## INFINITISM'S TAKE ON JUSTIFICATION, KNOWLEDGE, CERTAINTY AND SKEPTICISM\*

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SÍNTESE - O propósito deste artigo é mostrar como podem ser desenvolvidas explicações robustas de justificação e de certeza no interior do infinitismo. Primeiro, eu explico como a concepção infinitista de justificação epistêmica difere das concepcões fundacionista e coerentista. Em segundo lugar, explico como o infinitista pode oferecer uma solução ao problema do regresso epistêmico. Em terceiro lugar, explico como o infinitismo, per se, é compatível com as teorias daqueles que sustentam 1) que o conhecimento requer certeza e que uma tal forma superior de conhecimento é possível, bem como com as daqueles que rejeitam algum ou ambos os conjuntos em 1). Em outras palavras, o infinitismo nem endossa, nem rejeita o ceticismo, tomando-se essa tese como sendo aquela segundo a qual nós não possuímos conhecimento naquelas situações que nos parecem cognoscíveis.

PALAVRAS-CHAVE – Certeza. Coerentismo. Fundacionismo. Infinitismo. Pirronismo. Regresso epistêmico

ABSTRACT - The purpose of the paper is to show how robust accounts of justification and certainty can be developed within infinitism. First, I explain how the infinitist conception of epistemic justification differs from both the foundationalist and coherentist conceptions. Second, I explain how the infinitist can provide a solution to the epistemic regress problem. Third, I explain how infinitism, per se, is compatible with both the views of those who hold 1) that knowledge requires certainty and that such high-grade knowledge is possible as well as those who deny either or both conjuncts in 1). In other words, infinitism neither endorses nor rejects skepticism, taking that view to mean that we do not have knowledge in those areas commonly thought to be within our ken.

KEY WORDS – Certainty. Coherentism. Foundationalism. Infinitism. Pyrrhonism. Epistemic recress

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VERITAS	Porto Alegre	v. 50	n. 4	Dezembro 2005	p. 153-172
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#### Introduction

There are multiple purposes of this paper. First, I will explain how the infinitist conception of epistemic justification differs from both the foundationalis and coherentist conceptions. Second, using that conception of epistemic justification, I will explain how the infinitist can provide a solution to the epistemic regress problem which is, as I see it, how to avoid arbitrariness in belief without falling into dogmatism, where dogmatism is taken to be the acceptance of beliefs beyond what is justified by the reasons for the belief. Third, I will explain how infinitism, per se, is compatible with both the views of those who hold 1) that knowledge requires certainty and that such high-grade knowledge is possible as well as those who deny either or both conjuncts in 1). In other words, infinitism neither endorses nor rejects skepticism, taking that view to mean that we do not have knowledge in those areas commonly thought to be within our ken. That's a good thing because both the skeptic and the epistemist (a defender of knowledge) can accept infinitism as a proper account of justification and knowledge and, then, focus on whether the conditions of justification and knowledge can be fulfilled. If they did not employ common definitions of those concepts, then there would be no real disagreement between them because they would be talking past each other as did the people in James's famous squirrel-tree example.

# Some Preliminary Remarks about Infinitism, Justification and Knowledge, Certainty and Skepticism

Infinitism: I have developed and defended a form of infinitism in other papers. I will not be repeating that defense here in any great detail; however, I will be arguing that infinitism can provide a good account of some features of justification and knowledge, and that it remains neutral with regard to some forms of skepticism. In so far as those are desiderata of a good account of justification, this paper constitutes a further defense of a view that has been neglected, to say the least.

A central claim made by infinitism is that there is an important kind of epistemic justification that requires that there be available to the reasoner a set of reasons that neither ends with a so-called "foundational" belief nor is circular. Put positively, if we are to have beliefs that are *comprehensively justified*, meaning a

Please see the following: "Foundationalism and the Infinite Regress of Reasons", *Philosophy and Phenomenological Research*, 58.4, 1998, 919-925; "Human Knowledge and the Infinite Regress of Reasons", *Philosophical Perspectives*, 13, J. Tomberlin (ed.), 1999, 297-325; "Why Not Infinitism?" in *Epistemology: Proceedings of the Twentieth World Congress in Philosophy*, Richard Cobb-Stevens (ed.), 2000, vol. 5, 199-208; "When Infinite Regresses Are *Not* Vicious", *Philosophy and Phenomenological Research*, 66.3, 2003, 718-729; "What *IS* Wrong with Foundationalism is that it Cannot Solve the Epistemic Regress Problem", *Philosophy and Phenomenological Research*, 68.1, 2004, 166-171; "Infinitism Is the Solution to the Epistemic Regress Problem", *Contemporary Debates in Epistemology*, ed. Matthias Steup and Ernest Sosa, Blackwell Publishers, 2005, 131-40; "Reply to Ginet", *Contemporary Debates in Philosophy*, op. cit., 149-52; "Human Knowledge and the Infinite Progress of Reasoning", *Philosophical Studies*, forthcoming; "How to be an Infinitist about Doxastic Justification", *Philosophical Studies*, forthcoming.

belief that has *all* of the good epistemic features a belief can have, then there must be reasons offered for it that do not beg the question. We want our beliefs not to be held arbitrarily from our own point of view. We seek epistemic reassurance that our beliefs are true, or at least likely to be true. Being able to give reasons for our beliefs is an important epistemically good feature of our beliefs that makes them comprehensively justified; and, hence, infinitism is required – or so I will argue.

Infinitism has been deemed a non-starter by virtually all philosophers who have considered it. If they were right, it would leave some form of foundationalism or some form of coherentism as the only viable candidates for resolving the epistemic regress problem. But foundationalists and coherentists do not appear to me to be right in their rejection of infinitism. Their mistake is that they do not fully appreciate the resources available to the infinitist. The reason for that will, I hope, become clear as the paper develops.

Knowledge and Justification: Since Plato, philosophers have been seeking to correctly characterize knowledge – that form of true belief that is most highly prized. I am going to assume that there is a perfectly legitimate sense of "knowledge" in which S is said to have knowledge that p only if S's belief that p is sufficiently comprehensively justified. It might be that doors that open automatically when they are approached know that they are being approached or that dogs know their master's voice. But the kind of knowledge I am concerned with here is the kind that requires that we have comprehensively justified beliefs. In the concerned with here is the kind that requires that we have comprehensively justified beliefs.

