



Human Knowledge and the Infinite Regress of Reasons

Author(s): Peter D. Klein

Source: *Noûs*, Vol. 33, Supplement: Philosophical Perspectives, 13, Epistemology, (1999), pp. 297-325

Published by: Blackwell Publishing

Stable URL: <http://www.jstor.org/stable/2676107>

Accessed: 24/06/2008 19:00

Your use of the JSTOR archive indicates your acceptance of JSTOR's Terms and Conditions of Use, available at <http://www.jstor.org/page/info/about/policies/terms.jsp>. JSTOR's Terms and Conditions of Use provides, in part, that unless you have obtained prior permission, you may not download an entire issue of a journal or multiple copies of articles, and you may use content in the JSTOR archive only for your personal, non-commercial use.

Please contact the publisher regarding any further use of this work. Publisher contact information may be obtained at <http://www.jstor.org/action/showPublisher?publisherCode=black>.

Each copy of any part of a JSTOR transmission must contain the same copyright notice that appears on the screen or printed page of such transmission.

JSTOR is a not-for-profit organization founded in 1995 to build trusted digital archives for scholarship. We work with the scholarly community to preserve their work and the materials they rely upon, and to build a common research platform that promotes the discovery and use of these resources. For more information about JSTOR, please contact support@jstor.org.

HUMAN KNOWLEDGE AND THE INFINITE REGRESS OF REASONS*

Peter D. Klein
Rutgers University

Introduction

The purpose of this paper is to ask you to consider an account of justification that has largely been ignored in epistemology. When it has been considered, it has usually been dismissed as so obviously wrong that arguments against it are not necessary. The view that I ask you to consider can be called "Infinitism."¹ Its central thesis is that the structure of justificatory reasons is infinite and non-repeating. My primary reason for recommending infinitism is that it can provide an acceptable account of *rational beliefs*, i.e., beliefs held on the basis of adequate reasons, while the two alternative views, foundationalism and coherentism, cannot provide such an account.

Typically, just the opposite viewpoint is expressed. Infinitism is usually mentioned as one of the logically possible forms that our reasoning can take; but it is dismissed without careful consideration because it appears initially to be so implausible.² Foundationalists often begin by somewhat cavalierly rejecting infinitism. Then they proceed by eliminating coherentism through a series of complex and carefully developed arguments. Coherentists often follow a similar general strategy by first rejecting infinitism without any careful examination of the view and then they provide well considered reasons for rejecting foundationalism. Of course, if there are no convincing reasons for rejecting infinitism, then these typical defenses of foundationalism and of coherentism fail.

I will not rehearse the many arguments against foundationalism or coherentism in any detail here. But very briefly, foundationalism is unacceptable because it advocates accepting an arbitrary reason at the base, that is, a reason for which there are no further reasons making it even slightly better to accept than any of its contraries. Traditional coherentism is unacceptable because it advocates a not too thinly disguised form of begging the question; and seemingly more plausible forms of coherentism are just foundationalism in disguise.

Thus, if having rational beliefs is a necessary condition of some type of knowledge, both foundationalism and coherentism lead directly to the consequence that this type of knowledge is not possible because each view precludes the possibility of having beliefs based upon adequate reasons. On the other hand, infinitism makes such knowledge at least possible because it advocates a structure of justificatory reasons that satisfies the requirements of rational belief possession.

This paper has two main sections. In the first section I sketch infinitism in broad outline and argue that it is the only account of the structure of reasons that can satisfy two intuitively plausible constraints on good reasoning. In the second section I defend infinitism against the best objections to it.

I. A Sketch of Infinitism

Let me begin by pointing out some important similarities and dissimilarities between infinitism and the two alternative accounts of justification. Infinitism is *like* most forms of *traditional coherentism* in holding that only reasons can justify a belief.³ Infinitism is *unlike* traditional coherentism because infinitism does not endorse question begging reasoning.⁴ Indeed, this can be captured in what can be called the “Principle of Avoiding Circularity” (PAC).

PAC: For all x, if a person, S, has a justification for x, then for all y, if y is in the evidential ancestry of x for S, then x is not in the evidential ancestry of y for S.

By “evidential ancestry” I am referring to the links in the chains of reasons, sometimes branching, that support beliefs.⁵ For example, if r is a reason for p, and q is a reason for r, then r is in the evidential ancestry of p, and q is in the evidential ancestry of both p and r.⁶ I will not defend PAC in this paper because it strikes me as an obvious presupposition of good reasoning. It is intended merely to make explicit the intuition behind the prohibition of circular reasoning.

Not all so-called “coherentists” would deny PAC. These “coherentists” are really closet foundationalists because it is not the propositions within a set of coherent propositions that serve as reasons for other beliefs in the set; rather *the* reason for every belief in the set is simply that it is a member of such a set.⁷ Thus, these non-traditional coherentists avoid question begging reasoning by a two stage procedure. First, they define what it means for a set of propositions to be coherent (perhaps mutual probability enhancements plus some other conditions) and, then, they claim that the reason for accepting each proposition in the set is that it is a member of such a set of beliefs. That is consistent with endorsing PAC. But as we will see, this type of coherentism, like foundationalism, can offer no hope of blocking the regress of reasons.

Infinitism is *like* foundationalism in holding that there are features of the world, perhaps non-normative features, that make a belief a reason. Not just any

old belief is a reason. Infitism is *unlike* foundationalism because infinitism holds that there are no ultimate, foundational reasons. *Every* reason stands in need of another reason. This can be stated in a principle—the Principle of Avoiding Arbitrariness (PAA).

PAA: For all x , if a person, S , has a justification for x , then there is some reason, r_1 , available to S for x ; and there is some reason, r_2 , available to S for r_1 ; etc.

Note that there are two features of this principle. The first is that it is reasons (as opposed to something else like appropriate causal conditions responsible for a belief) that are required whenever there is a justification for a belief. The second is that the chain of reasons cannot end with an arbitrary reason—one for which there is no further reason. I conjoin these features in one principle because both are needed to capture the well-founded intuition that *arbitrary beliefs*, beliefs for which no reason is available, should be avoided. I will consider some objections to both aspects of PAA shortly.

Some foundationalists could accept PAA by claiming that the available reason, r , could just be x , itself. They could assert that some propositions are “self-justified.” That is not ruled out by PAA; but coupled with PAC, that possibility is ruled out. Indeed, the combination of PAC and PAA entails that the evidential ancestry of a justified belief be infinite and non-repeating. Thus, someone wishing to avoid infinitism must reject either PAC or PAA (or both).⁸ *It is the straightforward intuitive appeal of these principles that is the best reason for thinking that if any beliefs are justified, the structure of reasons must be infinite and non-repeating.*

PAA requires that the reason for a belief must be *available* to S . “Availability” is a key notion in my account of infinitism for, among other things, it has the potential for anchoring justification, as understood by the infinitist, in non-normative properties.⁹ So, it would be well for us to dwell a bit on that notion.

There are two conditions that must be satisfied in order for a reason to be available to S . It must be both “objectively” and “subjectively” available. I will discuss each condition in turn.

There are many accounts of objective availability. Each specifies either some normative or non-normative property or, perhaps, a mixed property that is sufficient to convert a belief into a reason.¹⁰ For example, one could say that a belief, r , is objectively available to S as a reason for p if (1) r has some sufficiently high probability and the conditional probability of p given r is sufficiently high; or (2) an impartial, informed observer would accept r as a reason for p ; or (3) r would be accepted in the long run by an appropriately defined set of people; or (4) r is evident for S and r makes p evident for S ¹¹; or (5) r accords with S ’s deepest epistemic commitments¹²; or (6) r meets the appropriate conversational presuppositions¹³; or (7) an intellectually virtuous person would advance r as a reason for p .¹⁴

Infinitism, per se, is compatible with each of these depictions of objectively available reasons.¹⁵ In addition, whether any of these mentioned accounts proves ultimately acceptable or whether another, unmentioned account is the best one is unimportant for the purposes of this paper. What is crucial to note at this point is that not just any proposition will function as a reason for other beliefs. If, for example, I offer as my reason for believing *that all fish have fins* my belief that *all fish wear army boots and anything wearing army boots has fins*, my offered-reason entails *that all fish have fins*, but on the accounts mentioned above it is not an objectively available reason. It has a low probability of being true; an impartial observer would not accept it; it would not be accepted in the long run by any appropriately defined set of people; there is no evident proposition that makes it evident; accepting it does not accord with my deepest epistemic commitments; there is no actual context in which appealing to that proposition will persuade anyone that all fish have fins; and an intellectually virtuous person would not offer it. Contrast this case with another. My belief *that dark clouds are gathering over the mountains and it is mid-winter in Montana* could satisfy the objective availability constraints contained in all of the accounts mentioned above for functioning as a reason for the proposition *that a snowstorm is likely*.

There is second feature of “availability” to S that is subjective. There might be a good reason, *r*, that is *objectively* available for use by any person, but unless it is properly hooked up with S’s own beliefs, *r* will not be *subjectively* available to S. In an appropriate sense to be discussed later, S must be able to call on *r*.

