Alan Gewirth and Fred Feldman. Gewirth sums up his basic strategy as follows:

Descartes’s argument is not circular, for, while it is by the psychological certainty of clear and distinct perceptions that God’s existence is proved, what God guarantees is the metaphysical certainty of such perceptions. [Emphasis mine.]

Psychological certainty is a subjective affair, implying only

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an irresistible compulsion to believe. Metaphysical certainty, on the other hand, is an objective affair, implying truth. If we let "certain" in (1) and (2) express metaphysical certainty, then Gewirth would deny (2). I do not need to have metaphysical certainty that clear and distinct perceptions are true before I prove God's existence; it suffices if clear and distinct perception gives me psychological certainty. But once I am psychologically certain that God exists, I can use this fact to establish the metaphysical certainty of clear and distinct perceptions.

The big question prompted by this approach, of course, is this: how can mere psychological certainty about God possibly give rise to metaphysical certainty about clear and distinct perceptions? Gewirth's answer to this question will emerge from the following reconstruction of his account of Descartes's program:

1. I perceive clearly and distinctly that the premises of Descartes's theological arguments are true, and that their conclusions follow from them. I thereby arrive at clear and distinct perception (and thus psychological certainty) that God exists and is no deceiver.

2. A proposition $P$ is metaphysically certain if and only if there is no proposition $R$ that is a reason for doubting $P$.

3. $R$ is a reason for doubting $P$ only if $R$ is itself clearly and distinctly perceived (and thus something I am psychologically certain of).

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8 "The Cartesian Circle," p. 374. "Clear and distinct perceptions are so coercive in their effect upon the mind that the mind cannot help assenting to them as true at the time it has such perceptions," ibid., p. 383.

9 Ibid., pp. 378 and 394.

10 Throughout the remainder of this paper I shall use "clear and distinct perception" (singular) for the act or faculty of perceiving clearly and distinctly, and "clear and distinct perceptions" (plural) for the propositional objects of such perception. That the objects of clear and distinct perception are always propositional is well argued by Frankfurt in Demons, Dreamers, and Madmen (Indianapolis: The Bobbs-Merrill Company, Inc., 1970), chapter 12.

11 My sources for what follows are the first two Gewirth articles mentioned in note 7. The steps I list are all present in the first article, but they are more explicitly set forth in the second.

12 By a "reason to doubt" $P$ Descartes does not mean a reason to disbelieve $P$ (i.e., believe its negation), but a reason to withhold assent from $P$ (provided you want to assent only to what is certain).

13 Gewirth says that $R$ need only purport to be clearly and distinctly perceived.
(4) The only reason for doubting the truth of clear and distinct perceptions is the hypothesis that God is a deceiver.

(5) If I clearly and distinctly perceive that God exists and is no deceiver, then I do not clearly and distinctly perceive that God is a deceiver.

(6) I do not clearly and distinctly perceive that God is a deceiver. (1) and (5).

(7) The hypothesis that God is a deceiver is not a reason for doubting anything. (3) and (6).

(8) All clear and distinct perceptions are metaphysically certain. (2), (4), and (7).

In the beginning clear and distinct perceptions are only psychologically certain. But as soon as we have used them to prove that God exists and is no deceiver, they become metaphysically certain. This is because by proving the existence and veracity of God we eliminate the only possible reason for doubting clear and distinct perceptions. But according to (2), if there is no reason to doubt something, it is metaphysically certain. In this way our original psychological certainties get parlayed into metaphysical certainties.

As it stands, this argument is open to two serious objections. In the first place, premise (3) sets the requirements that must be satisfied by a reason to doubt absurdly high. Descartes himself certainly does not require that reasons to doubt be clearly and distinctly perceived. He says that the reasons to doubt he brings forth are "very slight," "metaphysical," and "themselves doubtful." In the second place, premise (5) seems to presuppose that we can never clearly and distinctly perceive each of two mutually

But since he later disqualifies propositions from being reasons to doubt on the ground that they are not in fact clearly and distinctly perceived, he needs the stronger premise here.

14 Gewirth says that the existence and veracity of God is the first metaphysically certain proposition ("The Cartesian Circle," p. 394). But in fact the logic of his argument requires that all things we were previously psychologically certain of (because we perceived them clearly and distinctly) become metaphysically certain at one stroke the moment that proposition is established.

15 I pass over a third: why should the hypothesis of a deceiving God be the only reason for doubting clear and distinct perceptions?

16 HR I, 159; HR II, 277.
inconsistent propositions. But this is a thesis one would rather see as a conclusion than as a premise of the Cartesian enterprise.\footnote{This point is made by Anthony Kenny in “The Cartesian Circle and the Eternal Truths,” The Journal of Philosophy, 67 (1970), 685-700. In “Descartes: Two Disputed Questions,” Gewirth makes the following reply: Descartes is entitled to the premise that clear and distinct perceptions are mutually consistent because consistency is an internal matter of relations among ideas, not an external matter of correspondence to fact. But this reply mistakenly assumes that Descartes’s doubt is rooted in his representationalism, and arises only where there is a gap to be bridged between mental ideas and extra-mental facts. In fact his doubt is far more radical. To see this, notice three things: \(i\) the propositions we can clearly and distinctly perceive are limited to propositions about what is going on in our own minds and propositions about the relations among abstract entities; \(ii\) Descartes does not hold that mental happenings and abstract entities are known only via representatives—here there is no representationalist gap; yet \(iii\) he still finds room to wonder whether clear and distinct perception is a guarantee of truth.}  

Fortunately, however, these objections can both be avoided by a single change in the argument. We need only replace premise (3) by the following premise:

\[(3') \text{R is a reason for doubting } P \text{ only if it is not the case that its negation, not-} R, \text{ is clearly and distinctly perceived.}\]

(I shall abbreviate the consequent by “\(R\) is not excluded by clear and distinct perceptions.”)  

Here we no longer require that reasons to doubt be upheld by clear and distinct perception, but only that they not be condemned by it. This enlarges the class of permissible reasons to doubt, thus mitigating the objection to premise (3). Moreover, we may now dispense altogether with the objectionable premise (5), since the conclusion, (8), follows from (1), (2), (3'), and (4) alone.

There remains, however, an objection that is fatal to Gewirth’s whole approach. The revised argument establishes only that clear and distinct perceptions are metaphysically certain in the sense jointly defined by premises (2) and (3'). That sense amounts to this: a proposition is metaphysically certain if and only if every reason for doubting it is excluded by clear and distinct perceptions. Now it was assumed initially that clear and distinct perceptions are only psychologically certain. What is added when at the end of the argument we say that God’s veracity and other things clearly and distinctly perceived are metaphysically certain? Just this: that we are psychologically certain not only of those propositions
themselves, but also of the falsehood of every reason for doubting them. Thus, we have not advanced to a new kind of certainty at all. We have merely extended the class of psychological certainties.

Descartes played for higher stakes. The certainty he sought was certainty in a sense entailing both maximal evidence and truth. Despite what Gewirth says, metaphysical certainty in his sense entails neither. It remains at bottom a purely psychological notion.

In the hope of obtaining a conclusion that is epistemologically more nourishing, let us turn to Feldman. His reconstruction of Descartes is identical in structure with the one we obtained by revising Gewirth, but there is an important difference: he replaces the concept of psychological certainty with the epistemic concept of practical certainty. Practical certainty is the sort of certainty involved in ordinary knowing of the justified-true-belief variety. Being practically certain of something, unlike being psychologically certain of it, entails having some justification for believing it.

Feldman’s argument may be set out as follows:

(1) By means of Descartes’s theological arguments, I attain practical certainty that God exists and is no deceiver.

(2) A proposition $P$ is metaphysically certain if and only if there is no proposition $R$ that casts metaphysical doubt on $P$.

(3) $R$ casts metaphysical doubt on $P$ only if it is not the case that its negation, not-$R$, is practically certain.

(4) The only proposition that casts metaphysical doubt on any clear and distinct perception is the hypothesis that God is a deceiver.

(5) All clear and distinct perceptions are metaphysically certain.

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18 Gewirth wants to say both that the absence of psychologically compelling reasons to doubt is sufficient for metaphysical certainty and that metaphysical certainty is sufficient for truth. But he cannot have it both ways.