Some people think dogs reason. For example, Sextus Empircus cites a case in which a dog apparently reasons by way of disjunctive syllogism. In addition, I suppose, that some people would stretch the concepts of *belief* and *reasons* so far that they would say that the devices in automatic doors have beliefs and reasons. I won't take issue with those anthropomorphisms here – just as long as it is clear that 'knowledge' and, hence, 'comprehensively justified beliefs' are paradigmatically predicated of humans whose beliefs are backed by good reasons.

Further, I am going to assume that, although knowledge entails true, justified belief, those are not sufficient conditions for knowledge. In other places, I have argued that the defeasibility theory of knowledge can provide the missing condition which, when added to true, justified belief, provides a set of necessary and

Plato, *Meno*, 97a-98d.

Sosa puts the point this way:

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 "servomechanic" 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. [Ernest Sosa, *Knowledge in Perspective* (Cambridge: Cambridge University Press, 1991), p. 95.]

Sextus Empiricus, Outlines of Pyrrhonism, I. 69-70.

Gettier, E., "Is Justified True Belief Knowledge?" Analysis, 23, 1963, 121-3.

sufficient conditions. I am going to assume, here, that the defeasibility theory is correct and that it is well enough known so that it is not necessary to provide a full articulation of that view. However, where some of the details of that account will prove useful, I will provide them. But for our purposes, we can say that some subject, S, knows that p **iff**:

- 1. p is true.
- 2. S is justified in believing that p.
- 3. S believes that p (supported by whatever justifies the belief that p).
- 4. There is no genuine defeater of S's justification of p.

I said that S is comprehensively justified (from now on I will usually just say "justified") in believing that p only if S's belief is based upon good reasons, but we must be very careful not to beg a fundamental issue at stake. I am using "reason" here in a very broad sense including such things as when we say "the reason the pen dropped is that she opened her fingers". For 'reasons' must, at least at this point in the discussion, include such mental states as experiences, perceptions and memories as well as non-mental facts because foundationalists would take it that in some circumstances what justifies a belief is an experience, perception, memory or nonmental fact - rather than a further belief. That is, a foundationalist might say that my experience of seeing (or my experience of seeming to see) a red, tomato-shaped thing (or sense-datum) is the reason I believe that there is a tomato. Further, some foundationalists, might take the reasons to be "external" states in the world. They would say that my reason for, or basis for, believing that there is a chair includes the fact that there is a chair. Thus, if we were re to limit "reasons" at this point in the discussion to a type of belief, then infinitism is being assumed at the outset.

'Justified belief' inherits an ambiguity from 'belief.' The latter refers either to a belief state (whether occurrent or dispositional) or to the propositional content of a belief state. For example, when we say of a belief that it is true, we are referring to the propositional content of the belief state; and when we say that Sally has had a belief for three weeks, we are referring to the belief state. Hence, when we say that Sally is justified in believing that p, we can mean either that her believing that p is justified or merely that the proposition, p, is justified for her. Following Firth, I will refer to the former as doxastic justification and the latter as propositional justification. If a belief that p is doxastically justified for p, then the proposition, p, is propositionally justified because the belief can be justified only if there is

Please see the following for my version of the defeasibility theory: "A Proposed Definition of Propositional Knowledge", Journal of Philosophy, 67 (16), 1971, 471-482; "Knowledge, Causality and Defeasibility", Journal of Philosophy, 73 (20), 1976, 792-812; "Knowledge is True, Non-defeated Justified Belief", Essential Knowledge, Longman Publishers, ed. Steven Luper, 2004, 124-135; Certainty: A Refutation of Scepticism, University of Minnesota Press, 1981, especially, pp. 137-172.

This distinction was first introduced by Roderick Firth in "Are Epistemic Concepts Reducible to Ethical Concepts?" in *Values and Morals* (Dordrecht, Holland: D. Reidel Publishing Co., 1978), edited by Alvin Goldman and Jaegwon Kim.

an appropriate set of reasons (in the broad sense) that justifies the propositional content of the belief. But what is crucial to note for our purposes is that since a proposition can be justified for a person without the person believing it, a proposition could be justified without a belief having that propositional content being justified. When Sally has good enough reasons for believing the proposition (and no overriding contravening reasons for disbelieving or withholding it), the proposition could be justified for her even though she is not doxastically justified because she doesn't have the belief. As we say, Sally might just not have put two and two together. In addition, Sally might have the belief that p and p might be propositionally justified but she might believe p for the "wrong reasons." In that case her belief (i.e., the believing) would not be justified.

Thus, although the justification condition in knowledge refers to doxastic justification, the no-genuine-defeater condition implicitly makes use of propositional justification. The defeater condition means, roughly, that there is no true proposition, d, which is such that if conjoined with the propositional content of the reasons that justify p, the resulting conjunction no longer provides an adequate reason for p (unless d defeats only by rendering plausible a false proposition). The qualification mentioned in parenthesis is designed to handle the problem of misleading defeaters. It is an important qualification in the defeasibility theory, but it will play no role in this paper.

Justification has been the subject of so much discussion in epistemology that although the distinction between doxastic and propositional justification preserves a customary distinction, it is far from clear that the way that philosophers employ 'justification' remains faithful in all ways to the ordinary way of talking. That's not necessarily a bad thing. After all, 'acceleration' in physics-talk does not remain true to the ordinary notion of mere increase of velocity. Indeed, the revised concept made possible a major advance in the study of motion by recognizing that both change in direction and increase in velocity were correlated with the presence of a force.

Given that 'justification' has become a term of art, it is important to lay one's cards on the table at the outset. Justification, as I understand it, is one of the important components of warrant – where warrant is whatever has to be added to true belief to convert it to knowledge. The other component is the no-defeater clause. I take 'justification' to be a catchall term indicating a large array of epistemic good making features of beliefs. That array includes both internal features having to do with the reasons one has for believing as well as external features having to do with the process that produced the belief. Beliefs produced by reliable processes, including the skills of the believer and the environmental condi-

Note that given the broad reading of "reasons" mentioned above, we will have to take the representational states as having propositional content and include propositions corresponding to the worldly facts which serve as reasons. But this is, I think, common practice.