It is this subjective sense of “availability” that has provoked many of the objections to infinitism. For example: How can a “finite” human mind have an infinite number of beliefs?¹⁶ I think that rhetorical question involves a deep misunderstanding of the infinitist’s position that will be discussed in some detail when we consider the objections to infinitism, but let me now just state the obvious: Humans have many beliefs that are not occurrent. It is in the non-occurrent sense of “belief” that the members of an infinite series of reasons might be subjectively available to S. Roughly, but I hope good enough for the purposes of this paper, let us say that S believes *p* just in case S would affirm that *p*, or endorse *p* in another fashion—perhaps sotto voce—in some appropriately restricted circumstances. For example, S may not now be thinking that she is in Montana in mid-winter looking at dark clouds gathering, but if asked why she believes a snowstorm is immanent, she will consciously affirm that she is in Montana in mid-winter looking at dark clouds gathering. The point is that she has the belief even before she forms the conscious thought.¹⁷

Having briefly sketched the two ways in which a belief must be available, let me return to the central motivation for infinitism—the two intuitive principles. As mentioned above, I think the only way to avoid infinitism is to reject either PAC or PAA. PAC seems completely safe to me. The old rejoinder that a large enough circle of reasons is acceptable, strikes me as just plain wrong. That a circle is larger might make it more difficult to detect the flaw in the reasoning, but large circles, nevertheless, involve question begging reasoning. An error in reasoning is still an error no matter how difficult it is to detect.

What probably is meant by invoking the “large circle” is that it has seemed plausible to argue that one has a better reason for accepting a proposition if, *ceteris paribus*, it is a member of a larger set of coherent propositions. There is greater “mutual support” in larger sets. This feature of a non-traditional coherentist account is offered as a way of maintaining a coherentist position while still accepting PAC.¹⁸ Indeed, I think PAC, once understood, will be accepted in any context of discussion that presupposes a distinction between good and bad reasoning. Circular reasoning is just not acceptable.

But PAA might not seem so secure. Can’t something other than reasons make a belief justified? For example, couldn’t a belief be justified just in case it arose in some reliable fashion? Or couldn’t there be a “meta-justification” available that (i) shows that some propositions are justified but that (ii) is not, itself, directly involved in the justification of the proposition? And, finally, couldn’t it be epistemically rational to accept some propositions even when there is no reason for believing them? Perhaps arbitrariness isn’t such a bad thing after all!

There are, no doubt, other objections to PAA, but the three just mentioned seem the most serious. First, the intuitive appeal of reliabilism needs to be reckoned with. Second, the move to a “meta-justification” seems initially plausible. Finally, there is an ingenious argument developed by Stephen Luper-Foy to the effect that it is rational to accept basic beliefs even though they are not rational beliefs—that is, even though there is no reason that can be given to believe that they are true. Let us consider these objections in order.

(a) Reliabilism?

Reliabilism, or at least the relevant form, holds either that *reasons* are not always required to justify a belief or that knowledge does not require justification, if “justification” is used in such a way as to entail that only rational beliefs are justified. A reliabilist could accept the claim that the structure of reasons is infinite and simply deny that reasons are required either for knowledge or for justification. A “moderate” form of reliabilism maintains that not all forms of knowledge or justification require reasoned belief. A “radical” form of reliabilism maintains that no form of knowledge requires reasoned belief. What are we to make of these claims? Does knowledge or justification require having reasons?

I maintain that being able to produce reasons for beliefs is a distinctive characteristic of adult human knowledge. Apparently, nothing else knows in this way. Of course, many things have knowledge that is not *rational* belief. Dogs scratch at doors knowing, in *some* sense, that they will be opened; but dogs do not have reasons. Even adult humans know (in *that* sense) when they do not have reasons. As Fred Dretske says, when adult humans are in Minnesota in mid-winter, they know that it is cold without having reasons.¹⁹

Nevertheless, even some reliabilists employ intuitions involving the having of adequate reasons in order to distinguish cases of justified belief from cases of unjustified beliefs. Alvin Goldman, one of the architects of reliabilism, considers a case in which a subject, S, believes “I am in brain-state B” just in case S is in

brain-state B. The belief acquisition method is perfectly reliable, but “we can imagine that a brain surgeon operating on S artificially induces brain-state B. This results, phenomenologically, in S’s suddenly believing—out of the blue—that he is in brain-state B, without any relevant antecedent beliefs. We would hardly say, in such a case, that S’s belief that he is in brain-state B is justified.”²⁰

I think the best explanation for Goldman’s intuition about this case is that some reliabilists still feel the bite of the evidentialist requirement that in some cases we—adult humans—must have reasons for our beliefs in order for them to count as knowledge.

More directly, I am convinced by examples like Keith Lehrer’s Truetemp Case that there is a sense of “know” such that belief, though completely reliable, is not knowledge in the relevant sense. Recall that Mr. Truetemp has a thermometer-cum-temperature-belief-generator implanted in his head so that within certain ranges of temperatures he has perfectly reliable temperature beliefs. As Lehrer puts it:

He accepts [beliefs about the temperature] unreflectively... Thus he thinks and accepts that the temperature is 104 degrees. It is. Does he know that it is? Surely not.²¹

Some reliabilists might maintain that Mr. Truetemp does, indeed, know. Now, as I see it, the issue is not whether Mr. Truetemp “knows” in *some* sense that the temperature is 104 degrees. He may very well have knowledge in some sense—the same sense in which a dog can “recognize” her owner’s voice or in which a thermometer “knows” the room temperature. In the other sense of “know”—the sense that is only predicated of humans who have reached “the age of reason”—Mr. Truetemp lacks knowledge because he does not have a subjectively available reason for thinking that it is 104 degrees. There is nothing he could think of which is a reason for believing that it is 104 degrees. In other words, “knowledge” might not refer to a natural kind—there being only *one* fundamental type. Ernest Sosa makes this point persuasively when he writes:

The challenge of doxastic assent might well be thought a pseudo-challenge, however, since it would deny knowledge to infants and animals. Admittedly, there is a sense in which even a supermarket door “knows” when someone approaches, and in which a heating system “knows” when the temperature in a room rises above a certain setting. Such is “servo-mechanic” knowledge. And there is an immense variety of animal knowledge, instinctive or learned, which facilitates survival and flourishing in an astonishingly rich diversity of modes and environments. Human knowledge is on a higher plane of sophistication, however, precisely because of its enhanced coherence and comprehensiveness and its capacity to satisfy self-reflective curiosity. Pure reliabilism is questionable as an adequate epistemology for such knowledge.²²

Thus, I believe that radical reliabilism—the view that claims that having reasons is never necessary for knowledge—fails to capture what is distinctive about adult human knowledge.

On the other hand, the intuitive appeal of moderate reliabilism can be adequately recognized without giving up PAA. For one can grant that in some senses of “know,” rational beliefs are not required for knowledge. Where “knows that *p*” means roughly “possess the information that *p*” we can say of “servo-mechanic” objects that they possess knowledge that *p*. They do not need reasons. Nevertheless, there is another sense of “know” such that the mere possession of information is not adequate. The information must be supported by appropriate reasons. Beliefs that come “out of the blue” do not qualify as knowledge in this sense.

There is one further, relevant move available to the infinitist. It could even be granted that *no* form of knowledge requires having rational beliefs. That is, radical reliabilism could be accepted. But even granting that, the infinitist’s claim remains significant if only because, if correct, it would delineate an important condition of rational beliefs, even if such beliefs were not required for knowledge. Foundationalism and coherentism would remain less attractive than infinitism as accounts of rational belief.

(b) Meta-Justifications?

Let us now turn to what Laurence Bonjour calls “meta-justifications”—justifications designed to show that certain types of beliefs are acceptable even in the absence of another belief that serves as a reason. Such beliefs are acceptable, it is claimed, because they have some property, call it *P*, and beliefs having *P* are likely to be true.²³ Both non-traditional coherentism and foundationalism are alike in that they hold that there is some such property, *P*.

Let us turn directly to foundationalism. Can it avoid advocating the acceptance of arbitrary reasons by moving to meta-justifications? Suppose it is claimed that a foundational proposition is justified because it has a certain causal history (e.g., involving the proper use of our senses or memory) or that it is justified in virtue of its content (e.g., it is about a current mental state or it is about some necessary truth). Pick your favorite accounts of the property, *P*. I think, as does Bonjour, that the old Pyrrhonian question is reasonable: Why is having *P* truth-conducive?²⁴ Now, either there is an answer available to that question or there isn’t. (Bonjour thinks there is.) If there is an answer, then the regress continues—at least one more step, and that is all that is needed here, because that shows that the offered reason that some belief has *P* or some set of beliefs has *P* does not stop the regress. If there isn’t an answer, the assertion is arbitrary.

Now, let me be clear here in order to anticipate a possible objection. I am not claiming that in order for a belief to be justified or known, either we must *believe* that it is justified or we must be *justified in believing* that it is justified. As many have pointed out, that confuses *p*’s being justified with a belief about *p*’s justificatory status.²⁵ I am not supposing that the foundationalist, or for that matter, the non-traditional coherentist thinks that what Alston has called “epistemic beliefs” (beliefs about the epistemic status of beliefs) must play a role in the justification of all beliefs.²⁶ Quite the contrary, I think the foundationalist typically advocates

an explicit process of reasoning that ends with beliefs which have P rather than with epistemic beliefs about P. The meta-justification is invoked in order to avoid the appearance of arbitrariness for it is designed to show why the “final” beliefs are likely to be true. My point is merely that moving to the meta-level, that is, arguing that such beliefs are likely to be true because they possess a certain property, P, will not avoid the problem faced by foundationalism. Either the meta-justification provides a reason for thinking the base proposition is true (and hence, the regress does not end) or it does not (hence, accepting the base proposition is arbitrary). The Pyrrhonians were right.