20 I have recast his argument somewhat, but every premise I attribute to him is logically equivalent to a premise or definition he states in his article. I have also dropped references to persons and times.
The logic of this argument is the same as Gewirth’s. Before we have proved the veracity of God, clear and distinct perceptions are only practically certain. They are not metaphysically certain, because doubt is cast on them by the hypothesis that God is a deceiver. But as soon as we become practically certain that God is not a deceiver, that hypothesis, by (3), is no longer eligible to cast doubt. By (4), however, it is the only candidate, so nothing any longer casts doubt on clear and distinct perceptions. Therefore, by (2), they are henceforth metaphysically certain.

In light of (2) and (3), Feldman’s conclusion is equivalent to the following: we are practically certain not only of clear and distinct perceptions, but also of the falsehood of every proposition that would cast doubt on them. This is an improvement over Gewirth’s conclusion, since it implies that clear and distinct perceptions have something going for them epistemically. But my basic misgiving remains. Feldman’s conclusion, like Gewirth’s, provides no guarantee that clear and distinct perceptions are true. For a Cartesian this is not enough. 21

Gewirth and Feldman fall short of giving us what Descartes wanted for the same reason. They both define metaphysical certainty in terms of the absence of reasons to doubt. Then they make it very hard for anything to qualify as a reason to doubt. As a result, they make it very easy for things to qualify as metaphysically certain. Their standards for certainty are thus set too low.

Descartes, on the other hand, was much more liberal about what could count as a reason to doubt. For him, a proposition could function as a reason to doubt just so long as it was (in Feldman’s terms) a “metaphysical possibility.” 22 This makes his

21 Roderick Firth’s “The Anatomy of Certainty,” The Philosophical Review, 76 (1967), 3-27, divides senses of “certain” into three classes: truth-evaluating senses, warrant-evaluating senses, and testability-evaluating senses. In terms of this scheme, Descartes’s sense of “certain” is both truth-evaluating and warrant-evaluating; Feldman’s is warrant-evaluating but not truth-evaluating; and Gewirth’s is neither warrant-evaluating nor truth-evaluating, but only (to extend Firth’s classification) belief-evaluating.

22 Feldman considers the objection that a reason to doubt need only be a “metaphysical possibility,” i.e., something of whose falsehood we are not metaphysically certain. (I prefer the term “epistemic possibility” here.) He gives both a textual and a strategic reply. The textual reply is that Descartes himself required that reasons to doubt be practically possible. But the passages Feldman cites in support of this are both inconclusive in themselves.
standards for certainty very high. In the next section I defend Descartes's high standards.

IV

According to H. A. Prichard, "We can only be uncertain of one thing because we are certain of something else." And according to Wittgenstein, "The game of doubt presupposes certainty. If you tried to doubt everything, you would not get as far as doubting anything." A similar point was made in Descartes's own day by Bourdin, who asked concerning the reasons Descartes gave for doubting, "If they are doubtful and replete with suspicion, how can they have brought any force to bear upon you?" Descartes was unimpressed with this objection. In reply to Bourdin he said, "We may well enough be compelled to doubt by arguments that are in themselves doubtful."

Descartes was right about this. Reasons to doubt need not be certain: they need only be epistemically possible. To vindicate Descartes against Bourdin and company, I shall now construct an argument that purports to show that one thing is uncertain without presupposing that anything else is certain. There are three preliminaries. First, I define epistemic possibility as follows: if $P$ is a proposition that $S$ is considering at $t$, then $P$ is epistemically possible for $S$ at $t$ if and only if $S$ is not certain at $t$ of not-$P$. Second, by the Demon Hypothesis I mean the following: an evil demon brings it about that whatever seems evident to me is false. Finally, let $T$ be the proposition that $2 + 3 = 5$. (If there is any proposition

and outweighed by other passages, such as HR II, 266, where Descartes says that the "very least ground of suspicion" may engender doubt. The strategic reply is that by doing things his way "we help to provide a conceptual framework within which a solution to the problem at hand may be found." But I shall show that a solution may also be found within a framework that sets the standards for certainty higher.

25 HR II, 273.
26 HR II, 277.
the reader finds more evident than \( 2 + 3 = 5 \), he may let \( T \) be that one instead.) Now here is the argument:

1. The following proposition is epistemically possible for me: \( T \) seems evident to me and the Demon Hypothesis is true.
2. If \( P \) entails \( Q \) and \( P \) is epistemically possible for me, then \( Q \) is epistemically possible for me. (In other words, epistemic possibility is transmitted by entailment. This is the analogue of a theorem in modal logic.)
3. \( (T \) seems evident to me and the Demon Hypothesis is true) entails \( (T \) is false).
4. \( (T \) is false) is epistemically possible for me. \( (1), (2), \) and \( (3). \)
5. I am not certain that \( T \) is true. \( (4), \) definition.

Here we have a valid argument that leads to the conclusion that I am not certain that \( 2 + 3 = 5 \). Yet nowhere in the argument is anything claimed to be certain. The Demon Hypothesis, the most powerful of Descartes's reasons to doubt, is said only to be epistemically possible.

"Ah, yes, but wait just a minute," I hear an objector say. "It is true that in your premises nothing is claimed to be certain. But in order for the argument to do its job, you who advance it must be certain of the premises, that is, you must be certain that they are true." The objector is mistaken. If the premises of my skeptical argument are merely true, whether known to be so or not, the conclusion will also be true. And in that case I will not be certain that \( 2 + 3 = 5 \). But the premises could all be true without my being certain of anything. Therefore, there are conditions sufficient for my being uncertain about one thing that do not require my being certain about something else. And this is just what the argument was supposed to illustrate.

Nevertheless, there is another and more cogent objection to the argument. Premise (2) is false, and derives only spurious support from the analogy with modal logic. To see this, note that (2) is equivalent to the following proposition: whatever has logical consequences that are uncertain for me is itself uncertain for me. But this is clearly false. If you present me with a remote theorem of number theory I may well be uncertain of it, but I will be certain of the axioms just the same. Putting this point in terms of
epistemic possibility, the negation of the theorem may be epistemically possible for me, but the negation of the conjunction of the axioms will not be. The reason for this discrepancy, of course, is that I may not be certain that the axioms do entail the theorem. This suggests that we modify premise (2) as follows:

\[(2') \text{If } (P \text{ entails } Q) \text{ is certain for me, and } P \text{ is epistemically possible for me, then } Q \text{ is epistemically possible for me.}\]

In other words, epistemic possibility is transmitted by entailment when I am certain that the entailment holds.

The revised premise is undoubtedly true, but it brings a new difficulty along with it. To make the resulting argument valid, we shall have also to modify premise (3), as follows:

\[(3') \text{I am certain that the following entailment holds: } (T \text{ seems evident to me and the Demon Hypothesis is true}) \text{ entails } (T \text{ is false}).\]

Now we are claiming certainty in one of our premises. So what becomes of my attempt to vindicate Descartes against Prichard and Wittgenstein?

The answer is that it still succeeds. Prichard and Wittgenstein thought that grounds for doubt must be certain. Here they were wrong and Descartes was right. Grounds for doubt need only be epistemically possible, as my revised argument still illustrates. But something must be conceded to Prichard and Wittgenstein nonetheless. Although a ground for doubt need not be certain, one must in such a case be certain about the logical relation in which the ground stands to the dubitandum. This is the moral of our having to incorporate (3') into the revised argument. We may sum things up thus: doubt presupposes that something is certain; so far Prichard and Wittgenstein were right. 27 But the ground on which one bases a doubt need not be certain; on this point Descartes was right.

I want to make one observation before moving on. Look at my revised skeptical argument and I think you will agree that the only challengeable premise is (1). I think you will also agree that

27 A corollary they draw is that universal doubt is impossible, but one should not make too much of this. Although one cannot have reasons for doubting everything, one could have reasons for doubting almost any arbitrary proposition. Though not universal skepticism, this is skepticism enough.
(1) is false only if the Demon Hypothesis is not epistemically possible. Thus, you can challenge the argument only by challenging the epistemic possibility of the Demon Hypothesis. And if you do this, you are claiming to be certain that the Demon Hypothesis is false. To overthrow the demon of skepticism, you must take him boldly by the horns.