Alvin Plantinga defines warrant as "that, whatever precisely it is, which together with truth makes the difference between knowledge and mere true belief" in *Warrant: The Current Debate* (Oxford University Press, 1993), p. 3.

tions beyond the skin of the believer, are important ingredients of comprehensively justified beliefs. But it is not those external features that will play a role in this paper. It is the reasons that we appeal to in order to justify a belief that will be crucial. Note a crucial assumption I am making, namely, that justifying a belief is something that we do. It gets to be comprehensively justified only when we justify it. More about that shortly. Optimists among us hope that the reasons we have for our beliefs often are their causes – or more precisely, that the beliefs that have those reasons as their propositional contents are the causes of our justified beliefs. Perhaps. But I wouldn't want to die in the last ditch clinging to the hope that the causal history of our beliefs mirrors in any significant way the reasons that we offer for them. The pessimist will hold that the scientific image of man and the philosophical image of man diverge at just this juncture. For our purposes, I will not make either the optimistic or pessimistic conjecture. When something is so clearly an empirical matter, better to wait until the evidence is in!

Although the causal etiology of a particular belief remains mysterious, at least at this point, whether a belief is epistemically defensible does not seem mysterious at all. To be defensible, there must be better reasons for believing it than there are for denying it or withholding it. I take it that a comprehensively justified belief is one that the agent can rationally defend. If asked, the agent can give a good answer to this question: What entitles you to believe that x? If the agent has no good answer available, then there is a clear sense in which the agent does not have a comprehensively justified belief. A comprehensively justified belief, like earned income, is the result of our actions. Both require our labor. The belief might be properly caused, but if we have no reason for thinking that the belief is true, there is something important lacking. It's like having acquired an inheritance without any reason for thinking that we have acquired it. Of course it's a good thing to have acquired the inheritance, but from our point of view it is useless since we don't know we have the money in the bank.

There is one further comment about doxastic justification that needs to be made at this point. Consider two people who at some specified time have identical reasons for believing that Dunnit is the murderer. Both of them believe that Dunnit's fingerprints are on the gun, that she had a motive and the opportunity to kill Victim, etc. Both of them offer those reasons for their beliefs. But let us suppose further that one of them, Mr. Subjective, can only trace his reasons back to those propositions that confirm the belief that Dunnit did it. He can't provide reasons for those reasons. (Maybe he suffers amnesia, maybe he acquired them while under hypnosis, maybe he acquired them because he dislikes Dunnit and heard someone speculating about her involvement but doesn't realize that's how he acquired them, maybe he's just forgotten the reasons, etc.). Add to the case that Mr. Subjective has no idea that he couldn't trace his reasoning back any further. It never occurred to him to try. His belief is not comprehensively justified, but in spite of

For a full discussion of this issue see "Philosophy and the Scientific Image of Man" in Sellars, W., Science, Perception and Reality (New York: Humanities Press, 1963), 1-40.

that, there is a clear sense in which his belief that Dunnit did it is at least partially justified. After all, he has very good reasons for that belief. What else is he supposed to believe? And withholding wouldn't be correct since all of his reasons point towards Dunnit being the murderer.<sup>11</sup>

Compare Subjective's situation with that of Objective who acquired the beliefs in the good old fashion way – she earned them through careful investigation and analysis of the relevant data. She can give good reasons for believing Dunnit did it, and reasons for those reasons. I think we can say that both Subjective and Objective are *subjectively* justified – that is, given what they both have already done to justify their belief that Dunnit did it, there is a clear sense in which each is entitled to his/her belief that Dunnit did it. But Subjective's justification stops way too short. There is no way available for him to continue the process of justifying his beliefs. Only Objective has that possibility. I think we commonly refer to one belief as *subjectively* justified and the other as (at least possibly) *objectively* justified since only Objective's beliefs could fulfill what is required to be comprehensively justified.

Foundationalists, coherentists and infinitists will differ on what those requirements are. Foundationalists will require that our beliefs are anchored in foundational ones. That is, they will require that we be able to trace our reasons back to foundational reasons if our beliefs are to be comprehensively justified. Coherentists will require that a belief be a member of a set of coherent beliefs; and infinitists – well, let me put that off for the moment.

Certainty and Skepticism: Again there are some ambiguities that must be addressed. We can talk about a person being certain or a belief being certain or a proposition being certain. The former, psychological certainty, is not the target of this paper. Doxastic certainty and propositional certainty are the proper objects of my concern here and they are meant to be the highest degree of justification that can be obtained by a belief or a proposition. I will have more to say about them as the paper proceeds. Finally, a few comments about philosophical (as opposed to mundane) skepticism. Philosophical skepticism comes in two basic forms: Academic skepticism and Pyrrhonian skepticism. The former holds that we do not have knowledge in those areas commonly thought to be within our ken. It can be a restricted form of skepticism; for example, the claim could be that we do not know that there are other minds, or it can be a global form in which it is held that there is no knowledge of any proposition normally thought to be within our ken. There are arguments for such views, but I will not consider them here. I have done so in other places. The proposition is a proposition of the places.

See Klein, "Skepticism", Stanford Encyclopedia of Philosophy,

http://plato.stanford.edu/entries/skepticism/

For a more full discussion of this point see Richard Feldman, "Justification is Internal", Contemporary Debates in Epistemology, op. cit., p. 282.

See Certainty, op. cit.; "Skepticism and Closure: Why the Evil Genius Argument Fails", Philosophical Topics, 23.1, 1995, 213-236; "The Failures of Dogmatism and a New Pyrrhonism", Acta Analytica, 15.24, 2000, 7-24; "Skepticism", The Oxford Handbook of Epistemology, Paul Moser (ed.),

Here the issue will be whether infinitism leads to, or even provides any evidence for, such a view. It might appear to do just that because it might seem to be requiring that in order to have knowledge our beliefs must be objectively comprehensively justified and, in doing so, it might seem to be requiring that we must have produced an infinite number of reasons for our beliefs. But, so the objection continues, that is impossible for creatures like us, with minds that are finitely limited in many ways. I will show that this reasoning rests upon a misunderstanding of infinitism because infinitism does not require that we actually provide an infinite number of reasons for the target belief to be objectively comprehensively justified.

A related ground for rejecting infinitism is that some might hold that knowledge entails certainty and, since we can never complete the process of providing reasons, no belief can be doxastically certain. A primary task of this paper is to argue that such a view is mistaken. Infinitism can provide a good model of beliefs that rise to the level of certainty.