The same is true of non-traditional coherentism. Claiming that a belief is justified because it is a member of a set of propositions that is coherent cannot stop the regress in any but an arbitrary way. The non-traditional coherentist must produce a meta-justification for the belief that propositions satisfying that requirement are likely to be true. As BonJour says:

...one crucial part of the task of an adequate epistemological theory is to show that there is an appropriate connection between its proposed account of epistemic justification and the cognitive goal of *truth*. That is, it must somehow be shown that justification as conceived by the theory is *truth-conducive*, that one who seeks justified beliefs is at least likely to find true ones.²⁷

So the non-traditional coherentist, like the foundationalist, will move to a meta-level in an attempt to show why a belief that coheres with others is likely to be true.²⁸ But the same question will arise: Why is coherence truth-conducive?²⁹

To generalize: Foundationalism and non-traditional coherentism cannot avoid the regress by appealing to a meta-claim that a belief having some property, P, is likely to be true. That claim itself requires an argument that appeals to reasons. Indeed, the appeal to such a meta-claim invokes just the kind of dialectical context involving what is distinctive about adult human knowledge. For surely a reason is required to justify the belief that propositions with property, P, are likely to be true; and whatever justifies that claim will require a reason; and—well, you get the point. Thus, the move to a meta-justification cannot stop the regress without violating either PAA or PAC.

(c) *Harmless Arbitrariness?*

One objection to PAA remains to be considered: Perhaps it is rational to accept arbitrary, non-rational, beliefs even though there are no reasons for thinking that they are true. If that were the case, it would presumably dampen the enthusiasm some epistemologists have for foundationalism, for they think that the foundational propositions are not arbitrary (they appeal to meta-justifications to show that). In addition, it would call into question a primary motivation for traditional coherentism, namely that it is irrational to accept a belief without a

reason. But it would also undermine my argument for infinitism based in part on PAA because that principle is designed to capture the widely endorsed intuition that it is rational to accept a belief only if there is some reason for thinking the belief is true.

Stephen Luper-Foy has argued that it is rational to accept foundational beliefs even though they cannot be supported by reasons. Here is his argument (some of what follows is close paraphrase, some is direct quotation as indicated):

The epistemic goal is to acquire a complete and accurate picture of the world. Granted, at base our reasons are arbitrary but “an injunction against believing anything... would obviously make it impossible for us to achieve the goal of arriving at a complete and accurate understanding of what is the case... Indeed, given that our ultimate beliefs are arbitrary, it is rational to adopt management principles that allow us to retain these foundational yet arbitrary views, since the alternative is to simply give up on the attempt to achieve the epistemic goal.”³⁰

His point, I take it, is that since the goal of an epistemic agent is to acquire a complete and accurate picture of the world, accepting a basic, though arbitrary, reason is rational since if one did not accept it, there would be no possibility of attaining the goal. It is “rational to do and believe things without reason”³¹ because if we did not, we could not attain our goal.

There are two responses. First, if I am right, we need not worry about reasons being arbitrary, since the regress does not stop. There are no arbitrary, ultimate reasons because there are no ultimate reasons. But more to the point at hand, if the regress did end with an arbitrary reason (as Luper-Foy is assuming at this point in his argument), I think his argument for making it rational to accept arbitrary reasons does not succeed.

Luper-Foy is using a prudential account of rationality such that we are prudentially rational just in case our chosen means to a goal are efficient in achieving that goal. But such an instrumental conception of rationality is acceptable only if the definition of rationality is understood to imply that it is rational to adopt a means to a given goal only if the means are more likely to achieve *that* goal rather than some incompatible and highly undesirable goal. Suppose, as Luper-Foy claims, that the epistemic goal is to gain a complete and accurate picture of the world, then believing *x* would be rational only if believing *x* furthered that goal instead of the incompatible and highly undesirable goal, let us say, of obtaining a complete and inaccurate picture of the world. But if my basic beliefs are arbitrary, that is, if there is no available reason for thinking that accepting them is more likely to contribute to obtaining an accurate picture than an inaccurate picture, then, for all I know, accepting the basic beliefs could equally well lead to obtaining a complete and inaccurate picture of the world. So, if at the base, reasons are arbitrary, it is not even prudentially rational to accept them since doing so is no more likely to satisfy rather than frustrate my epistemic goals.

II. Objections to Infinitism

We have completed the examination of what I take to be the best reasons for rejecting PAA and found that they are inadequate. As mentioned earlier, I take PAC to be the *sine qua non* of good reasoning. Nevertheless, in spite of the fact that there appear to be no good grounds for rejecting PAA or PAC taken individually, the view that results from accepting both of them, namely infinitism, has never been advocated by anyone with the possible exception of Peirce.³² The remainder of this paper will focus on the reasons that have been advanced against infinitism. Of course, if only for the sake of consistency, I cannot take it that this matter is finally settled. But I do think the proposed objections to the position fail.

So, what are the arguments designed to show that the structure of reasons could not be infinite and non-repeating? They can be divided into four types presented in the order in which I think they present deep issues for the infinitist—beginning with the least troubling and moving to the most troubling: 1) Varieties of the Finite Human Mind Objection; 2) the Aristotelian Objection that If Some Knowledge Is Inferential, Some Is Not Inferential; 3) the *Reductio* Argument Against the Possibility of an Infinite Regress Providing a Justification for Beliefs (most clearly developed by John Post and I. T. Oakley); 4) the Specter of Skepticism Objection—namely that nothing is known unless reasoning somehow settles the matter.

Objection 1. The Finite Mind Objection

Very roughly, the intuition behind this objection is that the human mind is finite and if such a mind is to have reasons for beliefs (a requirement for the distinctive adult human kind of knowledge), it cannot be the case that such beliefs are justified only if there is an infinite chain of reasons. Here, for example, is what John Williams says:

The [proposed] regress of justification of S's belief that p would certainly require that he holds an infinite number of beliefs. This is psychologically, if not logically, impossible. If a man can believe an infinite number of things, then there seems to be no reason why he cannot know an infinite number of things. Both possibilities contradict the common intuition that the human mind is finite. Only God could entertain an infinite number of beliefs. But surely God is not the only justified believer.³³

As stated, it is a bit difficult to get a purchase on this objection. It cannot mean simply that we are finite beings—occupying a finite amount of space and lasting a finite duration of time—and consequently, we cannot be in an infinite number of states (in particular, belief states). A “finite” thing, say a one foot cube existing for only ten minutes, has its center at an infinite number of positions during the ten minutes it moves, say, from point $\{0,0,0\}$ in a three dimensional Cartesian coordinate system to, say, point $\{1,1,1\}$. So, a finitely extended thing can be in an infinite number of states in a finite amount of time.

But Williams does not leave matters at this fuzzy, intuitive level. What he means, I think, is that there is something about belief states or justified belief states in particular which is such that no finite human can be in an infinite number of them. The argument, as best as I can ferret it out, is this: It is impossible to consciously believe an infinite number of propositions (because to believe something takes some time) and it is impossible to “unconsciously believe” (“unconscious belief” is his term) an infinite number of propositions because the candidate beliefs are such that some of them “defeat human understanding.”³⁴

Granted, I cannot consciously assent to an infinite number of propositions in my lifetime. The infinitist is not claiming that in any finite period of time—the “threescore and ten” assigned to us, for example—we can consciously entertain an infinite number of thoughts. It is rather that there are an infinite number of propositions such that each one of them would be consciously thought were the appropriate circumstances to arise.

Williams is, indeed, right that the putative examples given thus far in the literature of infinite sets of propositions in which each member is subjectively available are not plausible because consciously thinking some of them is impossible. But, of course, it is a non-sequitur to claim that because some examples fail, they all will.

Richard Foley, for example, suggests that since I believe that I am within one hundred miles of Boston, I believe that I am within two hundred miles of Boston, and I believe that I am within 300 miles, etc.³⁵ Williams correctly points out that eventually a proposition in such a series will contain a “number so large that no one can consider it.”³⁶ Robert Audi gives a similar argument against the possibility of a mind like ours having an infinite number of beliefs.³⁷

It is easy to see the general reason why such examples fail.³⁸ They all presuppose a finite vocabulary for expressing beliefs. Hence, it would *seem* that any method of generating an infinite series of beliefs by some manipulation on the items in the vocabulary (e.g., conjoining them, disjoining them) will eventually produce a member in the set that is too “large” or too “long” for us to consider.

But even with a finite vocabulary, we do have another way of picking out objects and forming beliefs about them. We can use indexicals. We can point to an object and say “this.” We can also say of an object that it has some shape, say α . Now, suppose that there were an infinite number of discernable objects with the shape α . I claim that there would be an infinite number of propositions each of the form “this is α -shaped” such that were we to discern the object referred to by “this” in each proposition, we would consciously think “this is α -shaped” under the appropriate circumstances. So, *if* there were an infinite number of α -shaped discernable objects, then there would be an infinite set of propositions such that each member would be consciously endorsed under the appropriate circumstances—i.e., when we discern the object and consider whether it is α -shaped. Of course, this is only a hypothetical claim. I do not know whether there is an infinite number of such discernable objects. But it does not matter for my point. My claim is merely that, in principle, nothing

prevents so-called “finite minds” from being such that each proposition in an infinite set of propositions is subjectively available. There might not be an infinite number of such discernable objects, but we certainly have the capacity to think about each such object that we discern that it is α -shaped. Therefore, we have the capacity to believe each member of an infinite set of propositions. No member in the set gets too “large” or too “long” or too “complex” for us to grasp.