V

In this section I shall present what I think is the most promising solution to the problem of the Cartesian Circle. Not only is it the best solution for Descartes, but it also has applications to contemporary epistemology.

The key to the solution I advocate is a distinction similar to one Anthony Kenny draws between the following propositions:

(a) For all \( P \), if I clearly and distinctly perceive that \( P \), then I cannot doubt that \( P \).

(b) I cannot doubt that (for all \( P \), if I clearly and distinctly perceive that \( P \), then \( P \)).

The distinction I shall use is analogous but different. For Kenny's indubitability, which does not obviously entail either evidence or truth, I want to substitute certainty. This gives us the following pair of propositions:

(A) For all \( P \), if I clearly and distinctly perceive that \( P \), then I am certain that \( P \).

28 This distinction is anticipated in Kenny's book *Descartes* (New York: Random House, 1968) by the distinction on pp. 183-84 between first-order doubt (which would correspond to the denial of (a)) and second-order doubt (which would correspond to the denial of (b)). It is drawn explicitly in his article “The Cartesian Circle and the Eternal Truths,” cited previously.

One claim Kenny makes in connection with the distinction is incorrect. In the book he says that second-order doubt is doubt of particular propositions “in a roundabout manner” by referring to them “under some general heading, such as ‘what seems to me most obvious’” (pp. 183-84). In the article he says that the doubt implied by the denial of (b) touches particular clearly and distinctly perceived propositions “only through referentially opaque wrappers” (p. 689). But referential opacity prevents any “touching” at all. One who doubts that what he perceives clearly and distinctly is true is not doubting particular clearly and distinctly perceived propositions in any manner, however roundabout, nor through any wrappers, however opaque. What he is doubting is whether there is any connection between clear and distinct perception and truth.
(B) I am certain that (for all $P$, if I clearly and distinctly perceive that $P$, then $P$).

The difference is that (A) says that whenever I clearly and distinctly perceive any proposition I will be certain of it (the proposition in question), whereas (B) says that I am certain of a general principle connecting clear and distinct perception with truth. Clearly, (A) could be true even though (B) were false. (B) requires that I have the concept of clear and distinct perception, but (A) does not. Moreover, even if I did have this concept, I might be uncertain about the general connection between clear and distinct perception and truth, yet certain of every proposition I did clearly and distinctly perceive.²⁹

Unfortunately, the same English sentence—"I am certain of the truth of clear and distinct perceptions"—may be used to express either (A) or (B). Perhaps because of this, the distinction is often missed. But it is crucial to the Cartesian enterprise. I shall briefly indicate how it enables us to make sense of two otherwise puzzling passages in Descartes, and then I shall show how it provides an escape from the Circle.

The first passage is the notorious fourth paragraph in the Third Meditation, where Descartes appears to oscillate inconsistently between saying, on the one hand, God or no God, I am certain of things when I clearly and distinctly perceive them, and, on the other hand, I can doubt even the truth of clear and distinct perceptions if I do not know there is a veracious God. The appearance of inconsistency is removed if we see Descartes as being uncertain not of particular propositions that he clearly and distinctly perceives, but only of the general connection between clear and distinct perception and truth. What he shows us in this paragraph is that at this stage in the Meditations (A) is true of him but (B) is not.³⁰

²⁹ It seems also to be the case that (B) could be true even though (A) were false. I might be certain that clear and distinct perception guarantees truth, yet not certain that a given proposition I was clearly and distinctly perceiving was true, provided I was unaware that I was clearly and distinctly perceiving it.

³⁰ This analysis of the paragraph is essentially Kenny's; see p. 689 of "The Cartesian Circle and the Eternal Truths." It must be said, however, that the final sentence of this paragraph—"Without a knowledge of these two truths [God exists and is not a deceiver] I do not see that I can ever be certain of anything"—is an embarrassment for almost any interpretation of Descartes.
The second thing our distinction enables us to understand is the epistemic advantage Descartes claims over the atheist. He concedes that even the atheist can be certain that the three angles of a triangle are equal to two right angles if he is clearly and distinctly perceiving this at the time. (A) is thus true of atheist and Descartes alike. But if at a later time both men merely remember having a clear and distinct perception of that theorem, Descartes will still be certain of it, but the atheist will not. This is not because (as the Memory Gambit would have it) Descartes can trust his memory and the atheist cannot. It is rather because Descartes can be certain (after he has proved the veracity of God) that anything he once clearly and distinctly perceived is true, whereas the atheist cannot. So (B) is true of Descartes, but not of the atheist.31

Now let us see how our distinction enables us to break out of the Circle. The first thing to notice is that (B) need not be true at the beginning of the Cartesian enterprise. I do not have to be certain that all clear and distinct perceptions are true before I prove that God exists. Proposition (2), which describes the lower arc of the Circle, is false.

Although (B) is false at the outset, however, it does not follow that (A) is false at the outset. And if (A) is true at any time, then anything I perceive clearly and distinctly at that time will be something I am certain of. Clear and distinct perception will

31 Descartes’s advantage is not as great as he thinks. Merely remembering that he once had a clear and distinct perception of God’s veracity will not (on pain of circularity) assure him now that anything he previously clearly and distinctly perceived is true. So Descartes must acquire a present clear and distinct perception of God’s veracity by going through the theological proofs afresh. This means that he has an advantage over the atheist only in those cases where the theological proofs are shorter or more easily called to mind than the geometrical proofs the atheist must reconstruct.

It could be replied that the content of Descartes’s recollection is not “I once clearly and distinctly perceived that God exists and is no deceiver,” but just “God exists and is no deceiver.” But if so, the atheist is entitled to say that the content of his recollection is not “I once clearly and distinctly perceived that the angles of a triangle are equal to two right angles,” but just “The angles of a triangle are equal to two right angles.”
thus provide me with an initial stock of premises I know for certain to be true. According to Descartes, these premises will include *I think, if I think then I exist, and a cause must contain at least as much reality as its effect*, among others. From these first principles I can go on to prove other things, including the existence of God and, eventually, the principle that all clear and distinct perceptions are true.32

Clear and distinct perception and proposition \((A)\) play crucial roles in my proposal that must not be misunderstood. The fact that I clearly and distinctly perceive a proposition does not serve as a ground for accepting it. It is a source of knowledge, but not a ground. Nor does proposition \((A)\) serve as a ground. Rather, it is a fact that enables knowledge to get started. (We can authenticate this fact later if we wish, but need not do so in the beginning.)

Prichard misunderstands Descartes in just the way I am warning against. According to him, Descartes thinks he can arrive at certainty about a proposition \(P\) only by running through an argument of the following sort:

Whatever I perceive clearly and distinctly is certain.
I am perceiving clearly and distinctly that \(P\).
Therefore, \(P\) is certain.33

Here proposition \((A)\) and my clearly and distinctly perceiving \(P\) both appear as grounds. As grounds, they cannot contribute to knowledge unless they are themselves known. But the question how I know *them* obviously has no satisfactory answer if an argument like the one above must stand behind any answer I give. Prichard’s interpretation of Descartes thus leads to disaster (as he himself is quick to point out).

In opposition to Prichard’s interpretation, I maintain that in order to become certain of a proposition I do not need to know that I am clearly and distinctly perceiving it, nor that whatever I so perceive is either certain or true. It is enough that I *do* clearly and distinctly perceive the proposition. \((A)\) *says* that this is enough. For \((A)\) says that perceiving something clearly and distinctly is sufficient to render me certain of it. It follows that nothing

32 Of course, I do not really believe that Descartes knew for certain everything he said he did, e.g., his causal maxims. But this does not detract from the soundness of the general plan I am attributing to him.

33 Doney (ed.), *Descartes*, p. 145.
else is necessary, unless it is also necessary for the occurrence of clear and distinct perception in the first place. But neither knowledge of (A) nor knowledge of the fact that I am clearly and distinctly perceiving something is necessary for such perception to occur.  

The point I have been insisting upon could be summed up as follows: (A) is not a principle I have to apply in order to gain knowledge; I need only fall under it.

The solution I am proposing does not require us to deny (1), the proposition describing the upper arc of the Circle. We can side with Descartes if we like and hold that in order to know that whatever is clearly and distinctly perceived is true, we must first know that God exists. But this is not to say that before God’s existence is known, clear and distinct perception affords us no certainty. On the contrary, it does, and this is what lets knowledge get started. Those who observe that we must be certain of some clear and distinct perceptions independently of our knowledge of God are therefore correct. But to conclude from this that (1) must be denied would be to confuse (A) with (B).