In short, my claim is that infinitism does not lead to Academic skepticism. But does it endorse Pyrrhonism? The answer is a bit more complicated. Pyrrhonism can be characterized in at least two ways. If it is characterized as a view that holds that it is reasonable to believe that no non-evident proposition (a proposition requiring a reason to be accepted) is ever epistemically more worthy than its contraries, then infinitism is not compatible with that form of Pyrrhonism since that form is inherently self-contradictory (and nothing can be consistent with a contradiction). But if Pyrrhonism is not taken to be a reflexively self-contradictory proposition about the power of reasoning but rather as a characterization of a way of life – a kind of life that takes non-evident propositions as never settled – then infinitism can be seen as a form of, or at least a close cousin of, Pyrrhonism.<sup>14</sup>

### 2 The Infinitist Solution to the Regress Problem

Here is the regress problem as presented in Sextus Empiricus's Outlines of Pyrrhonism:

The later Skeptics hand down Five Modes leading to suspension, namely these: the first based on discrepancy, the second on the regress *ad infinitum*, the third on relativity, the fourth on hypothesis, the fifth on circular reasoning. That based on discrepancy leads us to find that with regard to the object presented there has arisen both amongst ordinary people and amongst the philosophers an interminable conflict because of which we are unable either to choose a thing or reject it, and so fall back on suspension. The Mode based upon regress *ad infinitum* is that whereby we assert that the thing adduced as a

Oxford University Press, 2002, 336-361; "How a Pyrrhonian Skeptic Might Respond to Academic Skepticism" in *The Skeptics: Contemporary Essays*, Ashgate Press, ed. Steven Luper, 2003, 75-94; "There is No Good Reason to be an Academic Skeptic", *Essential Knowledge*, Longman Publishers, ed. Steven Luper, 2004, 299-309; "Closure Matters: Skepticism and Easy Knowledge", *Philosophical Issues*, 14, 2004, 165-184.

See "The Failures of Dogmatism and a New Form of Pyrrhonism", ibid.

proof of the matter proposed needs a further proof, and this again another, and so on *ad infinitum*, so that the consequence is suspension [of assent], as we possess no starting-point for our argument. The Mode based upon relativity [...] is that whereby the object has such or such an appearance in relation to the subject judging and to the concomitant percepts, but as to its real nature we suspend judgment. We have the Mode based upon hypothesis when the Dogmatists, being forced to recede *ad infinitum*, take as their starting-point something which they do not establish but claim to assume as granted simply and without demonstration. The Mode of circular reasoning is the form used when the proof itself which ought to establish the matter of inquiry requires confirmation derived from the matter; in this case, being unable to assume either in order to establish the other, we suspend judgement about both. <sup>15</sup>

The Regress Problem can be put as follows: Is there any account of justification with its attendant view about the required series of reasons that can provide a model for the conditions in which a belief is comprehensively justified? My claim here is that only infinitism can provide such a model.

Note that there are five modes. Three of them are ways of resolving the differences of opinion that do, or at least can, arise because of the relativity of perception and the credible discrepancies in our initial evaluations about the truth of a proposition. What is crucial for our purposes is that the modes of relativity and discrepancy are general recipes for cooking up ways to avoid dogmatism about any proposition about which presumptively credible differences of opinion can arise.

If we let  $b_1$  be any proposition about which there can be plausible differences of opinion, the regress can be seen as beginning this way:

I believe  $b_1$ , and my reason for  $b_1$  is  $b_2$ , and my reason for  $b_2$  is  $b_3$ , etc. Now, what, if anything, can legitimately end the regress?

There is one obvious way to legitimately end the regress. We can grow tired of producing reasons or we can have other pressing or not so pressing things to do. In the broad sense of "reason" mentioned above, those are legitimate reasons for ending the giving of reasons. But those are not good *epistemic* reasons. To do so requires some epistemic basis – there must be something about the justificatory status of the last offered reason that makes it proper to end the regress, if, indeed, there is any such proper ending point.

Foundationalism holds that there are such proper ending places. They typically will support their view in two ways.

 $\it First$ , they point to examples of regress-ending beliefs and claim that it is disingenuous to deny that there are foundational propositions. Here is what Aristotle says:

[There are some people who] [...] 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.<sup>16</sup>

Basic Works of Aristotle, Richard McKeon, ed., 1011a1-14.

Sextus Empiricus, Outlines of Pyrrhonism, I, 166-169.

Indeed, in Sextus's original formulation of the regress problem he *assumes* that, at least from the point of view of the dogmatist, all good reasoning must have a starting point. Recall that this is what he claims:

The Mode based upon 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 [of assent], as we possess no starting-point for our argument.

This is not an *argument* against infinitism. Of course, in any discussion of an issue we must begin somewhere. We must, as Plato said, act like a mathematician and postulate something from which other things will follow. Whether explicitly or implicitly we begin by stating something that we can agree on as a starting point – otherwise we would be talking past each other. But the issue here is whether every actual starting point (or ending point if one is thinking about how the regress progresses) can legitimately be questioned. If we *assume* that there must be a starting point for which no further reason can be given, then we have already eliminated infinitism as a plausible account. For infinitism is just the view that 1) there is no unchallengeable starting point that, once properly challenged, does not require a reason and 2) reasons cannot be repeated. It is not an *objection* to infinitism to point out that it does not include a provision for such a starting point.

Second, foundationalists will at least appear to argue (as opposed to presupposing) that there must be a proper starting point if we are to have knowledge because otherwise the regress will go on indefinitely or circle back on itself. Circling back is not a viable option because doing so will beg the question, and if the regress continues indefinitely, we could not know anything because "one cannot traverse an infinite series." (Post. An. 72b10)

I have examined this "argument" for foundationalism in detail elsewhere. Here I merely wish to underscore the point that it, too, *presupposes* a foundationalist picture of justification. Aristotle says, "the same things cannot be simultaneously both prior and posterior to one another, so circular demonstration is not possible" (72b25-28). He is imagining a situation in which the posterior belief must derive its justification from the prior belief. Champions of circular reasoning – at least in some forms – would not accept that assumption. Rather they would, or at least could, claim that justification is essentially a property of the set of coherent beliefs rather than a property of one belief that is transferred to another. When a particular belief is justified, they would continue, it is so only because it is a member of a set of beliefs that are coherent. That is, beliefs are justified in virtue

See the papers mentioned in note 1.

<sup>&</sup>lt;sup>17</sup> Meno, 86e-87b.