I mentioned earlier that I thought there was a deep misunderstanding of the infinitist’s position underlying the infinite mind objection. Now is the time to consider it. I have already said that the infinitist is not claiming that during our lifetime we consciously entertain an infinite number of beliefs. But what might not be so obvious is that the infinitist is also not even claiming that we *have* an infinite number of what Williams calls “unconscious beliefs” if such beliefs are taken to be *already formed* dispositions. (We might, but that isn’t necessary for infinitism.) Consider the following question: Do you believe that $366 + 71$ is 437? I take it that for most of us answering that question brings into play some of our capacities in a way that answering the question “Do you believe that $2 + 2 = 4$?” does not. For I simply remember that $2 + 2 = 4$. I have already formed the belief that manifests itself when I consciously think that $2 + 2 = 4$. By contrast, I had not already formed a similar disposition concerning the sum of 366 plus 71. We do not simply remember that $366 + 71 = 437$. Rather, we do a bit of adding. We are *disposed to think* that $366 + 71 = 437$ after a bit of adding given our belief that $6 + 1 = 7$, that $7 + 6 = 13$, etc. We have a second order disposition—a disposition to form the disposition to think something. Thus, there is clearly a sense in which we believe that $366 + 71 = 437$. The proposition that $366 + 71 = 437$ is subjectively available to me because it is correctly hooked up to already formed beliefs.

We have many second order dispositions that are counted as beliefs. For example, you believe that apples do not normally grow on pear trees even though you had never formed the disposition to consciously think that (at least up until just now!). Infinitism requires that there be an infinite set of propositions such that each member is subjectively available to us. That requires that we have the capacity to form beliefs about each member. It does not require that we have already formed those beliefs.

The distinction between already formed first-order beliefs and dispositions to form a first-order belief is important for another reason. Earlier I had argued that there was a way, in principle, to show that even with a finite vocabulary, we could have an infinite number of beliefs by employing indexicals. Nevertheless, that response will not be useful here since we cannot point to reasons (as we can point to objects) with “this” or “that” unless the reasons are already formed. The problem is to show that there can be an infinite number of reasons given a finite vocabulary each of which can be entertained by a human being.

The solution to this problem is ready-to-hand. Since we can appeal to second order dispositions, we can say that when our vocabulary and concepts fall short

of being able to provide reasons, we can develop new concepts and ways of specifying them. That is, we can discover, develop or invent new concepts to provide a reason for our beliefs.

This seems to happen regularly. When we have no ready-to-hand explanation of events, we devise new concepts that can be employed in understanding those events. Consider the following: the development of the concept of unconscious mechanisms to account for our behavior, the development of the concept of quarks to provide for some unity in our understanding of sub-atomic particles and their interactions, and the development of evolutionary theory to account for the fossil record as well as the diversity and commonality among species. In each case there was a temporary stopping point reached in our ability to provide reasons for our beliefs. But we have the capacity to develop new concepts that can provide us with further reasons for our beliefs.

Let me sum up my response to this first reason for thinking that a finite mind cannot have an infinite number of justified beliefs. We have seen that the notion of "belief" is ambiguous. It can refer to already formed dispositions and it can refer to the disposition to form dispositions. It is in the second sense that the infinitist is committed to the claim that there is an infinite number of beliefs both subjectively and objectively available to us whenever (if ever) we have distinctively adult human knowledge.

There is a second argument that is sometimes given for supposing that the requirements of having an infinite number of *justified* beliefs cannot be satisfied. Both Richard Foley and Richard Fumerton suppose that in order for S to be justified in believing that p on the basis of e, S must (at least paradigmatically for Foley) *justifiably* believe that e justifies p. Fumerton puts it this way:

To be justified in believing one proposition P on the basis of another E one must be
1) justified in believing E and 2) justified in believing that E makes probable P.³⁹

It is easy to see that if this condition of inferential justification were coupled with infinitism, the consequence would be that any person having a justified belief must have a belief that gets "so complex" that no human could ever have it. Foley argues to the same conclusion by claiming that a condition like (2) is a feature of the "best justifications" and that any theory of justification will include a description of the best justifications.⁴⁰

I agree that such a requirement would force the rejection of infinitism. But as I mentioned earlier, I can see no reason to agree to the premiss that in order for S to be justified in believing that p on the basis of e, S must be *justified* in believing that e is a good reason for p. I think this simply confuses having a justified belief that p with having justified beliefs about p's justificatory status. This amounts to requiring that S not only be an epistemologist, but also that S have a well reasoned epistemology in order to be justified in believing, for example, that a thunderstorm is likely. Epistemology is important, but having a justified epistemology is not required in order to have justified beliefs! Thus, this argument provides no

grounds for thinking that the chain of good reasons, even if infinite, includes beliefs that are too complex for us to grasp.⁴¹

Objection 2. The Aristotelian Objection that If Some Knowledge Is Inferential, Some Is Not Inferential.

In the *Posterior Analytics* Aristotle claims that if some knowledge is the result of inference, some knowledge must not be the result of inference. I think that is correct. And I grant that some knowledge is the result of inference. So, some knowledge is not the result of inference. But, somewhat surprisingly, it does not follow that the structure of justificatory reasons is finite.

Assume, as I think it is evident that Aristotle does, that at some early time in the development of a human being, the being is completely ignorant. At some later point, the being has knowledge. It would not be possible to account for all of the being's knowledge on the basis of previously obtained knowledge, for that *could not* give us an account of the original, first, change from ignorance to knowledge. So, all knowledge could not be *produced* by inference from previous knowledge—not because the structure of justificatory reasons could not be infinite but because all knowledge could not arise from previous knowledge if at one time we are ignorant and at a later time we are knowledgeable. But nothing in this argument prevents the chain of justificatory reasons from being infinite. We could acquire most of our beliefs in ways that do not involve reasons as causes. My claim is merely that in order to have the distinctively adult human type of knowledge, there must be reasons of the appropriate sort available. Thus, it can be granted that we, humans, move from a state of complete ignorance to a state of having the distinctively adult human type of knowledge during our lifetimes and still maintain, as I do, that we make that transition only when there are reasons subjectively and objectively available for our beliefs.

Now, Aristotle may never have intended, at least in the *Posterior Analytics*, that the description of the role of experience in the acquisition of knowledge be used to show that there are beliefs for which there are no reasons.⁴² Nevertheless, there is a passage in the *Metaphysics* that might be cited to show that Aristotle endorsed an argument against infinitism:

There are, both among those who have these convictions [man is the measure of all things] and among those who merely profess these views, some who raise a difficulty by asking, who is to be the judge of the healthy man, and in general who is likely to judge rightly on each class of question. But such inquiries are like puzzling over the question whether we are now asleep or awake. And all such questions have the same meaning. These people demand that a reason shall be given for everything, for they seek a starting point and they seek to get this by demonstration, while it is obvious from their actions that they have no conviction. But their mistake is what we have stated it to be: they seek a reason for things for which no reason can be given; for the starting point of demonstration is not demonstration.⁴³

Now, I grant that there are occasions when it is absurd to ask for reasons for a belief. Roughly, those are the occasions in which it is clear that the conversational presuppositions are not to be questioned. For example, when we are distinguishing features of waking states from features of dream states, it is absurd to ask whether we can tell the difference. But it does not follow that such questions are always inappropriate. Indeed, when the presuppositions of the conversational context are revealed, they can be questioned. Thus, one can grant what I think Aristotle is suggesting, namely that demonstration can take place only within a context of agreed upon presuppositions and that it is absurd to ask for reasons to justify those presuppositions within that kind of a context. He is right. But, of course, the contextual situation can change.

Objection 3. The Reductio Argument Against the Possibility of an Infinite Regress Providing a Justification for Beliefs

The gist of the argument is this: If there were an infinite regress of reasons, any arbitrarily chosen contingent proposition would be justified. That is absurd. So there can't be an infinite regress of justification.

The argument has two forms. Let me deal with them in the order of their ascending plausibility. I. T. Oakley's argument is this (what follows is a close and, I hope, fair paraphrase):

Let us suppose that S is justified in believing p in the way envisaged by the regress theorist. That is, there is a regress from p to r, to s to t, etc. Now, conjoin with every member of the series a further belief of S's, say q. If the first set of beliefs {p, r, s, t, etc.} is justified, so is the new set of conjunctive beliefs {(p&q), (r&q), (s&q), (t&q), etc.}. And if (p&q) is justified, then q is justified.⁴⁴

I think this argument rests on an assumed principle of justification, namely this: If e justifies p, then (e & q) justifies (p & q). If that assumed principle were true, and if (p & q) justifies p and justifies q, then I think this argument does constitute a *reductio* of infinitism. But the assumed principle of justification is false—or better, it is clear that it and the principle endorsing justification over simplification cannot both be true. For, jointly, they lead to the unwelcome consequence that any arbitrary proposition, q, is justified given *any* theory of justification.

To see that, suppose, that there is some proposition, e, and any theory of justification such that e is justified and e justifies p. Then, by parallel reasoning, since e justifies p, then (e & q) justifies (p & q). And, by parallel reasoning, q is justified. So, there is a quick and dirty way of showing that every proposition would be justified given *any* theory of justification.

But surely what is wrong here is that the argument fails to note what is essential to infinitism. It is a consequence of the infinitist's constraints on constructing a non-question begging chain that the ancestors of x in the chain cannot

“contain” x .⁴⁵ The assumed principle violates that constraint and is a clear violation of PAC because the only reason offered for $(p \ \& \ q)$ is $(e \ \& \ q)$. Indeed, *every* link in the proposed infinite chain is question begging, for q is contained in each. Thus, this objection fails because the type of infinite chain presupposed in this objection does not have the appropriate *form*.⁴⁶

There is another *reductio* argument that has been advanced against infinitism that does not violate the proposed constraints on the *form* of the chain of reasons. Here is a close paraphrase of the argument as given by John Post:

Consider an example of an infinite regress that does not violate the appropriate constraints. Let p be contingent and use *modus ponens* as follows:

..., $r \ \& \ (r \rightarrow (q \ \& \ (q \rightarrow p)))$, $q \ \& \ (q \rightarrow p)$, p

This sort of infinitely iterated application of *modus ponens* guarantees that for any contingent proposition, p , one can construct an instance of an infinite regress.⁴⁷

Post takes that as a *reductio* of the infinitist’s position. I agree that if on some view of justification every contingent proposition were justified, the view would be unacceptable.⁴⁸ But Post has assumed that the infinitist takes the mere existence of such a chain of propositions with the appropriate form (non-repeating and infinite) to be a sufficient condition for a belief’s having a justification. However, as I emphasized at the outset, the existence of such a chain is necessary, but it is not sufficient. The beliefs in the chain must also be “available” to S as reasons. Thus, not all infinite chains having the required structural properties make beliefs justified.