Moreover, to say (as I do) that we must be certain at the outset of some clear and distinct perceptions is not to say (as I don’t) that we must be certain at the outset of the proposition some clear and distinct perceptions are true. Nor is it to say that we must be certain of a more specific proposition of the form those clear and distinct perceptions that are F (for example, bathed in the light of nature) are true. In either of these cases we would be entertaining a proposition about the epistemic powers of clear and distinct perception, but no such thing is required of us.

34 Kenny hits upon an important part of the solution I am advocating when on p. 194 of Descartes he writes, “When [Descartes] passes from the clear and distinct perception of something to the affirmation of its truth, he does not do so by tacit appeal to a suppressed major premise; his affirmation is based directly on the intuition and not on a deduction derived from a general proposition about the truthfulness of intuitions.” But three pages later he betrays this insight with the following claim: “If every other certainty is to be built upon the certainty afforded by clear and distinct perception, then it is essential, if there is to be any certainty at all of the type Descartes sought, that one should be able to be certain that one is clearly and distinctly perceiving something.” On the contrary, if you don’t need “Whatever is perceived clearly and distinctly is true” as a major premise, then you don’t need “I am clearly and distinctly perceiving that P” as a minor premise.

35 Though in fact I would deny this, of course.
We have seen that in virtue of (not by appeal to) proposition \((A)\) we acquire an initial stock of certainties. Where do we go from here? Descartes's route is all too familiar. Among the initial certainties are premises that entail the existence of God. In the Third Meditation he clearly and distinctly perceives this entailment, thus becoming certain that God exists. In the Fourth Meditation he clearly and distinctly perceives, and thus becomes certain, that God could not be a deceiver. He goes on to infer (and become certain) that whatever he perceives clearly and distinctly is true.

It is important to recognize at this point that despite his usual formulation of it, Descartes's rule of clearness and distinctness (the C&D Rule, I shall call it) is not merely a rule of truth. It is also a rule of evidence and, indeed, of certainty. Many passages make this clear. When Descartes first introduces the C&D Rule, it is by means of the question, "Do I not . . . know what is requisite to render me certain of a truth?"[^36] A few sentences later he refers to clear and distinct perceptions as "matters in which I believe myself to have the best evidence."[^37] Elsewhere he says that clear and distinct perceptions are "true and certain."[^38] Moreover, he often tells us that when he clearly and distinctly perceives something, he cannot help but believe it.[^39] What is clearly and distinctly perceived, then, is not only true, but also maximally evident and believed. It is therefore known for certain. The C&D Rule thus turns out to be equivalent to proposition \((A)\).

Descartes's procedure could be summed up thus: by falling under proposition \((A)\) (that is, the C&D Rule), he becomes certain of premises from which he eventually derives proposition \((A)\) itself.[^40] But since he does not have to use proposition \((A)\) at any step along the way, there is no circle.

[^36]: HR I, 158.
[^37]: Ibid.
[^38]: HR I, 184; HR II, 41. What Descartes says here is that clear and distinct perceptions are certain after God's existence is proved. For my purposes, we must interpret him to mean "From a knowledge of God, I can prove that whatever is perceived clearly and distinctly is certain" rather than "If I clearly and distinctly perceive something and I know that God exists, then I will be certain of that thing." The latter makes knowledge of God a prerequisite of certainty, but the former does not.
[^39]: HR I, 158, 176, 183; HR II, 42, 266.
[^40]: Once he becomes certain of \((A)\), \((B)\) is true, too—but not until then.
Once Descartes knows that proposition \((A)\) is true, of what use is the information? Well, for one thing, it enables him to cast off the atheist’s handicap: he can now be certain of things he merely remembers having clearly and distinctly perceived. But more importantly, it enables him to vindicate his starting point. It gives him an answer to the critic who says, “I grant that your procedure is not circular, but I don’t see how you can escape the charge of arbitrariness in your first premises. What is the justification for starting from just the premises you did?” After he has proved proposition \((A)\) Descartes can give the following reply: “Those premises are things I knew for certain. The proof of this is that I perceived them clearly and distinctly, and whatever I so perceive is certain.”

To make the last point clearer, let me review the successive stages of the Cartesian enterprise. Here are the things of which Descartes is certain, listed in the order in which he becomes certain of them:

1. **I think**, the causal maxims, etc. Proposion known because they are clearly and distinctly perceived.
2. **God exists, God is no deceiver.** Propositions known because they are clearly and distinctly perceived to follow from premises at level (1).
3. **Whatever I perceive clearly and distinctly is certain.** Principle known because it is clearly and distinctly perceived to follow from propositions at level (2).
4. **I perceive clearly and distinctly that I think, etc.** New premises, one corresponding to each premise at level (1).
5. **I am certain that I think, etc.** Propositions known because they are clearly and distinctly perceived to follow from propositions at levels (3) and (4).

The propositions at stage (1) are Descartes’s first premises; he accepts them without any supporting grounds. This is what in-

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41 For a discussion of how premises of the form “I perceive clearly and distinctly that \(P\)” are known, see Frankfurt, *Demons, Dreamers, and Madmen*, chapter 13. Some critics of Descartes hold such knowledge to be problematic. It is an advantage of my interpretation that the need for it is postponed until level (4).
curs the charge of arbitrariness (or dogmatism). But that charge may be answered as follows. If proposition \( A \) is true, then Descartes’s first premises are immediately justified, that is, they are justified simply in virtue of being clearly and distinctly perceived, not because they inherit justification from other propositions. From these immediately justified beginnings Descartes goes on to derive (at level (3)) proposition \( A \) itself, which serves as a reason for the higher-order propositions (at level (5)) to the effect that his initial premises were justified (indeed, certain). This shows that the initial premises were not arbitrary.

The strategy I am imputing to Descartes is nicely described in a recent article by William P. Alston. He writes:

For any belief that one is immediately justified in believing, one may find adequate reasons for accepting the proposition that one is so justified. The curse (of dogmatism) is taken off immediate justification at the lower level, just by virtue of the fact that propositions at the higher level are acceptable only on the basis of reasons. 42

This fits Descartes perfectly. His initial premises are immediately justified and certain, but the higher-order proposition that says they are certain is justified by appeal to reasons. 43

I shall consider one more objection to Descartes’s procedure. This one charges that proposition \( A \) is arbitrary because one could have chosen any rule of evidence and justified it by the method I attribute to Descartes. My reply is twofold. First, proposition \( A \) is not arbitrary; it is the conclusion of an argument. One may wish to quarrel with the argument, but that would be a separate objection. Second, it is simply not true that any principle could be justified in the same manner as \( A \). It has at least to be a true principle, or else no first premises will be justified in virtue of it.


43 Alston himself does not attribute this strategy to Descartes. He thinks Descartes is an Iterative Foundationalist, i.e., one who believes that some propositions of the form “\( P \) is immediately justified for \( S \)” are themselves immediately justified for \( S \). (See p. 182n.) But as I interpret Descartes, he is what Alston calls a Simple Foundationalist, i.e., one who believes that for any epistemic subject, some propositions are immediately justified, but that no propositions of the form “\( P \) is immediately justified for \( S \)” are immediately justified. Such higher-order propositions are justified only mediately by reference to the veracity of God.
This completes my solution to the problem of the Cartesian Circle. Needless to say, I do not wish to endorse all the details of Descartes's reasoning. But I do maintain that in general outline it is sound, and in Part Two I shall use what is of value in it to throw light on contemporary issues.

Part Two

VI

In contemporary epistemology there is a movement away from foundationalist theories of justification toward coherentist theories. Wilfrid Sellars and Keith Lehrer, two of the leaders of this movement, have criticized foundationalism by raising doubts about its ability to justify its own epistemic principles. In this Part I shall draw on what we have learned about Descartes in Part One to show how these criticisms may be met.