Aristotle does say that there is a "qualified sense" in which a proposition might be both prior and posterior to itself. A proposition would be "prior for us" if we learn it first, but it would not be "prior in an unqualified sense" – the sense in which a proposition is prior in the order of demonstrations based upon first principles or what he calls "immediate premisses" (72b18). So this qualified sense in which a proposition might be both prior and posterior to itself is not relevant. We are concerned only with what Aristotle calls "prior in an unqualified sense."

of being a member of a set of beliefs that has the requisite inferential structure. Justification supervenes on the set of beliefs and their internal relations, not on the conditions that give rise to a particular belief.<sup>20</sup> So, Aristotle's objection fails to recognize that coherentists do not share the foundationalists' conception of justification in which justification is a property that can be transferred from one belief to another.

Nevertheless, as I and others have argued, this form of coherentism is a one-step form of foundationalism. <sup>21</sup> The property in virtue of which all beliefs in a set of beliefs are justified is coherence, in whatever way coherence is characterized. A belief in such a set is not justified because it inherits its justification from other beliefs. All beliefs are foundational because they are justified but not because they derive their justification from other beliefs. It's like being a sibling. A person does not acquire the property of being a sibling from a sibling. Both siblings are a sibling because of their relationships.

So, if there is a general problem with the foundationalist answer to the regress because it employs basic propositions in that answer, that problem will apply to this form of coherentism as well because all propositions are basic, or at least relatively basic. They are more basic if they enjoy the status of being more inferentially connected to other beliefs. I will mention that general problem with foundationalism in a moment.

The infinitist's view of justification does not employ any notion of basic beliefs, except a notion of contextual basicality to be discussed shortly. In addition, infinitism does not think of comprehensive justification as a property that is transferred to an as yet non-comprehensively justified belief. A belief becomes comprehensively justified only after we *have* justified it. As we produce more and more reasons for it, the belief becomes more and more justified. A reason, though not itself yet comprehensively justified – because we haven't done anything to justify it – can be employed to comprehensively justify that for which it is a reason. Justifying a belief is an activity. It is something like gaining a good reputation. We may begin with no reputation whatsoever but through our efforts (and some good luck) we gain the reputation, say, of being honest.<sup>22</sup> Analogously, it is through the process of producing reasons that we contribute to *making* a belief (not a proposition) justified.

Laurence BonJour, The Structure of Empirical Knowledge (Cambridge: Harvard University Press, 1985).

See Ernest Sosa, "The Raft and the Pyramid", *Midwest Studies in Philosophy*, 5, 1980, 3-25 and my "Human Knowledge and the Infinite Regress of Reasons" and "Human Knowledge and the Infinite Progress of Reasoning", *op. cit.* 

There is an analogous sense in which we are lucky if we have a belief available to assist us in making a belief comprehensively justified. We might not have had such a belief. I take it that this kind of "epistemic luck" is not the kind that precludes knowledge. The impermissible kind of luck has to do with the accidental connection between the belief and the truth condition (if you're a reliabilist) and/or the justification and the truth condition (if you're a defeasibility theorist).

Now, of course, the reason must be available to us. That is, there must be a set of propositions of the right sort that we can call upon to justify a belief, and the infinitist holds that the set had better be endless and non-repeating. But it is absolutely crucial to note that we needn't "traverse" the infinite set in order for a belief to be comprehensively justified. That would be required only if comprehensive justification were an all or nothing thing. If we had to complete the process of providing reasons in order for a belief to be somewhat comprehensively justified, then no belief could ever be so justified. But just as gaining the reputation for being honest is acquired step by step, the justification of a belief is increased as we provide more and more reasons. We have never completely justified it in the sense that further justification is not possible. But we have justified it to some extent, and in some cases, perhaps enough to rise to the level of knowledge. The reason for the qualification, "perhaps", is that knowledge requires more than adequately justified belief. The justification must also be non-defeated.

Aristotle's solution to the epistemic regress problem is foundationalism. He says that his "own doctrine is that not all knowledge is demonstrative; on the contrary, knowledge of the immediate premisses is independent of demonstration". (72b18) Foundationalists hold that some beliefs have some degree of autonomous justification - a type of justification that is not gained by transfer from other beliefs. They will argue that doxastic justification comes in two forms. Some beliefs are justified because they are based (properly inferred from) other beliefs. To use a familiar Aristotelian analogy, something that is not moving by nature acquires motion from something already moving. Just as some moving objects acquire their motion from objects already possessing motion, some justified beliefs acquire their justification from beliefs already justified. But, he would continue, this can't go on indefinitely - the motion and the justification have to originate in some first mover or first principle which does not require another mover or another belief in order to move or be justified. In other words, there must be some beliefs that are not justified by other beliefs but rather are self-justified, in the sense that they are justified but do not inherit their justification - or at least some of their justification – from another belief.

One might have hoped that when the Aristotelian model of motion was discarded, the foundationalist model of justification would also have (at least) been questioned. But the foundationalist picture (including coherentism understood as one-step foundationalism) has remained the dominant, if not exclusive, account of justification.

The qualification "of the right sort" is crucial if we are to avoid a problem proposed by I. T. Oakley in "An Argument for Skepticism Concerning Justified Beliefs", *American Philosophical Quarterly*, XIII, no. 3, (1976), 221-228, especially pp. 226-227 and by John Post, "Infinite Regress of Justification and of Explanation", *Philosophical Studies*, XXXVIII, (1980), 32-37, especially pp. 34-35. Post's argument, in a slightly revised form appears in Post's book, *The Faces of Existence*, (Ithaca: Cornell University Press, 1987), pp. 84-92. I reply to those arguments in "Human Knowledge and the Infinite Regress of Reasons", *op. cit.*, especially 311-312.

I have argued elsewhere that foundationalism cannot solve the regress because, as the Pyrrhonians correctly saw, there is an important sense in which the "basic" proposition is arbitrary. This is not the place to rehearse that argument in any detail, but it depends upon the claim that comprehensively justified beliefs, i.e., beliefs satisfying all of the vast array of good-making epistemic features, have been justified, at least in part, by giving reasons. If no reason for a belief has been provided, then there is a clear sense in which it remains arbitrary. It might have a property, P, such that any belief with P is basic, but two questions can (and sometimes do) arise as to whether 1) we can determine whether that belief has P and 2) whether beliefs with P are, thereby, likely to be true.