In considering Post’s objection, Ernest Sosa distinguishes between what he calls chains that provide potential justification and those that provide actual justification.⁴⁹ I think Sosa is right.⁵⁰ As I see it, there is a potential justification for every contingent proposition; that is, there is an infinite chain of propositions like the one Post describes for every proposition. But only some chains contain reasons. Hence, not every proposition will have a justification because a proposition has a justification only if each member of the chain is available as a reason in both the objective sense and subjective sense to serve as a reason.⁵¹

Objection 4. The Specter of Skepticism

This is the most difficult objection to answer because it is the most difficult to fully understand. It apparently goes to some deeply held intuitions that, perhaps, I do not fully appreciate. The objection rests upon a Cartesian-like view that the whole point of reasoning is to “settle” an issue. According to that view, ideally, reasoning should produce *a priori* demonstrations; but where that is not possible or feasible (for example with regard to empirical propositions), something approximating a demonstration is required in order for a proposition to be justified or known. Reasoning should settle what it is we are to believe. If it can’t,

then what's the point of employing it? Reasoning is valuable, at least in part, because it can produce a final guarantee that a proposition is more reasonable than its contraries. But if the reasoning process is infinite, there can be no such guarantee. Thus, one of the claimed virtues of infinitism, namely, that it makes the distinctively adult human type of knowledge possible, is an illusion because that type of knowledge obtains only if reasoning can settle matters.

Here is the way that Jonathan Dancy puts the objection:

Suppose that all justification is inferential. When we justify belief A by appeal to belief B and C, we have not yet shown A to be justified. We have only shown that it is justified if B and C are. Justification by inference is conditional justification only; A's justification is conditional upon the justification of B and C. But if all justification is conditional in this sense, then nothing can be shown to be actually non-conditionally justified.⁵²

Now, there is an unfortunate conflation in the passage that should be avoided—namely, failing to distinguish between *showing* that a belief is justified and a belief's being justified. Nevertheless, that equivocation could be removed and the objection remains: if all justification is provisional, no belief becomes unprovisionally justified.⁵³

This is an old objection. It is, I think, what the Pyrrhonists thought made the infinite regress unacceptable as a theory of rational belief. Sextus wrote:

The Mode [of reasoning] based upon the regress *ad infinitum* is that whereby we assert that the thing adduced as a proof of the matter proposed needs a further proof, and this again another, and so on *ad infinitum*, so that the consequence is suspension, as we possess no starting-point for our argument.⁵⁴

I have endorsed the Pyrrhonian objections to foundationalism and coherentism. Why not accept their argument against the infinite regress?

The answer is simply that although every proposition is only provisionally justified, that is good enough if one does not insist that reasoning settle matters once and for all. Once that is recognized, surprisingly enough, the Pyrrhonian goal of avoiding dogmatism while continuing to inquire is obtainable.

I readily grant that the kind of final guarantee that Descartes and others have sought is not available if infinitism is correct. In general, as we have seen, the foundationalist's reliance upon a meta-justification to locate a property shared by all "basic" propositions is not a viable strategy for avoiding the regress. In particular, why should Descartes' suggestion for a truth-conducive property, namely clarity-and-distinctness, be accepted without a reason being given? Indeed, Descartes, himself, thought that a reason was required for believing that clarity-and-distinctness is truth-conducive. He attempted to provide that reason by producing an argument demonstrating the existence of an epistemically benevolent god. But surely that is only a temporary stopping point in the regress of reasons because

the premisses in that argument need to be supported by further reasons in order to avoid arbitrariness.

But, let me take the objection more seriously. Is a proposition justified only when belief in it *results from a process of justification that has been concluded*? Richard Fumerton has argued against infinitism because “[f]inite minds cannot *complete* an infinitely long chain of reasoning, so, if all justification were inferential we would have no justification for believing anything. [emphasis added]”⁵⁵

This objection to infinitism implicitly appeals to a principle that we can call the *Completion Requirement*: In order for a belief to be justified for someone, that person must have actually completed the chain of reasoning that terminates in the belief in question. The infinitist cannot accept the Completion Requirement because it is clearly incompatible with infinitism. Justifications are never finished. More to the point, however, the Completion Requirement demands more than what is required to have a justified belief even on non-infinitist accounts of justified beliefs.

To see that, apply the Completion Requirement to a foundationalist conception of justification coupled with the dispositional account of belief mentioned above that includes second order dispositions. The result would be that most, if not all, of our beliefs are not justified. I have thousands and thousands of beliefs—if not infinitely many. I have not carried out the process of reasoning to many (if any) of those beliefs from some foundational beliefs (even if there were foundational beliefs). In fact, I couldn’t have explicitly entertained any significant number of the propositions I believe. There are just too many.

Nevertheless, Fumerton’s claim that S’s belief is not justified merely because there is a justification available to S seems correct. In discussing the requirements for a belief’s being justified, he draws an important distinction between S’s merely *having* a justification for P and S’s belief that P being justified. He claims, correctly I believe, the former is necessary but not sufficient for the latter:

The expression “S has a justification for believing P” will be used in such a way that it implies nothing about the causal role played by that justification in sustaining the belief. The expression “S’s belief that P is justified” will be taken to imply both that S has justification and that S’s justification is playing the appropriate causal role in sustaining the belief.⁵⁶

I think that an infinitist must grant the distinction between S’s merely *having* a justification for the belief P and the belief P *being* justified for S. PAC and PAA specified necessary conditions for S’s having a justification; they did not specify what else is required in order for S’s belief to be justified. The question, then, becomes this: Can the infinitist draw the distinction between S *having* a justification for P and S’s belief P *being* justified?

Ernest Sosa and others have suggested that the infinitist will be hard pressed to distinguish between S’s merely having available a justification for a proposition and the proposition’s being justified for S. Return to the case discussed earlier in which S calculates the sum of two numbers by employing some “already

formed" dispositions. Now suppose (Sosa would suggest) that S had, instead, merely guessed that the sum of the two numbers is 437, and, also, that when exploring whether the guessed sum is actually correct, S does a bit of adding and sees that the sum that he had guessed was, in fact, the right answer.⁵⁷ Presumably we want to say that although S had a justification available (if S can add) prior to calculating the sum, the belief that the numbers summed to 437 was not even provisionally justified until S does a bit of adding. So, merely *having* a justification available will not suffice for a belief's *being* provisionally justified.

Here is the way Sosa states the point:⁵⁸

Someone who guesses the answer to a complex addition problem does not already know the answer just because, given a little time, he could do the sum in his head. If he had not done the sum, if he had just been guessing, then he *acquires* his knowledge, he does not know beforehand... We are not just interested in the weaker position of someone who *would* be able to defend the belief, but only because its exposure to reflection would lead the subject to new arguments and reasonings that had never occurred to him, and that in any case had played no role in his acquisition or retention of the target belief.⁵⁹

Now one might respond by saying that arriving at the sum of two numbers is not appropriately analogous to coming to believe, for example, that I hear my neighbor's dog, Fido, barking. Summing two large numbers requires (at least for most of us) some conscious process; whereas coming to believe that it is Fido barking does not require having gone through a process of conscious reasoning. To repeat, the Completion Requirement is just too strong in many cases. I can be justified in believing that it is Fido barking even if I have not arrived at that belief through some conscious process of reasoning.

Nevertheless, a question still remains even about my belief that it is Fido barking: How is the infinitist to distinguish between (1) the case of a lucky guess that it is Fido barking when a justification is available and (2) the case in which the belief is actually justified?⁶⁰

The crucial point to recall is that for the infinitist *all* justification is provisional. S *has* a provisional justification for a proposition, p, only if there is a reason, r_1 , both subjectively and objectively available to S for p; whereas S's belief p *is* provisionally justified only if S's belief r_1 "is playing the appropriate causal role in sustaining" (to use Fumerton's expression) S's belief p. But what about the belief r_1 ? Doesn't it have to be provisionally justified in order for the belief p to be provisionally justified? No. There does have to be a reason, r_2 , for r_1 that is subjectively and objectively available if S is to *have* a justification for p, but the belief r_2 does not have to be provisionally justified in order for the belief p to be provisionally justified. It is sufficient that the belief p is causally sustained by the belief r_1 for the belief p to be provisionally justified. Beliefs originating from wild guesses would not be provisionally justified. Thus, the infinitist can make the requisite distinction between the case of a lucky guess when a justification is available and the case in which the belief is justified.

Still, I suspect that there is a deep skeptical worry lurking here. Infinitism envisions the possibility that if we begin to provide the reasons available for our beliefs, we might eventually arrive at a reason for which there is no further reason that is both subjectively and objectively available. Perhaps, our capacities to form new dispositions and concepts will reach a limit. Perhaps, the objective requirements of availability will not be met. Those possibilities cannot be ruled out *a priori*. Thus, the possibility of skepticism is a serious one. It is not, as some have thought, only a philosopher's nightmare.⁶¹ Here I side with Richard Foley who writes:

The way to respond to skeptical doubts is not to legislate against them metaphysically, and it is not to dismiss them as meaningless, self-defeating, or even odd... It is to recognize what makes epistemology possible makes skeptical worries inevitable—namely, our ability to make our methods of inquiry themselves into an object of inquiry.⁶²

Now, of course, I think there might be an infinite series of reasons available; and if so, our desire for a reason can be answered whenever it arises. Foley thinks that the lack of final guarantees implies that “the reality of our intellectual lives is that we are working without nets.”⁶³ And I agree that there are no final guarantees. There is no final net of that sort.