Two doctrines are essential to foundationalism: (i) there is a class of propositions—the "foundations"—that are self-evident or immediately justified; and (ii) every proposition that is justified is so at least partly in virtue of standing in certain relations to the foundations. Certain other doctrines are often associated with foundationalism, but they are not entailed by (i) and (ii). For example, Descartes was a foundationalist who held (iii) that the foundational propositions must be not only immediately justified, but also certain and indubitable, (iv) that they are limited in scope to simple necessary truths and propositions about one's own mental states, and (v) that the superstructure is related to the foundations by deductive relations exclusively. One can defend (i) and (ii) without being committed to (iii), (iv), and (v).

44 By a self-evident proposition I do not mean one that derives its evidence from itself (whatever that might mean), but one that does not derive its evidence from any other propositions. (Similarly, when theologians speak of God as self-caused, they do not usually mean that God causes his own existence, but rather that his existence is not caused by any other being. See Caterus's remarks on this point at HR II, 4.) Perhaps a better term is "immediately justified," which I shall generally use instead.

It should be borne in mind that a justified proposition is not necessarily one that an epistemic subject has gone through the procedure of "justifying."
FOUNDATIONALISM

Foundationalists often set forth principles specifying the conditions under which propositions of various types are justified. Usually called *epistemic principles*, they fall into two groups: principles that tell us that propositions of certain types are justified independently of their logical relations to other propositions, and principles that tell us that if some propositions are already justified, then any propositions that stand in such-and-such relations to them are also justified. Principles of the first sort I call *generation principles*, since they are principles whereby justification is generated in the first place, and those of the second sort I call *transmission principles*, since they are principles whereby justification is transmitted from some propositions to others. Generation principles are used to lay the foundations, transmission principles to erect the superstructure.

The general form of an epistemic principle is “If ... then \( P \) is justified for \( S \).” The antecedent of a sentence expressing a transmission principle will contain terms of epistemic appraisal (such as “evident,” “certain,” and so on), since it must mention other propositions and specify their epistemic status. But the antecedent of a sentence expressing a generation principle will not contain terms of epistemic appraisal.\(^{45}\)

Descartes’s C&D Rule is a generation principle. It tells us that if someone is clearly and distinctly perceiving a proposition—a state we can describe without using epistemic terms—then that proposition is certain for him. Another example of a generation principle is Chisholm’s Principle \((A)\), which says that if a subject is in any of a designated group of “self-presenting states,” then it is evident to him that he is in the state in question.\(^{46}\)

\(^{45}\) Some coherentists espouse principles that are neither generation principles nor transmission principles, but a sort of hybrid between the two. An example would be “If \( P \) coheres with the system of propositions accepted by \( S \) (or the scientists of our culture circle, etc.), then \( P \) is justified for \( S \).” This is like a generation principle in that its antecedent contains no epistemic terms, but like a transmission principle in that its antecedent specifies relations to other propositions. It seems to me, however, that an adequate epistemology must recognize at least one *full-blooded* generation principle. “Credibility may be transmitted from one statement to another through deductive or probability connections; but credibility does not spring from these connections by spontaneous generation,” Nelson Goodman, “Sense and Certainty,” *The Philosophical Review*, 61 (1952), 160–67.

An obvious example of a transmission principle is the principle that deduction transmits justification—more precisely, if \( P \) is justified for \( S \), and the proposition that \( P \) entails \( Q \) is true and justified for \( S \), then \( Q \) is justified for \( S \). This is the only transmission principle Descartes allowed.\(^{47}\) But most foundationalists countenance several others, including, perhaps, principles whereby justification is transmitted to propositions about the physical world and propositions about the past. The best known list of such nondeductive transmission principles is Chisholm’s.\(^{48}\)

Critics of foundationalism look upon its epistemic principles with suspicious eyes. “What is the justification for them?,” they ask. Sellars and Lehrer contend that foundationalists have no satisfactory answer to this question, and urge us to adopt a coherentist view instead. Coherentism denies (i) and (ii), maintaining that a proposition may be justified in virtue of belonging to a coherent system of propositions none of which is immediately justified.

It will be convenient to sum up the Sellars-Lehrer critique in three theses:\(^{49}\)

(i) Epistemic principles must themselves be known (or justified) if knowledge (or justified belief) is to arise in accordance with them.\(^{50}\)

\(^{47}\)The principle Descartes introduces in the Sixth Meditation—that beliefs in physical objects prompted by our sensory ideas must be true, else God would be a deceiver—is a rule of truth, not a rule of evidence. I say more about this distinction in Section X.

\(^{48}\)See Principles (B)-(I) in chapter III of Theory of Knowledge. Some readers may question my classification of Principles (B)-(F) as transmission principles. They have the form of generation principles, since their antecedents contain no terms of epistemic appraisal. I suspect, however, that Chisholm thinks of them as transmission principles. If they were generation principles, then he would be committed to the view that some propositions about the physical world and some propositions about the past are immediately justified; but Chisholm sides with the Cartesian tradition in holding that such propositions are only mediately justified.


\(^{50}\)For convenience in what follows I shall often use the term “knowledge” where justification is all that need be at issue.
(II) There is no way to justify epistemic principles within a foundationalist framework.

(III) There is a way to justify epistemic principles within a coherentist framework.

If (I) and (II) are both true, foundationalism leads to skepticism. If (III) is true, coherentism does not. So the upshot of the Sellars-Lehrer critique is this: if we wish to avoid skepticism, we must reject foundationalism in favor of coherentism. In the remaining sections, I shall explore possible foundationalist responses to this challenge, concentrating on (I) and (II).

VII

Premise (I) of the Sellars-Lehrer critique is widely taken for granted, but acceptance of it rests on a misunderstanding of how epistemic principles function. I have already discussed this misunderstanding in Part One. There we saw that Descartes did not need to know that the C&D Rule was true in order for clear and distinct perception to give him knowledge. For just the same reason, we can say in general that a subject need not know that an epistemic principle is true in order for the circumstance mentioned in its antecedent to give him knowledge.

The argument for this is very simple. An epistemic principle has the form "If . . . then P is justified for S." In other words, it says that the obtaining of whatever condition is specified in its antecedent is sufficient for P's being justified for S.\textsuperscript{51} Now it is a logical truth that if X is sufficient for Y, then there is no other condition Z that is necessary for Y, unless Z is also necessary for X. But knowledge of an epistemic principle is not necessary for the obtaining of its antecedent. Therefore, knowledge of an epistemic

\textsuperscript{51} Sometimes epistemic principles are formulated so as to allow for the possibility that the justification arising in accordance with them may be defeated or overridden. In these cases the obtaining of the antecedent is not by itself sufficient for justification to arise; what is sufficient is this plus the absence of any overriding circumstances. But this complication does not affect the point I am making. (Incidentally, this same complication calls for a qualification in my earlier characterization of generation principles: a clause in the antecedent stipulating that there are no overriding circumstances may, in its specification of those circumstances, use terms of epistemic appraisal; but the positive clause in the antecedent will not use such terms.)
principle is not necessary for knowledge to arise in accordance with it. The first premise of the Sellars-Lehrer critique is false.

VIII

The argument that shows that knowledge of epistemic principles is not required also shows that knowledge of their antecedents is not required. This undermines a criticism Sellars levels against Chisholm's Principle (A). That principle, recall, says that if a subject is in any of a designated group of psychological states, then it is evident to him that he is in whatever state it is. Sellars says that this principle "seems to point to" arguments of the following form:

It is a fact that I am $F$.

So, it is reasonable to believe that I am $F$.

He then observes, "In order for any such argument to do the job, its premise would have to have authority, it would have to be something which it is reasonable to believe." Presumably the difficulty with this is that if the conclusion were in question, the argument could not be expected to put it out of question.

To raise this objection is to misunderstand Chisholm in just the way that Prichard misunderstood Descartes. Chisholm's principle is not supposed to function as a suppressed major premise under which a subject must subsume himself. The point is rather that just as having a clear and distinct perception of something puts one in a condition of knowing it, so being in a self-presenting state puts one in a condition in which it is evident to one that he is in that state.