Consider one example: Suppose it is claimed that the "basic" belief is one about a first-person psychological state to which we have "privileged access." The question can be asked: Are those psychological states (as opposed to other types of states) such that we are likely to be correct when we claim that we are in them? The foundationalist has only three possible answers: "Yes," "No," "I withhold." The "yes" answer, once amplified, provides a reason for thinking the belief is correct, and, the regress has continued. Once the question has been raised and understood, both the "no" and the "withhold" responses would expose the arbitrariness of accepting the socalled privileged access proposition and of basing all of one's other beliefs on such a basis.

For that very reason, no foundationalist will give those answers. They will seek to explain why we are at least very likely to correctly detect the psychological states to which we are "privileged." Thus, they are implicitly recognizing the need for continuing to provide reasons for our beliefs beyond the so-called "foundational" reason. If we can legitimately ask what reason we have for thinking that we can correctly detect facts other than mental facts (i.e., facts in the "external world"), then it seems to me that we can equally well ask what reason we have for thinking that we can correctly detect facts about our mental states. What is it about them that makes them transparent? My claim here is not that there are no good answers to that question; rather, my claim is that the question is a legitimate one and answering it continues the regress of justifying our beliefs.

To say much more here about the way in which the "mode of hypothesis" leads to the mode *ad infinitum* would distract us from my central tasks, namely showing how infinitism can provide for a robust sense in which a belief *can* be certain and that it remains neutral about skepticism. It is to those central tasks that I now turn. With the background sketch of infinitism given above, I think it is relatively easy to accomplish those two, related tasks.

See the papers in note 1.

#### 3 Skepticism and Certainty

As discussed above, there are two basic types of certainty that form our explanandum: doxastic certainty and propositional certainty. Within the infinitist conception of justification, we can define the latter as follows:

A proposition, p, is certain iff:

- 1. there is an infinite, non-repeating set of propositions beginning with p each member of which is such that if it is the  $n_{th}$  member in the series, there is an  $(n+1)_{th}$  member that is a good reason for it;  $^{25}$  and
- 2. there is no true proposition, d, which is such that the conjunction,  $[d \& the (n +1)_{th} proposition]$  fails to provide a good reason for  $n_{th}$  proposition. <sup>26</sup> (Call 'd' a defeater.)

This is not the place to give a full defense of this characterization of propositional certainty because my main point is that there is an available infinitist characterization of certainty that is robust and both the skeptic and epistemist can accept it. But a couple of comments are in order. The first clause simply spells out the infinitist's requirement for a proposition to be comprehensively justified. Hence, if a proposition is certain, it is justified. The second clause indicates what has to be added to justification to raise it to the highest level of epistemic merit. It is needed because most reasons are defeasible and if a proposition is certain it must not be subject to defeat by the truth. But the second clause also guarantees that p and every other proposition in the set is true, for if there is a false proposition, say f, at the n<sub>th</sub> member then there is a true proposition,  $\tilde{f}$ , which conjoined with the (n +1)th member fails to provide a good reason for the nth member. Thus, if a proposition is certain it is true. That seems completely appropriate since we want justification to be truth conducive and the highest degree of justification should provide the tightest connection to truth - and a guarantee of truth would seem to be the tightest connection. Thus, if a proposition is certain, it is fully grounded in the truth.<sup>27</sup>

This is what one might call a person-neutral definition. A proposition is certain regardless of whether anyone ever thinks of it – or for that matter, whether there are any persons.

For the purposes of this paper, we can take the notion of "being a good reason" as a primitive not needing further explication. My favorite account of it is that x is a good reason for y **iff** if x is true, then it is likely that y is true. The likelihood I have in mind is objective likelihood. But other notions of 'being a good reason' could also be employed. Foundationalism, coherentism and infinitism will all have to appeal to some notion of x's being a good reason for y, and I am prepared to accept whatever account turns out to be the best one.

I am here ignoring the complication of so-called misleading defeaters. That is a difficult issue and I have discussed it elsewhere (see the papers mentioned in note 6), but I don't think it bears directly on the issue at hand. Since the certain proposition, by definition, must be true (since it is a member of the series and all members are true) there will always be a way to construct the series so that it is not subject to defeat from the misleading defeater by adding what I've called a 'restoring proposition' to the series.

I am using "fully grounded" as did Michael Clark in "Knowledge and Grounds: A Comment on Mr. Gettier's Paper 'Is Justified True Belief Knowledge?'" Analysis, 24, 1963, 46-48.

Now, are any propositions certain for us? I do not know. Some evidence that there are comes from the progress in science. It does seem that we get better and better able to answer skeptical challenges by appealing to hitherto unconsidered propositions. Of course, there are moments in our acquisition of knowledge when we are stymied and no further proposition is readily available to us. As the Pyrrhonians noted, that should help us avoid dogmatism and cause us to continue our inquiry, perhaps at a later time. It would not show, however, that the *proposition* is not certain – especially if we have often found further reasons for our beliefs upon additional reflection and new experience.

I would like to consider one possible objection because doing so will help to clarify the infinitist account of propositional certainty. The primary worry being considered in this paper is whether, given infinitism, any propositions are certain. But now I would like to consider the objection that, given infinitism, there are too many propositions that are certain. There are many ways to put this objection and I have considered some in other places.<sup>28</sup> Here is a way I have not discussed before.

I just showed that on this account if a proposition is certain it is true, but it might also be thought that on this account if a proposition is true it is certain. For suppose someone were to say that for every true proposition, there is, automatically, a series of propositions that satisfies the two conditions for propositional certainty displayed above. Let the  $n_{th}$  proposition, p, be true. Now, it can be shown that simply because p is true, there is another proposition,  $p^*$ , namely "p" is true, that is a good reason for p; and there is another proposition,  $p^{**}$ , which is a good reason for  $p^*$ , namely " $p^*$ " is true, etc.

As stated, this objection overlooks the second requirement of propositional justification, namely, that the path of reasons must be non-question begging. However, I grant that in some cases, "p" is true can provide a non-question begging reason for p. For example, consider this path of reasons (n + 2, n + 1, n) where the following propositions are instantiated:

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n + 2: Sally endorses p and whatever Sally endorses is true; n + 1: "p" is true; n: p.
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But the path is question begging, where the following propositions are instantiated:

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n + 2: p;
n +1: "p" is true;
n: p.
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In other words, whether the step between (n + 1) and n is question begging will depend upon what precedes (n + 1).

See note 23.

So, is the proposed path envisioned in the objection one that begs the question or not? Is there an implicit appeal to a lower numbered proposition in a higher numbered one? I think the answer is that it is not entirely clear. To see that, suppose someone held a theory of truth like this:

T: "p" is true =df ("p" means p) & p.