Nevertheless, although I think the kind of “lifetime” guarantee that would settle things once and for all is not available, my view is that there are important, “limited” guarantees available; and there might be a limitless set of limited guarantees available. The limited guarantees are the reasons that we can find for our beliefs. We have a limited guarantee that *p* is true whenever we have a reason for *p*. Is this an airtight guarantee?

No. But, we do have limited guarantees. And, for all I know, there might be an infinite number of such limited guarantees. Thus, although no *a priori* argument is available whose conclusion is that there is an infinite regress of objectively and subjectively available reasons, as we have seen there is also no such argument for the claim that there is no such set of reasons available.

Thus, I would not characterize our epistemic predicament as one in which there are *no* nets. For there might be a net whenever we need one. Rather, I would characterize it as one in which it is possible, as Lewis Carroll would say, that there are nets all the way down.

Notes

*There are many people to thank for their assistance in writing this paper. The first public airing of a distant ancestor of the current paper took place at an NEH Summer Institute at Berkeley in the summer of 1993. Keith Lehrer and Nicholas Smith were the co-directors, so I have them to thank for the opportunity to present the paper. The experience at the Institute was the best professional one I have ever had. Virtually everyone at the Institute had important comments and criticisms of the paper. There

were just too many participants to cite them all. However, in addition to the co-directors, those who helped me most were: Hugh Benson, Mylan Engel, Ann Forster, Richard Garrett, Anthony Graybosch, Andrew Norman, Mark Patterson, Glenn Ross, Michael Roth, Bruce Russell, Sharon Ryan, and James Sennett. Other people read various ancestors of the paper whose comments, criticisms and suggestions were very helpful: William Alston, Richard Fumerton, Stephen Luper-Foy, Paul Moser, John Post, Ernest Sosa and Linda Zagzebski. In addition, three of my colleagues at Rutgers—Richard Foley, Brian McLaughlin and Vann McGee (now at MIT)—provided telling criticism of earlier drafts and, luckily for me, also helped me to see ways of revising the argument to meet those criticisms. Finally, students in my graduate seminars—especially Ted Warfield, Carl Gillett, Troy Cross, and Jeff Engel—were helpful to me in developing the arguments put forth in this paper. Indeed, so many people helped me with this paper, it is only in some extended sense of “my” that this is my paper. But (if only to keep the Preface Paradox going) the mistakes are my own.

1. The term “infinetism” is not original with me. To the best of my knowledge, the first use of a related term is in Paul Moser’s paper “A Defense of Epistemic Intuitionism”, *Metaphilosophy* (15.3), 1984, pp. 196–204, in which he speaks of “epistemic infinitism.” Also, John Post in *The Faces of Existence* (Ithaca: Cornell University Press, 1987) refers to a position similar to the one I am defending as the “infinetist’s claim.” (p. 91) There is, however, an important difference between the view that Post correctly criticizes and my view that will become clear later when I discuss his objection to infinitism.
2. For example, Robert Audi in *The Structure of Justification* (New York: Cambridge University Press, 1993) uses the “regress problem in a way that brings out its role in motivating both foundationalism and coherentism.” (p. 10). He specifically eschews a “full-scale assessment” of the regress argument (p. 127). In addition, William Alston, in his *Epistemic Justification* (Ithaca: Cornell University Press, 1989) employs the regress argument to motivate a type of foundationalism. He, too, does not examine the argument in detail but says “I do not claim that this argument is conclusive; I believe it to be open to objection in ways I will not be able to go into here. But I do feel that it gives stronger support to foundationalism than any other regress argument.” (p. 55) Finally, Laurence Bonjour in his *The Structure of Empirical Knowledge* (Cambridge: Harvard University Press, 1985) says that the considerations surrounding the regress argument are “perhaps the most crucial in the entire theory of knowledge” (p. 18) but dismisses the infinite regress by alluding to the “finite mental capacity” of human beings. Indeed, he says “though it is difficult to state in a really airtight fashion, this argument [that humans have a finite mental capacity] seems to me an adequate reason for rejecting [the view that the structure of justificatory reasons is infinite].” (p. 24) We will, of course, consider the “finite mind” objection in due course. My point is that such a crucial issue in the theory of knowledge deserves careful consideration.
3. I might note in passing that Davidson’s characterization of coherence theories—namely that “what distinguishes a coherence theory is simply the claim that nothing can count as a reason for holding a belief except another belief” might distinguish it from foundationalist theories, but it does not distinguish it from infinitism. See “Coherence Theory of Truth and Knowledge” in *Truth and Interpretation*, Ernest Lepore, ed., (New York: Blackwell, 1986), pp. 307–319. Citation from p. 310.
4. I take *traditional coherentism* to be the view that the structure of justification is such that some proposition, say x, provides some warrant for another proposition, say y,

and *y* also provides some warrant for *x*. It is to be distinguished from another view, discussed later, which holds that coherence is a property of sets of propositions and individual propositions in the set are warranted because they belong to such a set. In this *non-traditional coherentist* view, warrant attaches to beliefs because they are members of such a set. Unlike traditional coherentism, warrant is not a property transferred from one proposition to another.

5. Throughout I will be using single-strand chains of reasons. Nothing depends upon that. I do so in order to make the contrast between foundationalism and coherentism more readily evident.
6. Note that stating PAC this way does not entail that “being a reason for” is transitive. This avoids a valid criticism of an argument for infinitism. (See John Post, “Infinite Regress Argument” in *Companion to Epistemology*, Jonathan Dancy and Ernest Sosa, eds., (New York: Blackwell, 1992), pp. 209–212. His criticism of infinitism depends upon my own argument against the transitivity of justification. See *Certainty* (Minneapolis: University of Minnesota Press, 1981), pp. 30–35. Those criticisms do not apply here because “being in the evidential ancestry of” is transitive.
7. Laurence Bonjour in *The Structure of Empirical Knowledge* and Keith Lehrer in *Theory of Knowledge* (Boulder: Westview Press, 1990) develop accounts of what I call “non-traditional coherentism.”
8. There are other necessary conditions of justification, but they are not important for the discussion here. For example, there must not be another proposition, *d*, available to *S* that overrides *r* (unless there is an ultimately non-overridden overrider of *d*). See my *Certainty*, pp. 44–70.
9. This is important to note since as I understand Ernest Sosa’s objection to infinitism it is its supposed incompatibility with the supervenience of the normative on the non-normative that makes it unacceptable. See his “The Raft and the Pyramid”, *Midwest Studies in Philosophy*, vol 5, (Minneapolis: University of Minnesota Press, 1980), 3–25, especially section 7. James Van Cleve makes a similar point in his “Semantic Supervenience and Referential Indeterminacy”, *Journal of Philosophy*, LXXXIX, no. 7, (July 1992), 344–361, especially pp. 350–1 and 356–7. Note that I am not asserting that the normative does, in fact, supervene on the non-normative. Indeed, I think the issue might be misconceived. Perhaps there are some properties—the so-called “normative” properties of knowledge and justification—that are hybrid properties being neither normative nor non-normative. My claim is merely that as sketched in this paper, infinitism is compatible with the supervenience of the normative on the non-normative.
10. Thus, each one of these accounts of objective availability specifies a sufficient condition that entails that a belief is a reason. If the sufficient condition appeals only to non-normative properties, as some of them do, then what is unique to infinitism satisfies Van Cleve’s requirement for epistemic supervenience. He says:

One of the tasks of epistemology is to articulate *epistemic principles*—principles of the form ‘If _____, then subject *S* is justified in believing proposition *p*’. Such principles divide into two classes. One class includes principles that warrant inference from already justified propositions to further propositions; the antecedents of such principles will specify that certain propositions already have some epistemic status for the subject. But not all epistemic principles can be like this. There must also be a class of epistemic principles that specify the non-epistemic conditions under which some beliefs come to have some epistemic

status or other in the first place—the conditions, one might say, under which epistemic status is *generated*... [This] requirement is really just the requirement of epistemic supervenience—that there be some nonepistemic features that ultimately underlie the instantiation of any epistemic property. (Van Cleve, *op. cit.*, p. 350)

If I am right that the sufficient conditions for both subjective and objective availability can be specified in nonepistemic terms, then there is no reason for thinking that infinitism is incompatible with epistemic supervenience. For the conditions are sufficient for making beliefs into the required sort of reasons.

There are other conditions besides those specified in PAC and PAA that a belief must satisfy in order to be justified (see fn. 8), but if those also supervene on the non-normative facts, then infinitism is compatible with epistemic supervenience. Those other features are not unique to infinitism. The combination of PAC and PAA is what distinguishes infinitism from coherentism and foundationalism. My point is that what distinguishes infinitism is compatible with epistemic supervenience.