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53 Ibid.
54 There are, of course, other objections that one could raise against Chisholm's principle. Sellars' most challenging one is this: a necessary condition of $P$'s being evident to anyone is his having learned a sentence that means that $P$; but being in one of the states Chisholm calls "self-presenting" is not sufficient for having learned any sentences; therefore, being in one of these states is not sufficient for anything's being evident to you. Compare the argument on pp. 131–32 of "Empiricism and the Philosophy of Mind" in Sellars' Science, Perception, and Reality (London: Routledge and Kegan Paul, 1963). The big issue raised by this objection, of course, and one too big to discuss here, is the relation of thought to language.
There is a standard objection to coherentism that can be answered in the same way. Coherentists say that a proposition is justified if it coheres with a system of propositions of the right kind—for example, those already accepted by the subject, or by “the scientists of our culture circle,” and so on. Foundationalists have been wont to object by asking, “How do you know which propositions belong to the system? And how do you know that a given proposition does cohere with them?” But if the coherentist principle is true (and one may, of course, wish to question this) one need not know those things.

IX

In section VII we saw that epistemic principles need not be known in order for knowledge to arise in accordance with them. This does not mean, however, that the question “What justifies your principles?” is one that the foundationalist can brush aside. There are two reasons for this. In the first place, although some knowledge arises even if the principles are not known, there may be other knowledge that does depend on knowing the principles. In Descartes’s system, for example, one must have knowledge of the C&D Rule in order to obtain knowledge of propositions clearly and distinctly perceived at an earlier time. One must also have knowledge of the Rule in order to arrive at higher-order knowledge—knowledge that one knows. In the second place, even if knowledge of epistemic principles is not required for either of the two purposes just mentioned, we may seek it for its own sake when we embark upon epistemological inquiry. If it turns out that epistemic principles are justified at all, foundationalism will owe us an account of how they are justified. Otherwise it will not be a complete theory of justification. I turn, therefore, to examination of premise (II) of the Sellars-Lehrer critique.

If epistemic principles are justified within a foundationalist framework, this must be in one of two basic ways: either they are immediately justified, lying at the foundation, or they are mediately justified, resting upon the foundation. Within the latter alternative there are two subalternatives, which are best explained with the help of a term borrowed from Alston: an epistemic proposition is a singular proposition that attributes evidence,
certainty, or some other epistemic characteristic to another proposition. Now on the first subalternative, epistemic principles are justified after epistemic propositions, thus occupying a higher story in the edifice of knowledge, and on the second subalternative epistemic principles are justified before epistemic propositions, thus occupying a lower story in the edifice of knowledge. This gives us three alternatives in all: the justification of epistemic principles may be immediate, it may be mediate and posterior to that of epistemic propositions, or it may be mediate and prior to that of epistemic propositions. I shall discuss all three alternatives, beginning with the last.

X

The first pattern to be discussed—mediate justification of epistemic principles prior to the justification of epistemic propositions—follows this general sequence:

1. Propositions known immediately.
2. Further propositions inferred from propositions at level (1).
3. Epistemic principles inferred from propositions at level (2).
4. Instantiations of antecedents of epistemic principles.
5. Epistemic propositions inferred from propositions at levels (3) and (4).

The reader who refers back to section V will see that this is precisely the pattern I attributed to Descartes. At level (1) we have the cogito and other things known immediately, at level (2) the existence and veracity of God, at level (3) the C&D Rule, at level (4) subsumptions of level (1) propositions under the Rule, and at level (5) epistemic propositions attributing certainty to the propositions at level (1).

55 Alston, p. 169.
56 A third possibility, of course, is that epistemic principles and epistemic propositions occupy the same story of the edifice. But this is not very promising. There is some prospect of justifying epistemic principles if you can appeal to epistemic propositions, and some prospect of justifying epistemic propositions if you can appeal to epistemic principles, but little prospect of justifying each independently of the other. See Chisholm, “The Problem of the Criterion,” where the same point is made in different terms.
I argued in section V that Descartes’s procedure is neither circular nor arbitrary. What is problematic about it is simply whether there are indeed valid inferences from level (1) to level (2) and from level (2) to level (3). As Hume observed, to have recourse to the veracity of God in order to prove the certainty of our perceptions is to make “a very unexpected circuit.”

Contemporary epistemologists who use Descartes’s pattern will no doubt want to avoid the circuit through theology, replacing his level (2) propositions by something more in keeping with a naturalistic world view. Let us therefore inquire into the prospects for a Cartesian epistemology naturalized.

Let us begin by taking a look at an attempt by Sellars to give a naturalistic derivation of Chisholm’s Principle (C), which reads as follows:

If there is a certain sensible characteristic \( F \) such that \( S \) believes that he perceives something to be \( F \), then it is evident to \( S \) that he is perceiving something to have that characteristic \( F \), and also that there is something that is \( F \).

Sellars’ derivation of this principle occurs as part of a larger coherdentist strategy—in true Hegelian fashion, he is trying to concede the approximate truth of the foundationalist’s principles while showing that they find their rationale only within his own coherdentist system. Nonetheless, aspects of his derivation might be appropriated by foundationalists.

The idea, then, is to derive Principle (C) from naturalistic facts—facts of the sort establishable by scientific inquiry. What might these facts be? Sellars’ candidates are facts about concept formation and language learning. Certain sentences—for example, “Here is a red apple”—are learned as directly conditioned responses to states of affairs obtaining in one’s immediate vicinity. Now to say that a response \( R \) is conditioned to a stimulus \( S \) is to say that for the most part \( R \) occurs when and only when \( S \) occurs. Therefore, one who has learned how to use the sentence “Here is a red apple” will tend to utter it when and only when a red apple

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57 David Hume, *An Inquiry Concerning Human Understanding* (Indianapolis: Bobbs-Merrill, 1955), p. 162. Hume was referring to sense perceptions rather than clear and distinct perceptions, but the same point holds for the latter.

58 That naturalistic epistemology and Cartesian epistemology may be viewed as sharing the pattern (1)-(5) was suggested to me by Stephen Leeds.

59 *Theory of Knowledge*, p. 47.
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is present to his eyes. Hence, the utterance of that sentence by one who knows the language is a good indicator of the presence of a red apple. And one who finds himself uttering (or spontaneously inclined to utter) “Here is a red apple” can therefore take this utterance (or inclination) as evidence for the truth of the belief expressed by those words. We thus arrive (in Sellars’ words) at “something very like” Chisholm’s Principle (C).

But just how like Chisholm’s principle is it? What Sellars’ argument really shows is at most this: if S utters (or is spontaneously inclined to utter) the words “Here is an F” (where “F” is any predicate directly conditioned to nonverbal stimuli), then the proposition expressed by those words is likely to be true. This differs from Principle (C) in several ways, one of which for our purposes is crucial: where (C) contains the term “evident” Sellars’ principle contains the phrase “likely to be true.” It is plain that the latter must be taken in a statistical sense—the import of Sellars’ principle is that most beliefs of a certain sort are true. Now the mere fact that most beliefs of a certain sort are true does not suffice to make those beliefs evident (or even justified to any degree) for the persons who hold them. After all, any true belief belongs to at least one class of beliefs most members of which are true, but not all true beliefs are justified. What our Sellarsian considerations establish, therefore, is a statistical principle, not an epistemic principle in the proper sense of the term.

This may account for Sellars’ allegiance to premise (I). We saw in section VII that when epistemic principles are understood in the way I suggested, (I) is demonstrably false. But to someone who really has statistical rather than epistemic princi-

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60 This argument occurs both in “Epistemic Principles” and “Givenness and Explanatory Coherence.” For a somewhat similar account see W. V. Quine and Joseph Ullian, The Web of Belief (New York: Random House, 1970), pp. 33–36, where it is suggested that a “force for veracity” can be found “in the very mechanism of language learning.”

61 Other differences, not crucial for our purposes, are these: in Sellars’ principle the values of “F” are not restricted to sensible characteristics, and the talk of belief has been transposed into talk of utterance and inclination.