One might have to chisholm that a bit, but I'm one who thinks that T is roughly correct. If so, then the path would automatically repeat the proposition, p, at every stage of the regress and the path of reasons would beg the question.

What makes the answer to the question above somewhat unclear is this: It seems dialectically unfair to saddle the objector with my definition of truth. So, let us suppose that there is some true proposition of the form "x" is true which is not strictly equivalent to a conjunction, one conjunct of which is x. If that account of truth were correct, then I think it must be conceded that there *could* be a non-question begging path that satisfies condition 1.

But is condition 2 in the definition of propositional certainty satisfied? Can we be sure that there is no defeater of some step in the envisioned path? Just as the step from "Sally endorses p and whatever Sally endorses is true" to "'p' is true" could be defeated, perhaps some steps in the path generated by the truth theory could be defeated.

The answer is that we have no way of telling whether the path could be defeated until we see the fully developed theory of truth because if a proposition of the form "x" is true is not strictly equivalent to a conjunction one conjunct of which is x, then it is not clear that there won't be a defeater of the inference from "x" is true to x.

Perhaps there is some imaginative way around my reply to the objection by developing a theory of truth that guarantees the inference is not defeated without question begging. So, for the sake of the argument, I am willing to grant that such a theory is possible. And in so doing, I will also be granting that it is possible that every true *proposition* is certain. Now, the question becomes: Is that a bullet or a piece of cake? I think it is clearly not a bullet and that it might very well be a piece of cake.

It surely would be a bullet if infinitism resulted in all true *beliefs* being doxastically certain. Hunches that happened to be correct would be doxastically certain. True beliefs based upon false testimony would be doxastically certain. Beliefs based upon what politicians say that just happen to be true would be certain. And surely that last one is going too far! The reason for dwelling on this objection is to underscore the difference between propositional and doxastic certainty. So far we have been concerned with mere propositional certainty. Is there anything wrong with it being the case that every true *proposition* has a non-question begging and undefeated path of supporting reasons. Indeed, isn't it somewhat re-assuring that there is such a path? All we have to do is to discover it. Nevertheless, it is crucial to note that the path just considered – containing increasingly complex propositions, p,  $p^*$ ,  $p^{**}$ , etc – would not be helpful in making a *belief* justified, much less

certain, because we would rather quickly arrive at a proposition that, because of its complexity, would be beyond our ability to grasp; and what is beyond our grasp could not be employed to justify a belief.

Nevertheless, suppose that there were at least one path of suitable reasons such that each step was within our ability to grasp. Wouldn't that be a piece of cake because it makes it *possible* that some of the propositions that we believe to be true are certain – and absolutely so? And, hence, if someone (perhaps a skeptic like Peter Unger in *Ignorance*<sup>29</sup> or a non-skeptic like G. E. Moore) were to require that at least some forms of knowledge required a form of certainty, infinitism seems (at least so far) able to provide a model in which their views could be developed. Whether there really are such paths is a question beyond infinitism that, at least so far, appears uncommitted to an answer one way or the other.

Now let's turn to doxastic certainty. Under what conditions would one of S's beliefs be objectively certain? To begin to answer that question note a parallel with objective doxastic justification. We said earlier that objective doxastic justification of the belief that p requires propositional justification of p, and by extension, objective doxastic certainty would require propositional certainty. In other words, if the belief that p is certain, then the proposition, p, is certain. That is, there is a non-defeated path of suitable reasons for p. So far, infinitism is compatible with a belief being certain. Further, if the belief that p is comprehensively certain for S, S must do some justifying of the belief. Indeed, S must do "enough" justifying to make the belief certain.

I suggest that we take it that a belief that p is objectively certain (for S) iff:

- 1. The proposition, p, is certain; and
- 2. S has justified the belief sufficiently (i.e., S has provided enough reasons along the non-defeated path of propositions that makes p certain).

I think it will become clear in a moment what I mean by a belief being "sufficiently" justified or the provision of "enough" reasons. But first, recall that my central claim is that the infinitist characterization of certainty provides a robust account of certainty that is acceptable to skeptics and epistemists. To that end it will be useful to make a few general comments about certainty.

Peter Unger pointed out that there is a clear sense in which "certain" is an absolute term. 31 If something is certain then nothing can be more certain than it.

Unger, Ignorance, op. cit., especially p. 60 ff

Peter Unger, Ignorance: A Case For Scepticism, (Oxford University Press, 1975).

There is one qualification here that would be necessary if this were to be a full account of certainty. I have argued elsewhere that knowledge can be based upon false beliefs in an essential way – that is, that some false beliefs can play an essential role in the justificatory reasons. See my "Useful Falsehoods", *Epistemology: New Essays*, Quentin Smith, ed., Oxford University Press, forthcoming, 2006.) But that is such a highly controversial matter, it seemed best in this paper not to be detoured in our main tasks by discussing useful falsehoods. The paper mentioned above does explain what modifications to the defeasibility theory are required in order to accommodate useful falsehoods and those modifications could be readily transferred to the account of doxastic justification, propositional justification, doxastic certainty and prepositional certainty developed here.

But, as he also recognized, "certainty" is a relative term or gradable adjective because we commonly do say that some things are more certain than other things.<sup>32</sup> That seemingly set of incompatible claims requires some explanation. Unger suggested that, at base, certainty is an absolute term and offered a way of paraphrasing the relative expressions employing only the absolute notion, namely, x is more certain than y iff x is more nearly certain than y. The same paraphrasing would apply to terms like "clear" and "empty" and "full." Other explanations have been proposed. For example, it has been suggested that when we say something is certain, full, empty or clear, we are leaving out a parameter that is contextually supplied.<sup>33</sup> For example, the proposition is certain (for our purposes) even though for other purposes it is not certain, the refrigerator is full (of food) even though there is some empty space in it, or the glass is empty (of water) even though there is air in it. Still others might suggest that when we say that something is certain, full, etc., we are speaking loosely. Strictly speaking the glass is not empty. When we say it is empty, what we mean, and what is fully understood by our hearers, is that for all relevant intents and purposes (e.g., drinking some water) the glass is empty.3

I do not want to engage in a debate about which, if any, of those proposals is correct because there is an alternative plausible explanation of the relative and absolute sense of 'certainty' that employs the already useful distinction between propositional and doxastic justification. Just as in 'x is justified' the 'x' can range over propositions or beliefs, I think it is clear that when we say 'x is certain,' the 'x' can range over either the propositional contents of belief states or over belief states themselves. Given that, it is natural to suggest that it is propositions that are absolutely certain (or not at all certain), and that is it beliefs that are relatively certain depending upon the contextually determined level of justification necessary. One belief, B, is more certain than another belief, b, because the contextually determined threshold applied to B's being certain is higher than the contextually determined threshold applied to b's being certain, and both beliefs have reached their respective thresholds. Beliefs can never rise to the level of absolute certainty since the contextually determined threshold can be raised as high as we please even if we are content to stop it at some point.