11. This is a paraphrase of an account developed by Roderick Chisholm, *Theory of Knowledge* (Englewood Cliffs, NJ: Prentice-Hall Inc., 1966). See especially fn. 22, p. 23.
12. For a development of the individualistically relativistic account of objective availability, see Richard Foley, *The Theory of Epistemic Rationality*, (Cambridge: Harvard University Press, 1987), especially pp. 68–154.
13. See, for example: David Lewis, “Scorekeeping in a Language Game,” *Journal of Philosophical Logic*, VIII (1979), pp. 339–359; L. Wittgenstein, *On Certainty*, G.E.M. Anscombe and G.H. von Wright, ed., (New York: Harper and Row, 1972). There are also hints at such a view in Aristotle. (*Metaphysics*, 1006a–1011b.)
14. This position is advocated by Linda Zagzebski in *Virtues of the Mind*, (Cambridge: Cambridge University Press, 1996).
15. One problem for some interpretations of objective availability needs to be avoided. Troy Cross has pointed out to me that *if* the probability of propositions diminishes as the chain of reasons lengthens, our beliefs might have such a low probability that they would not in any normal sense of “justified,” in fact, be justified. There are four ways around that worry. The first is that there is an infinite number of probability gradations available given any required probability level of the putatively justified proposition. The second is that it is the proposition, itself, that is located in the chain rather than a proposition with a probability assigned. The third is to simply reject the reading of “objective probability” in frequency terms and treat “p is probable” as roughly synonymous with “p is acceptable and can be used to make other propositions acceptable.” The fourth is simply to reject probability theory as providing an appropriate set of conditions for objective availability.
16. See, for example, the passage cited earlier in Bonjour, *The Structure of Empirical Knowledge*. (See fn. 2.)
17. There is a deep problem with treating beliefs as dispositions to have thoughts *under the appropriately restricted circumstances*. For it appears that almost any proposition as well as its negation could count as believed under some range of “appropriately restricted circumstances.” I do not have a settled view regarding the way to restrict the range of circumstances to avoid that consequence. Obviously, this is a general, difficult problem for a dispositional account of belief. There just seem to be too many beliefs. But, as we will see, the problem for the infinitist is just the opposite. For infinitism seems to require more beliefs than we can or do have. It would be nice to have a satisfactory dispositional account of belief. A fully developed infinitist theory

must address this issue. Nevertheless, since my purpose here is merely to make infinitism a view worth exploring, we can proceed without solving this general problem concerning a dispositional account of beliefs.

18. Ernest Sosa makes a similar point in "The Raft and the Pyramid". It is reprinted in his book, *Knowledge in Perspective*, (New York: Cambridge University Press, 1991), 165–191, see especially p. 178.
19. Dretske, "Two Conceptions of Knowledge: Rational Belief vs. Reliable Belief," *Grazer Philosophische Studien*, 40 (1991), pp. 15–30, especially p. 18.
20. Alvin Goldman, "What is justified belief?" in *On Knowing and the Known*, Kenneth G. Lucy, ed., (Amherst, New York: Prometheus Books, 1996), p. 190.
21. Keith Lehrer, *Theory of Knowledge*, p. 164.
22. Ernest Sosa, *Knowledge in Perspective*, p. 95.
23. Laurence Bonjour, *The Structure of Empirical Knowledge*, especially pp. 9–14.
24. See, for example, *Outlines of Pyrrhonism*, PH I 114–117, 122–124.
25. See, for example, John Williams, "Justified Belief and the Infinite Regress Argument," *American Philosophical Quarterly*, XVIII, no 1, (1981), pp. 85–88, especially p. 86.
26. William Alston, "Two types of Foundationalism," *Journal of Philosophy*, LXXIII (1976), 165–85. The article also appears as Essay 1, in Alston's book, *Epistemic Justification*, pp. 19–38.
27. Laurence Bonjour, *The Structure of Empirical Knowledge*, p. 108–9.
28. Donald Davidson also seems concerned to establish this sort of connection between coherence and truth:

What is needed to answer the skeptic is to show that someone with a (more or less) coherent set of beliefs has a reason to suppose that his beliefs are not mistaken in the main. What we have shown is that it is absurd to look for a justifying ground for the totality of beliefs, something outside the totality which we can use to test or compare with our beliefs. The answer to our problem must then be to find a *reason* for supposing most of our beliefs are true that is not a form of *evidence*.

Davidson, "Coherence Theory of Truth and Knowledge", p. 314.

29. See Peter Klein and Ted Warfield, "What Price Coherence?", *Analysis*, 54.3, July '94, 129–32.
30. Steven Luper-Foy, "Arbitrary Reasons," in *Doubting: Contemporary Perspectives on Skepticism*, Michael Roth and Glenn Ross, eds., (Dordrecht: Kluwer Academic Publishers, 1990), 39–55. Citation is from p. 45.
31. Luper-Foy, "Arbitrary Reasons," p. 40.
32. See "Questions Concerning Certain Faculties Claimed for Man" in the *Collected Papers of Charles Sanders Peirce*, Charles Hartshorne and Paul Weiss, eds., (Cambridge, Massachusetts: Belknap Press of Harvard University Press, 1965), Vol V, Bk II, 135–155, especially pp. 152–153. There he writes:

Question 7. *Whether there is any cognition not determined by a previous cognition.*
259. It would seem that there is or has been; for since we are in possession of cognitions, which are all determined by previous ones and these by cognitions earlier still, there must have been a *first* in this series or else our state of cognition at any time is completely determined according to logical laws, by our state at

any previous time. But there are many facts against this last supposition, and therefore in favor of intuitive cognitions.

260. On the other hand, since it is impossible to know intuitively that a given cognition is not determined by a previous one, the only way in which this can be known is by hypothetic inference from observed facts. But to adduce the cognition by which a given cognition has been determined is to explain the determinations of that cognition. And it is a way of explaining them. For something entirely out of consciousness which may be supposed to determine it, can, as such, only be known and only adduced in the determinate cognition in question. So, that to suppose that a cognition is determined solely by something absolutely external, is to suppose its determinations incapable of explanation. Now, this is a hypotheses which is warranted under no circumstances, inasmuch as the only possible justification for a hypothesis is that it explains that facts, and to say that they are explained and at the same time to suppose them inexplicable is self-contradictory.

Peirce may, indeed, be arguing that only beliefs (cognitions) can provide a basis for other beliefs—nothing “external” can do so. He also might be arguing that the “meta-argument” referred to earlier can not succeed because one can always ask of the supposed meta-justification what justifies it. But I am not certain that either is what he is claiming. Further, if he is merely claiming that cognitions are infinitely revisable given new experiences, then he is not advocating infinitism.

33. John Williams, “Justified Belief and the Infinite Regress Argument,” p. 85.
34. Williams, p. 86.
35. Richard Foley, “Inferential Justification and the Infinite Regress,” *American Philosophical Quarterly*, XV, no.4, (1978), pp. 311–316; quotation from pages 311–2.
36. Williams, p. 86.
37. Robert Audi considers the set of beliefs: 2 is twice 1, 4 is twice 2, etc. Then, he says, “Surely, for a finite mind there will be some point or other at which the relevant proposition cannot be grasped.” (See Audi’s “Contemporary Foundationalism” in *The Theory of Knowledge: Classic and Contemporary Readings*, Louis Pojman, ed. (Belmont: Wadsworth, 1993), pp. 206–213. The quotation is from page 209.) The example is repeated in Audi’s book, *The Structure of Justification*, (New York: Cambridge University Press, 1993), p. 127. My reply is that there are other examples of infinite series of beliefs (understood as dispositions) that do not involve increasingly difficult to grasp propositions (like the one about to be given in the main text).
38. I am indebted to Vann McGee for this point.
39. Richard Fumerton, “Metaepistemology and Skepticism,” in *Doubting: Contemporary Perspectives on Skepticism*, pp. 57–68, quotation from page 60. The same account of justification is given in Fumerton’s book, *Metaepistemology and Skepticism* (Lanham, Maryland: Rowman & Littlefield Publishers, 1995), p. 36.
40. Richard Foley, “Inferential Justification and the Infinite Regress,” especially pp. 314–315.
41. There is a related point which I do think might be telling against the relatively thin view of justification I am proposing; and it might appear that this would jeopardize infinitism. Although it is clear that the requirement that S have a justification about what constitutes good reasoning is too strong a requirement of having a justification *simpliciter* or of paradigmatic forms of having a justification *simpliciter* for the reason

just given, it is plausible to suggest that S must *believe*, at least dispositionally, that e makes p probable (to use Fumerton's terminology) whenever S is justified *simpliciter* in believing that p and S's available reason for p is e. That is a somewhat thicker notion of justification than the one I am proposing. It is plausible because the intuitions that inform the Truetemp case can be employed to support this moderately thick view. Suppose Mr. Truetemp believes it is 104 degrees and he also believes that he has an accurate thermometer-cum-temperature-belief-generator implanted in his head. On my "thin" view, if S believes that he has an accurate thermometer-cum-temperature-belief-generator implanted in his head, then S has a justification for the belief that it is 104 degrees, if, *ceteris paribus*, he has a good enough, non-question begging reason for believing that he has an accurate thermometer-cum-temperature-belief-generator implanted in his head, and he has a reason for that reason, etc. But on my thin view, S might not believe that is his real reason. He might believe (dispositionally or occurrently) falsely, for example, that his reason is that it is Tuesday and that it is always 104 degrees on Tuesday. Of course, that is not a reason on my account because that belief, like the one offered in the Fish/Army Boots Case considered earlier, is not objectively available to Mr. Truetemp. I think such a case is best seen as one in which Mr. Truetemp does not know what his real reason is—but that he has a good enough reason available in both the objective and subjective sense. Thus, I think that, *ceteris paribus*, he is has a justification *simpliciter* and that, *ceteris paribus*, he does know that the temperature is 104 degrees, but he does not know *how* he knows that the temperature is 104 degrees or even *that* he knows that. Nevertheless, I acknowledge the intuitive tug in the opposite direction—namely that he is not justified *simpliciter*, and hence does not know, because he would offer the "wrong" reason for his belief that it is 104 degrees.

