

Can Foundationalism Solve the Regress Problem?

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1. Introduction

Foundationalism is a thesis about the structure of *epistemic justification* – that is, the distinctive kind of justification that we have for our beliefs. To a first approximation, foundationalism is the thesis that some of our beliefs are foundationally justified, while all other justified beliefs are justified in a derivative way by their relations to foundationally justified beliefs. In metaphorical terms, our belief system has the structure of a building in which the whole edifice is supported by its foundations.

To make the thesis more precise, we can draw a distinction between inferentially and non-inferentially justified beliefs.¹ A belief is *inferentially* justified if and only if it is justified in a way that depends upon the justification of other beliefs, whereas a belief is *non-inferentially* justified if and only if it is justified in a way that does not depend upon the justification of any other beliefs. Foundationalism can now be defined more precisely as the thesis that some beliefs are non-inferentially justified, while all other justified beliefs are inferentially justified in a way that depends on their relations to non-inferentially justified beliefs.²

Foundationalism can be understood as a thesis about the structure of justified belief in either *propositional* or *doxastic* senses of the term. A belief is

justified in the propositional sense if and only if the believer has justification to hold the belief, whereas a belief is justified in the doxastic sense if and only if the believer holds the belief in a way that is justified. These senses come apart for a believer who has justification to hold a belief but does not hold it in a way that is justified or, indeed, does not hold it at all. This distinction will play an important role in the discussion to follow.

A few additional clarifications are in order. First, foundationalism is an *epistemological* thesis about justification, rather than a *psychological* thesis about belief, so it is neutral with respect to the debate between holism and atomism about whether all beliefs require psychological abilities needed for holding other beliefs. Beliefs that are justified non-inferentially may depend psychologically, if not epistemically, upon other beliefs. Second, foundationalism is a thesis about the *source* of non-inferential justification, rather than its *strength*, so there is no commitment without further argument to the traditional foundationalist thesis that non-inferentially justification is infallible, indefeasible, or indubitable. Third, foundationalism is a *negative* thesis about the source of non-inferential justification – namely, it does not have its source in the justification for any other belief. As such, foundationalism is not committed to any specific positive thesis about the source of non-inferential justification and so proponents of foundationalism can disagree about which beliefs are non-inferentially justified and why.

One traditional argument for foundationalism is that it solves the *regress problem* for justified belief. The regress problem begins from the assumption that all justification is inferential justification and hence that all justified beliefs are

inferentially justified by their relations to other justified beliefs. If so, then there is either an infinite regress of justified beliefs or a closed circle of inferentially justified beliefs or there are no justified beliefs at all. According to the traditional argument, however, there cannot be an infinite regress or a closed circle of inferentially justified beliefs and so foundationalism presents the only viable alternative to the skeptical conclusion that we cannot have any justified beliefs at all.

Foundationalism solves the regress problem by rejecting the starting assumption that all justification is inferential justification. According to foundationalism, some beliefs are non-inferentially justified and all inferentially justified beliefs are justified by their relations to non-inferentially justified beliefs. Indeed, the traditional argument for foundationalism is that it is the *only* viable solution to the regress problem. In response, opponents of foundationalism have argued not only that foundationalism fails to solve the regress problem, but also that the regress problem can be solved in other ways – for instance, by appealing to *coherentism* or *infitism* as an alternative to foundationalism.³

Coherentism and infitism agree on the starting assumption that all justification is inferential justification and so reject the foundationalist thesis that some beliefs are non-inferentially justified. Moreover, they tend to agree that the key to solving the regress problem is rejecting a *linear* conception of inferential justification as a property that is transferred from one belief to another in favour of a *holistic* conception of inferential justification as a property that a belief has by virtue of its membership in a system of beliefs with the right kind of structure. However, coherentism and infitism disagree about the kind of structure that a

system of beliefs must have in order to be inferentially justified. Coherentism says that a belief is inferentially justified if and only if it is a member of a *coherent system* of the right kind, whereas infinitism says that a belief is inferentially justified if and only if it is a member of an *infinite series* of the right kind.⁴