An infinitist would hold that, although the *propositional content* of a belief can be absolutely certain for S (if there is an infinite, non-repeating, non-defeated chain of reasons for it available to S), the *belief* can never be absolutely certain for S because the contextually determined bedrock propositions can, themselves, be challenged. Once we have provided the contextually determined basic reason (in the narrow sense) thus making the belief relatively objectively certain (if the

Jason Stanley mentioned this possibility to me in conversations.

For a philosopher who has emphasized the relative use of "certainty", see Harry Frankfurt, "Philosophical Certainty", Philosophical Review. 62; 1971, 303-327.

Earl Conee develops this line in "Contextualism Contested", Contemporary Debates in Epistemology, op. cit., p. 47-55 and "Contextualism Contested Some More, idem., 62-66.

proposition is certain for S), the bar can always be raised by asking whether 1) we have a good reason for thinking that we are reliable foundational proposition detectors and 2) whether the property in virtue of which a proposition is basic is truth conducive. Or if the contextually determined foundation is not a proposition, but rather a reason in the broad sense, we can ask 1) what reason we have for thinking that, in general, we are reliable foundational state detectors or 2) what reason we have for thinking that on this particular occasion we have correctly detected the foundational state. In either case, if we reply that we have no reasons (in either sense) for answering those questions affirmatively, we should become epistemically queasy because we would not be able to distinguish, at least for the time being, our situation from ones in which a context sanctions the use of the magic eight ball or consulting a holy text for answers concerning empirical matters. The Pyrrhonian modes remain powerful tools that save us from falling into dogmatism!

Consider the belief that there is an oak tree in the yard. Typically, that belief is at least subjectively doxastically certain (enough) once i) we have formed beliefs about its leaf, bark, limb and root structures, and offered those contextually determined basic beliefs for believing that it is an oak tree, and ii) we are aware of no defeaters of that reasoning. It would not be objectively doxastically certain were the proposition not certain; however, nothing in the theory precludes the possibility that propositions are certain. In other words, such a belief can be more or less objectively certain depending upon how high the reached threshold is. But, of course, we can raise the bar and ask whether we are good detectors of leaf patterns, bark patterns, etc.

Note that this account of doxastic certainty and the defeasibility account of knowledge are closely related. The defeasibility theory holds that if a proposition is known, then it is objectively doxastically justified and there are no genuine defeaters. Given the proposed account of propositional and doxastic certainty, if knowledge entails certainty, then the required level of objective doxastic justification is certainty. I have argued that infinitism can provide a model of certainty which is such that if knowledge requires certainty, infinitism can supply a good model of objective doxastic certainty and that it remains an open question as to whether the necessary conditions of propositional and objective doxastic certainty are satisfied. Are there propositions which are certain? Perhaps. Are there beliefs which are relatively objectively certain? Perhaps. Put succinctly, objective doxastic certainty is neither precluded nor necessitated by the robust account of certainty that infinitism can provide.

What is not possible, given infinitism, is absolute doxastic certainty because we have "finite minds" and, hence, we can not perform an infinite number of discrete reason givings. That is the lesson to be learned from the Pyrrhonian discussion of the mode *ad infinitum*. Dogmatism results if reasoning is taken to have settled matters once and for all.

However, it is crucial to note that absolute doxastic certainty is also not available to the typical foundationalist with regard to non-foundational beliefs if at least some of the inferences from the foundational beliefs to the non-foundational beliefs are not completely truth-preserving. (I say "typical" because these comments will apply only to non-coherentist forms of foundationalism.) If foundationalism's account of doxastic certainty is acceptable even though the non-basic beliefs are not absolutely certain, why would infinitism's account of doxastic certainty not be acceptable if none of the beliefs are absolutely certain? Indeed, the infinitist's account of relative doxastic certainty contains a more robust notion of certainty than that incorporated in the typical foundationalist's account. For the foundationalist picture of warrant transfer from foundational propositions to non-foundational ones has the associated worry that the more inference steps taken from the foundational proposition to the non-foundational ones, the less justified the non-foundational proposition becomes because the inferences are not completely truth-preserving. There is the distinct possibility that the more reasons one has for a belief, the less justified it becomes, unless one throws in some deductive reasoning and/or grants coherence the ability to raise the warrant of beliefs! On the other hand, the infinitist's account of reasongiving is such that the more reasons one has for a belief, the greater the degree of doxastic justification.

What about coherentism? Even though coherentism is a one-step form of foundationalism because it takes all beliefs to be justified in virtue of the inferential relationships among their propositional contents, and, hence, it takes all beliefs in the coherent set of beliefs to be prima facie justified, it is that very fact that prevents the comments about typical foundationalism from applying here. In coherentism, justification is not a property that arises in one belief and then is transferred to another by inference. Hence it does not incur the liability that doxastic certainty diminishes with the number of inferences. In fact, coherentism shares with infinitism the possibility that doxastic justification can always be increased by adding new beliefs whose contents cohere with the already coherent sets of believed propositions. But that similarity also reveals that coherentism does not endorse absolute doxastic certainty anymore than does infinitism because it is always possible to add new beliefs that increase the degree of coherence, thus augmenting the degree of doxastic justification of all of the beliefs in the new set. So, coherentism has to eschew absolute doxastic certainty as well, at least for beings like us, whose belief sets are constantly being updated as we gain new experiences.

#### 4 Conclusion

Infinitism's solution to the regress problem employs a concept of comprehensive justification that incorporates a robust account of both propositional and doxastic certainty. That beliefs ever do rise to the required level of objective doxastic certainty is neither required nor precluded by infinitism. That is a welcome consequence since it makes the debate between the skeptics and epistemists possible. Finally, the discussion here has suggested that infinitism captures the intuitive plausibility of the Pyrrhonian take on the power and limits of reasoning.