Let me make the distinction between the three views of justification absolutely clear. The "thin" view (the one I think is correct) holds that *S has a justification for p on the basis of r* entails that (a) *S believes r* and (b) *r is a reason for p*. It does not require that, in addition, either (1) S believes that r is a reason for p or (2) S is justified in believing that r is a reason for p. The "moderately thick view" (the one I think is plausible) adds (1) to the thin view. The "extremely thick" view (the one I think cannot be correct) adds (2), and presumably (1) as well, to the thin view.

What is crucial to note is that, without jeopardizing infinitism, I can grant that S must dispositionally believe that e makes p probable in order for p to be justified by e for S. Of course on such a view, S would, at the next link in the chain, have to believe that e^1 makes e probable, and, at the next link believe that e^2 makes e^1 probable, etc. But note that granting that this thicker view of justification is correct would not force the infinitist into requiring that S have an implausibly complex belief. The beliefs at every step of the regress are no more complex than the one at the first step. So, the intuitive tug of this moderately thick view of justification can be allowed to modify the thin view without damaging my central claim. I resist the tug because I think it is the reasons available to S for p that determine whether S has a justification for p regardless of S's beliefs about those reasons.

42. There are some places in the *Posterior Analytics* where Aristotle *might* be claiming that it does follow from the fact that not all reasoning is the result of demonstration that the structure of reasons cannot be infinite:

Our own doctrine is that not all knowledge is demonstrative: on the contrary, knowledge of the immediate premisses is independent of demonstration. (The necessity of this is obvious: for since we must know the prior premisses from

which the demonstration is drawn, and since the regress must end in immediate truths, those truths must be indemonstrable.) [72b18–23] [*Basic Works of Aristotle*, Richard McKeon, ed., (New York: Random House, 1941)]

My point is that Aristotle's argument concerning the genesis of knowledge can be granted without granting that the structure of justification is finite. Demonstration cannot be required to bring about all knowledge. But it does not follow that reasons could not be given for all beliefs.

43. *Basic Works of Aristotle*, Richard McKeon, ed., 1011a1–14.
44. I. T. Oakley, "An Argument for Skepticism Concerning Justified Beliefs," *American Philosophical Quarterly*, XIII, no. 3, (1976), 221–228, especially pp. 226–227.
45. We said, in PAC, that for all x and for all y , if x is contained in the ancestry of y , y cannot be contained in the ancestry of x . Let " xCy " stand for " x is contained in the ancestry of y ".

- | | |
|--|-------------------------|
| 1. $(x)(y)(xCy \rightarrow \sim(yCx))$ | 1. Premiss (PAC) |
| 2. $aCa \rightarrow \sim(aCa)$ | 2. UI (twice), 1 |
| 3. aCa | 3. Assume, for reductio |
| 4. $\sim(aCa)$ | 4. 2,3 MP |
| 5. $\sim(aCa)$ | 5. CP (discharge), 3–4 |
| 6. $(x)\sim(xCx)$ | 6. UG, 5 |

46. In order to foreclose a possible objection, it is important to note that my claim that if every link contains q , the chain would be question begging does not have the unacceptable consequence that if S is justified in believing $(p \ \& \ q)$, then S is not justified in believing that q . My claim is merely that it is not always the case that $(p \ \& \ q)$ is an acceptable (i.e., non-question begging) reason for q . What typically occurs is that the chain of reasons includes p and includes q before including $(p \ \& \ q)$. But, of course, if the chain is of that form, then S would be justified in believing p and justified in believing q when S is justified in believing $(p \ \& \ q)$ because the justification of $(p \ \& \ q)$ depends upon the prior justification of p and the prior justification of q .

I say "typically" in the preceding paragraph, because there do seem to be some chains of reasoning in which $(p \ \& \ q)$ precedes p and precedes q . Consider this one (where " xRy " stands for " x is a reason for y "):

Sally says " $p \ \& \ q$ " and whatever Sally says is true} **R** $\{(p \ \& \ q)\}$ **R** $\{q\}$

That chain does not appear to me to be question begging. The crucial point here is that my denial that $(p \ \& \ q)$ is always a reason for q (the presupposition of Oakley's argument), does not commit me to denying that justification distributes over conjunction.

47. I have condensed the argument a bit. In particular, there are other constraints besides the question begging one discussed by Post. But I believe that they are not relevant. See John Post, "Infinite Regress of Justification and of Explanation," *Philosophical Studies*, XXXVIII, (1980), 32–37, especially pp. 34–35. The argument, in a slightly revised form appears in Post's book, *The Faces of Existence*, (Ithaca: Cornell University Press, 1987), pp. 84–92.
48. I might note in passing that if PAA and PAC are necessary requirements of justification, both foundationalism and coherentism lead to the result that no contingent proposition is justified, since they advocate reasoning that violates those principles. I think any theory of justification that automatically leads to the view that *no* proposition is justified ought to be rejected as readily as a view that has the consequence that *all* contingent propositions are justified.

49. Ernest Sosa, "The Raft and the Pyramid," *Midwest Studies in Philosophy*, Section 5.
50. Post claims in *The Faces of Existence* that his new formulation of the *reductio* argument meets the objection by Sosa (see his fn. 21, p. 91). As I construe Sosa's objection, namely that more is required for a belief to have a justification than the mere existence of a series of beliefs which under some circumstances would provide a justification, Post's reformulation does not meet Sosa's objection. Post says that in such a series "justification is supposed to accumulate for [the first item in the series] merely as a result of [the person's] being able endlessly to meet the demand for justification simply by appealing to the next inferential justification in the [series]." (p. 90). My point is that there will not be such a series of available reasons for some beliefs.
51. The infinitist must be careful here not to fall into a trap laid by Paul Moser. He points out correctly that if the distinction between conditional (or potential) regresses and actual ones were that there is some external *information* that makes each step justified, then it could appear that the infinitist is committed to the view that the *reason* for believing any member of the chain is not the merely the antecedent in the chain but the antecedent *plus* the "external" information. That is, the external information would become an additional reason for holding the belief. See Paul Moser, "Whither Infinite Regresses of Justification," *The Southern Journal of Philosophy*, XXIII, no. 1, (1985), 65–74, especially page 71.

But the infinitist need not fall into the trap. The infinitist holds that there are some facts in virtue of which a belief is a reason. These facts are not part of the chain of reasoning.

52. Jonathan Dancy, *Introduction to Contemporary Epistemology*, (Oxford: Basil Blackwell, 1985) p. 55.
53. I use the term "provisional" justification rather than "conditional" justification (as used by Dancy) because the term "provisional" more clearly underscores the fact that the reasons in the chains are replaceable.
54. *Outlines of Pyrrhonism*, PH I, 166.
55. Richard Fumerton, *Metaepistemology and Skepticism*, p. 57. Some of what follows repeats my comments on Fumerton's book in "Foundationalism and the Infinite Regress of Reasons," *Philosophy and Phenomenological Research*, LVIII, No. 4 (1989), 219–225.
56. Fumerton, p. 92.
57. A case similar to this one was discussed in a paper that Ernest Sosa presented at the Chapel Hill Philosophy Colloquium entitled "Two False Dichotomies: Foundationalism/Coherentism and Internalism/Externalism" on 10/17/97.
58. BonJour makes a similar point this way:

...the fact that a clever person could invent an acceptable inferential justification on the spot when challenged to justify a hunch or arbitrary claim of some sort, so that the justification was in a sense available to him, would not mean that his belief was inferentially justified prior to that time...

See BonJour, *The Structure of Empirical Knowledge*, p. 19.

59. Sosa, "Two False Dichotomies: Foundationalism/Coherentism and Internalism/Externalism", manuscript, p. 6.
60. It is crucial to note that I have been arguing that a necessary condition of S's being justified in believing that p is that S has an appropriate justification for p and having such a justification requires that there be an infinite number of non-repeating reasons available to S. I was not suggesting that was a sufficient condition for S's being just-

tified or even having a justification (see fn. 8 above). So, Sosa's objection, even if valid, cannot be directed towards the main claim of this paper. Nevertheless, it is an important objection since the infinitist will at least have to show how it is possible for S to have a justified belief *according to the infinitist's account of justified belief*, if the distinctive type of adult human knowledge is to be shown to be possible. Nevertheless, let us grant for the sake of argument that somehow it could be shown—either through philosophic argument, or perhaps even by cognitive science, that our beliefs do not (or can not) have the requisite causal history as required by infinitism (or foundationalism or coherentism, for that matter). What would be the consequences to infinitism (foundationalism or coherentism)? I think that is very far from clear-cut. The infinitist is claiming that a normatively acceptable set of reasons must be infinitely long and non-repeating if we are to avoid the pitfalls of foundationalism (arbitrariness) and coherentism (begging the question). If infinitism correctly specifies our current concept about what is required for a belief to have the appropriate normative pedigree and if it were to turn out that beliefs don't (or can't) have the requisite causal structure, then we have at least three choices: (1) We can revise our concept of the normative structure of good reasoning or (2) we can adopt a form of Pyrrhonism (withholding assent to any proposition requiring a justification) or (3) we can accept an antinomy. It would not follow that the normative constraints were incorrectly described—unless, perhaps, epistemic oughts imply epistemic cans. But that seems highly dubious. Would it not be possible for it to be the case that the rules of inference that are most truth conducive are such that we are not “wired” to employ them? If so, there is a perfectly good sense in which we ought to reason in some way that we can't.

61. See Michael Williams, *Unnatural Doubts* (Oxford, UK and Cambridge, USA: Blackwell, 1991).
62. Richard Foley, “Skepticism and Rationality,” in *Doubting: Contemporary Perspectives on Skepticism*, cited earlier, pages 69–81, quotation from p. 75.
63. Foley, “Skepticism and Rationality,” p. 80. For a full development of the “no nets” view, see Richard Foley, *Working Without a Net: A Study of Egocentric Epistemology*, (New York: Oxford University Press, 1993).