My main goal in this chapter is to motivate and defend the foundationalist solution to the regress problem. However, I will not adopt the ambitious strategy of arguing that foundationalism is the *only* viable solution to the regress problem, since this would require eliminating all the alternatives, including coherentism and infinitism, which is beyond the scope of this chapter. Instead, I will opt for the more modest strategy of arguing that foundationalism is a *better* solution to the regress problem than the alternatives, since it provides a more plausible account of the epistemic role of experience. Having motivated foundationalism in this way, I will proceed to defend it against arguments that, despite its initial plausibility, foundationalism cannot succeed in solving the regress problem. I conclude that foundationalism, while perhaps not the only viable solution, is nevertheless the most plausible solution to the regress problem.

2. Motivating Foundationalism

Why should we endorse the foundationalist solution to the regress problem? My general strategy is to argue for foundationalism by appealing to the following thesis about the epistemic role of experience:

The Experience Thesis: some beliefs are non-inferentially justified in a way that depends solely upon their relations to experience.

The experience thesis does not *entail* foundationalism, since foundationalism claims not only that some beliefs are non-inferentially justified, but also that all other justified beliefs are inferentially justified by their relations to non-inferentially justified beliefs. Nevertheless, the experience thesis motivates foundationalism by providing the materials for a simple and economical solution to the regress problem. In principle, someone might argue for a *hybrid solution* on which the regress of justification sometimes comes to an end in non-inferentially justified beliefs, but sometimes takes the form of an infinite regress or a closed circle of inferentially justified beliefs. On grounds of parsimony, however, I will assume that the regress problem has a uniform solution – that is, if the regress of justification *sometimes* comes to an end in non-inferentially justified beliefs, then it *always* does.⁵

My argument for the experience thesis has three parts. I begin by posing a dilemma for opponents of the experience thesis: the resulting theory is either subject to counterexamples or it is unmotivated. I go on to give two arguments for the experience thesis: one intuitive and one theoretical. The intuitive argument is that the experience thesis is supported by compelling examples of non-inferentially justified belief. The theoretical argument is that the experience thesis is a consequence of the independently motivated thesis of access internalism. These arguments complement one another to provide a cumulative case for the experience thesis that is both plausible and principled at the same time.

2.1. The Epistemic Role of Experience

I want to begin by posing a challenge for opponents of foundationalism who reject the experience thesis. As we have seen, many opponents of foundationalism – including proponents of coherentism and infinitism – claim that all justification is inferential justification and hence that no beliefs are non-inferentially justified by their relations to experience. This prompts the following question. Does experience play any role at all in the justification of belief?

Opponents of foundationalism can be divided into two categories depending on how they answer this question. On the one hand, *pure* anti-foundationalism says no: all beliefs are justified solely by their relations to other justified beliefs. On the other hand, *impure* anti-foundationalism says yes: some beliefs are justified in part by their relations to experience, although beliefs are never justified solely by their relations to experience in a way that is independent of all other justified beliefs.⁶ Either way, justification is always inferential in the sense defined above.

Pure anti-foundationalism seems vulnerable to counterexamples of the following kind. Take a subject for whom certain beliefs are justified and vary the subject's experiences while holding fixed the facts that make those beliefs justified. Intuitively, this can make the subject's beliefs unjustified, but according to pure anti-foundationalism, it cannot make any difference. The following example from Sosa illustrates the point quite vividly:

Suppose the victim has much sensory experience, but that all of this experience is wildly at odds with his beliefs. Thus he believes he has a splitting headache, but he has no headache at all; he believes he has a cubical piece of coal before him, while his visual experience is as if he had a white and round snowball before him. And so on. (1991: 136)

Intuitively, the subject's experience makes his beliefs unjustified, but pure forms of anti-foundationalism cannot explain this, since the subject's experience is irrelevant to whether his beliefs are members of a coherent set or an infinite series of the right kind. Examples like these demonstrate the implausibility of the anti-foundationalist claim that experience plays no epistemic role at all in the justification of belief.