62 I classify as statistical any principle that is concerned with frequency of truth rather than justification. Thus, even a principle to the effect that all beliefs of a certain sort are true would count as statistical.
ples in mind, (I) will seem eminently plausible. The statistical fact that most beliefs of a certain sort are true does not make any of those beliefs evident; but if a believer knew this statistical fact, and knew in addition that one of his beliefs belonged to the sort in question, then (if no evidence pointed the other way) he would be justified in holding that belief. It does seem that statistical principles, unlike epistemic principles, can contribute to knowledge only if they are themselves known. 63

Whether this explains Sellars’ acceptance of (I) or not, the point remains that his naturalistic derivation does not yield an epistemic principle, but only a statistical principle. Moreover, given a certain assumption that I have merely left tacit until now, I think it is safe to say that any attempt at a naturalistic derivation of epistemic principles would meet the same fate. The assumption is this: epistemic principles involve concepts that are irreducibly epistemic. That is to say, they involve concepts like evidence and certainty, and these concepts can only be defined with the help of other epistemic concepts; they cannot be defined solely in terms of logical and empirical concepts such as truth, probability, causation, and belief. 64 If this assumption is correct, it is hard to see how epistemic principles could ever be derived from propositions established by scientific inquiry. The difficulties involved would be analogous to those involved in trying to derive “ought”-statements from “is”-statements or observation statements from theoretical statements (without correspondence rules).

In conclusion, then, without a naturalistic reduction of epistemic concepts, there cannot be a naturalistic derivation of epistemic principles. 65 We must look elsewhere for their justification. 66

63 Sellars and Chisholm appear to agree in holding that statistical principles can be of epistemological significance only if they are themselves known. See Science, Perception, and Reality, pp. 167-68, and Chisholm, Perceiving (Ithaca: Cornell University Press, 1957), p. 27.

64 In “Empiricism and the Philosophy of Mind” Sellars seems to agree: “The idea that epistemic facts can be analyzed without remainder—even ‘in principle’—into nonepistemic facts . . . is, I believe, a radical mistake—a mistake of a piece with the so-called ‘naturalistic fallacy’ in ethics”—Science, Perception, and Reality, p. 131.

65 This point by itself, however, does not undermine naturalistic programs in epistemology. Naturalists might propose simply to dispense with epistemic principles, maintaining that statistical principles are all epistemology needs.
The next pattern to be discussed—mediate justification of epistemic principles posterior to the justification of epistemic propositions—is also present, although not prominent, in the Meditations. At the beginning of the Third Meditation Descartes introduces his C&D Rule in the following way:

I am certain that I am a thing which thinks; but then do I not likewise know what is requisite to render me certain of a truth? Certainly in this first knowledge there is nothing that assures me of its truth, excepting the clear and distinct perception of that which I state, which would not indeed suffice to assure me that what I say is true, if it could ever happen that a thing which I conceived so clearly and distinctly could be false; and accordingly it seems to me that already I can establish as a general rule that all things which I perceive very clearly and very distinctly are true. 67

Here Descartes starts with an epistemic proposition—*I am certain that I am a thing which thinks*—and moves to an epistemic principle—*all things which I perceive very clearly and distinctly are true.* 68

In the immediately following paragraphs, however, Descartes says that his principle is subject to doubts that can be removed only by establishing the existence of a veracious God. Evidently, then, he views the passage I have quoted as belonging merely to the context of discovery, not to the context of justification. In it the C&D Rule is first brought to light, but not yet established as known.

To this it might be objected that knowledge of statistical principles presupposes the truth of at least one epistemic principle. After all, statistical principles must be inferred from data; surely we need a principle in virtue of which the data are justified and a principle in virtue of which the inference is justified. The naturalist can reply that this is true only if knowledge is analyzed in terms of justification. It is not true if knowledge is given an analysis from which the concept of justification is eliminated, as in Goldman's “causal” analysis (Alvin Goldman, “A Causal Theory of Knowing,” *The Journal of Philosophy, 64* (1967), 357–72) or Armstrong's “reliability” analysis (David Armstrong, *Belief, Truth, and Knowledge* (Cambridge: Cambridge University Press, 1973)). I do not believe that these analyses are adequate, but I lack the space to criticize them here.

Unfortunately, the criticisms raised in this section apply to Descartes's enterprise, too. Although it appeals to a supernatural entity, that enterprise is naturalistic in the sense that it tries to derive epistemic principles from nonepistemic facts.

67 HR I, 158.

68 Keep in mind that instead of “true” he should say “certain.”
But why not regard the passage as a justification of the C&D Rule? We can extract from it the following argument:

(1) I am certain that I am a thinking thing.
(2) The only possible source of this certainty is clear and distinct perception.
(3) Therefore, clear and distinct perception is a source of certainty (i.e., whatever I perceive clearly and distinctly is certain).

This argument fits the pattern Chisholm has labelled “critical cognitivism.” Such arguments contain one premise affirming that we do have knowledge, certainty, or justification with respect to propositions of a given type, another premise ruling out all possible sources of this knowledge except one, and a conclusion affirming that the remaining possible source must therefore be the source of the knowledge in question. Epistemic principles are thus justified by appeal to epistemic propositions.69

Critical cognitivism arouses misgivings in many. I shall spend the rest of this section discussing the two strongest objections to it I have encountered. The first comes from Alston, who in the following passage is criticizing the view that epistemic propositions may be immediately justified, but whose remarks can be adapted against critical cognitivism as well:

In taking a belief to be justified, we are evaluating it in a certain way. And, like any evaluative property, epistemic justification is a supervenient property, the application of which is based on more fundamental properties. . . . Hence in order for me to be justified in believing that S’s belief that ρ is justified, I must be justified in certain other beliefs, viz., that S’s belief that ρ possesses a certain property, Q, and that Q renders its possessor justified. (Another way of formulating this last belief is: a belief that there is a valid epistemic principle to the effect that any belief that is Q is justified.) Hence in no case can an epistemic belief that S is justified in believing that ρ, itself be immediately justified.70

Alston is claiming that in order to come to be justified in believing an epistemic proposition, I must first be justified in believing an appropriate epistemic principle. If he is right

69 See Theory of Knowledge, pp. 59–61. There is a strain of critical cognitivism in Descartes’s reply to the Second Objections. There he justifies the principle that “Every idea needs to have some really existing cause of its objective reality” by saying “The admission of this axiom is highly necessary for the reason that we must account for our knowledge of all things, both of sensuous and of nonsensuous objects, and do so by means of it alone” (HR II, 56).
70 Alston, p. 170.
about this, the justification of epistemic principles cannot be posterior to that of epistemic propositions, contrary to what is envisaged by critical cognitivism. Things would have to be the other way around.

Let us grant that justification is a supervenient property.71 There are still two lines of reply to Alston’s argument. Using "Jp" to abbreviate "S is justified in believing that p," we can symbolize his main premise as follows:

\[ Jp \text{ requires } \exists Q\{JQp \& J[(p)(Qp \to Jp)]\} \]

Now the first reply is this: why is it not sufficient for Jp to have \[ J[\exists Q\{Qp \& (p)(Qp \to Jp)\}] \].

In other words, why is it not sufficient to be justified in believing that p possesses some property Q that renders its possessor justified without knowing which property it is? The job of the critical cognitivist’s argument would then be to identify the property Q.

I find this reply quite plausible. Sometimes I reflect that I know a certain proposition, then ask myself how I know it (what makes me justified). I can be justified in my initial reflection even before I have successfully answered the question it provokes. (The analogue in ethics would be knowing that an act is right without yet knowing what makes it right.)

The second reply is this: if it is a true epistemic principle that (p)(Qp \to Jp), then a sufficient condition for Jp would be QJp, which does not itself require either JQp or J[(p)(Qp \to Jp)]. Hence, in order to defend his main premise, Alston needs the additional but unstated premise that no epistemic proposition can ever possess a property like Q. In short, he must rule out QJp. But why can’t we have QJp? Suppose that Q is the property of being clearly and distinctly perceived; why can’t I clearly and distinctly perceive not only that 2 + 3 = 5, but also that it is evident to me that 2 + 3 = 5?72 Unless this alternative can be

71 What I am granting is that justification is supervenient in the sense that its instantiation depends on that of nonepistemic properties. If Alston’s point in calling justification supervenient is that its warranted ascription is always based on nonepistemic properties, I am challenging it.

72 Russell makes a similar suggestion on pp. 381–82 of Human Knowledge (New York: Simon and Schuster, 1948): “The degree of credibility attaching to a proposition is itself sometimes a datum. I think we should also hold that the degree of credibility to be attached to a datum is sometimes a datum.”
ruled out, Alston's argument is inconclusive.

The other objection to critical cognitivism is that it seems unsatisfyingly arbitrary and ad hoc. I do not know how to allay this misgiving, except by pointing out, as Chisholm does, that the conclusion of a critical cognitivist argument is (sometimes, at least) the consequence of premises that are individually quite plausible. For example, isn't it certain that I am (at least) a thinking thing? And what else could render me certain of it, if not the fact that I clearly and distinctly perceive it?

Before moving on I want to make three comments about the status of epistemic principles that are justified by critical cognitivist arguments. First, since knowledge of epistemic principles is not on this view a prerequisite for knowing that you know, there may be few occasions if any on which knowledge of them is called for. But this is not to say that they are idle; on the contrary, they have to be operative if there is to be knowledge at all. Second, every critical cognitivist argument has one premise that affirms that all possible sources but one of a given type of knowledge are barren. But it is hard to be sure that one has considered all possible sources, and harder still to be sure that one has considered all possible ways in which knowledge might arise from a given source. Therefore, the justification of epistemic principles afforded by critical cognitivism is bound to be somewhat tentative and conjectural. Third, it is sometimes suggested that epistemic principles are synthetic and a priori. But a critical cognitivist should not say this, for the argument he offers makes essential use of the a posteriori premise that we do know various things. If epistemic principles are a priori for him in any sense at all, it can only be in the Kantian sense that they are necessary presuppositions of knowledge.

XII

The last possibility to be discussed is that epistemic principles are immediately justified. The historical Descartes did not

\[\text{E.g., by Chisholm in chapter 7 of Perceiving. But Chisholm also tends to favor critical cognitivism. Perhaps one could combine these positions by saying that epistemic principles are discovered through critical cognitivism, but justified by immediate intuition.}\]
countenance this possibility, but I can imagine another Descartes meditating to himself as follows: “By reflecting on my condition when I clearly and distinctly perceive that $2 + 3 = 5$, I can see that my condition is one of knowing. Moreover, I can see that any state of clear and distinct perception would have to be a state of knowing. There could no more be a state of clear and distinct perception that was not a state of knowing than there could be adjacent mountains that did not enclose a valley.” For this Descartes, the C&D Rule is an immediately justified necessary truth. Other foundationalists have claimed a similar status for their epistemic principles.\textsuperscript{74}

Lehrer objects strenuously to the imputation of immediate justification to epistemic principles.\textsuperscript{75} Such a maneuver, he says, has the following disadvantages: (i) it makes the choice of epistemic principles “arbitrary”;\textsuperscript{76} (ii) it “entirely begs the question in favor of the foundation theorist” and “lacks dialectical cogency”;\textsuperscript{77} and (iii) it “opens the door to the most rampant forms of speculation.”\textsuperscript{78} What can the foundationalist say in reply?

(i) To say that the choice of principles is “arbitrary” is to say that there is no justification for choosing one set of principles rather than another, and Lehrer’s ground for saying this is presumably that the foundationalist offers no reason in support of his choice. But if this is his ground, then Lehrer is presupposing that all justification is mediate—that nothing can be justified unless there is some further proposition that supports it. This, of course, begs the question against the foundation theorist.

(ii) In laying down a generation principle, a foundationalist affirms that the propositions specified in its consequent are

\textsuperscript{74} E.g., Chisholm in chapter 7 of Perceiving.

\textsuperscript{75} He also objects to the claim that epistemic principles are necessary truths, suggesting that a skeptic who denied them would not be contradicting himself. This is true if it means that a formal contradiction cannot be deduced from the skeptic's denial by appeal to logic and meanings alone. But not all necessary truths have denials that are self-contradictory in this sense. On the other hand, if (as he seems to be) Lehrer is using “self-contradictory” in the broad sense in which it is synonymous with “necessarily false,” then it is no longer obvious that the skeptic’s denial is not self-contradictory.

\textsuperscript{76} Knowledge, pp. 143-44.

\textsuperscript{77} Knowledge, p. 121.

\textsuperscript{78} Knowledge, pp. 152-53.
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immediately justified whenever its antecedent is true. If a coherentist, who denies that any propositions are immediately justified, asks why he should accept such a principle, he will naturally be unsatisfied if he is told that it is itself immediately justified. So Lehrer is right: the foundationalist does beg the question, and his reply is dialectically ineffective.

But let us see if the coherentist can argue with greater dialectical effectiveness. He, too, espouses an epistemic principle, one that takes the following form: if a proposition coheres with a system of propositions of kind $K$, then it is justified. Why should we accept a principle of this type? The coherentist dare not say that it is self-evident, lest he make a fundamental concession to the other side. It is more likely that he will say that it is justified by its coherence—in which case he is as guilty of begging the question as the foundationalist.

I mention this not to indulge in a tu quoque, but in order to bring out the fact that in the foundationalism-coherentism dispute, as in most matters of fundamental disagreement, it may be impossible for either side to support its view without begging the question against the other. It is hard for either side to get a dialectical grip on the other. One should not draw skeptical or relativist conclusions from this, however. One side may be in the right—and know that it is—even if it is incapable of demonstrating this to the other.

(iii) Let us consider, finally, the objection that foundationalism opens the door to speculation. If the foundationalist claims that his principles are immediately justified, then what is to prevent, let us say, a revelationist from claiming the same status for a principle to the effect that if $S$ has an ostensible revelation that $P$, then $S$ is justified in believing that $P$? The answer is that there is nothing to prevent this, but the foundationalist need not agree that the revelationist's principle is justified. Some claims to immediate justification are spurious.

Now let us see how speculation fares within the coherence theory. It is a consequence of this theory that any belief might be

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79 Knowledge, p. 54. Different ways of specifying what the coherence relation is and what a system of kind $K$ is yield different coherentist principles, but the point I am making applies to them all.
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justified just so long as the believer enlists an appropriate cast of supporting beliefs.\(^8^0\) Suppose, for instance, that someone entertains the notion that the world is made of cottage cheese, and that the rest of his beliefs form a system of kind \(K\) including the following items: the cosmos flowed forth from the teats of a cow and curdled; when I sink my spade into the earth, up come mounds of creamy white stuff; and so on. What is to prevent this? Again, nothing. Moreover, there is an important difference between this situation and the one described in the last paragraph: the foundationalist did not have to agree that the revelationist’s beliefs were justified; but the coherentist \textit{does} have to agree that the beliefs of our eccentric cosmologist are justified (for him, at least), because they do, after all, satisfy the antecedent of the coherence principle. If anything, then, coherentism opens the door to speculation \textit{wider}.

I conclude that there is nothing inherently objectionable about claiming that epistemic principles are immediately justified. Of course, this status can be claimed more plausibly for some principles than others. Perhaps few would hesitate to classify as immediately justified the principle that deduction transmits justification. And I would not hesitate to add to the list two generation principles: to cover the first truths \textit{a posteriori}, Chisholm’s Principle \((A)\), and to cover the first truths \textit{a priori}, a version of Descartes’s C&D Rule, modified so as to be a rule of prima facie justification only. But to classify nondeductive transmission principles as immediately justified does not come as easily.

XIII

The results of Part Two may be summarized as follows. Coherentists have objected that epistemic principles must be justified, but cannot be if foundationalism is true. I have argued for just the opposite: epistemic principles need \textit{not} be justified, but \textit{can} be if foundationalism is true. I considered three ways in which this might occur. The first, naturalism, is perhaps the most exciting, but also, alas, the least promising. It overlooks the

\(^{8^0}\) And, in Lehrer’s version, is a disinterested truth-seeker. See \textit{Knowledge}, pp. 189–90.
distinctively *epistemic* dimension of epistemic principles. The third, immediate justification, incurs no objection in principle, but very few epistemic principles can be claimed to be justified in this way. The second, critical cognitivism, is in some ways unsatisfying, but it, too, incurs no objection in principle, and may be the only alternative for nondeductive transmission principles. 81, 82

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81 But there are other approaches I have not discussed. For example, according to the theory of meaning defended by John L. Pollock in *Knowledge and Justification* (Princeton, N.J.: Princeton University Press, 1974), epistemic principles would turn out to be true in virtue of the meanings of their constituent nonepistemic concepts.

82 For the idea of combining Cartesian and contemporary issues in one paper I am indebted to Stephen Leeds, who suggested it to me in conversations and in a note ("Foundationalism and the Cartesian Spiral"). For helpful criticisms of an earlier version I am indebted to Ernest Sosa.