One might object that Sosa's example is conceptually impossible on the grounds that one's beliefs cannot be wildly at odds with one's sensory experience. However, this objection backfires, since the epistemic role of experience explains *why* this is conceptually impossible. There are limits on the degree to which one's experience can be at odds with one's beliefs because experience imposes constraints on the rationality of belief and too much irrationality puts in question one's competence with the relevant concepts. In any case, we do not need examples as extreme as Sosa's in order to make the point: local as well as global variations in one's experience can make an impact on which of one's beliefs are justified.

According to impure anti-foundationalism, experience plays an epistemic role in justifying beliefs, but it cannot play this role except in combination with other justified beliefs. The challenge for impure anti-foundationalism is to provide a stable

motivation for this view. If experience is sufficient to play an epistemic role in the justification of belief, then why suppose it is insufficient to play this epistemic role except in combination with other justified beliefs? Davidson (1986: 310) claimed that “nothing can count as a reason for holding a belief except another belief”. But Davidson’s thesis is highly questionable and in any case it is inconsistent with impure foundationalism, since it rules out any epistemic role for experience.⁷ The challenge is to motivate opposition to foundationalism without thereby motivating a pure version of anti-foundationalism. I have no general argument that this challenge cannot be met, but in section three below, I will consider and reject one of the most promising and influential attempts to meet this challenge.

In summary, there is a dilemma for opponents of foundationalism who deny the experience thesis. On the one hand, it is implausible to deny that experience plays any epistemic role at all in the justification of belief. On the other hand, it is difficult to motivate the claim that experience plays an epistemic role, but only in combination with justified background beliefs. I do not take this dilemma to be conclusive, but merely to pose an outstanding challenge for opponents of foundationalism who deny the experience thesis. In what follows, I will attempt to motivate the experience thesis more directly.

2.2. Perception and Introspection

The intuitive argument for the experience thesis appeals to plausible examples of beliefs that are non-inferentially justified by experience. However, proponents of foundationalism disagree about *which* beliefs are non-inferentially justified by

experience. In particular, there is a debate between *classical* and *moderate* forms of foundationalism about whether experience provides a source of non-inferential justification for perceptual beliefs about the external world or only for introspective beliefs about one's own experience. Without attempting to resolve this debate in any definitive way, I will suggest that the case for non-inferential justification is much more compelling in the case of introspective beliefs about experience than it is for perceptual beliefs about the external world.

How does experience justify beliefs about the external world, such as my belief that I have hands? We can contrast two different answers to this question: *inferentialism* and *non-inferentialism*.⁸ According to inferentialism, my belief that I have hands is inferentially justified in a way that depends on my justification for believing the premises of an argument for the conclusion that I have hands, such as the following:

(1) I seem to see that I have hands.

(2) My experience is generally reliable, so if I seem to see that I have hands, then I have hands.

(3) Therefore, I have hands.

According to non-inferentialism, by contrast, my belief is non-inferentially justified by my experience in a way that does not depend upon my justification to believe anything else. Which of these answers should we prefer?

The usual arguments for inferentialism are, to my mind, inconclusive.⁹ First, there is the *ordinary language objection*: in the absence of defeaters, I can justify my belief that I have hands by citing the fact that I seem to see that I have hands and without mentioning the reliability of my experience. Plausibly, however, I don't need to mention the reliability of my experience because it is simply taken for granted in the absence of defeaters, not because it plays no role in the justification for my belief. Second, there is the *phenomenological objection*: my belief that I have hands does not seem to be held on the basis of inference. But inference need not be *conscious*: my belief that I have hands may be causally dependent on my belief that my experience is reliable, despite the fact that there is no conscious process of inference. Third, there is the *over-intellectualization objection*: my belief that I have hands can be justified even if I lack the intellectual sophistication to infer it from beliefs about the reliability of my experience. This objection relies on an assumption about *the basing relation*: my belief that I have hands is inferentially justified only if it is held on the basis of inference from a justified belief that my experience is reliable. Arguably, however, this assumption is false: a belief that I have hands might be held on the basis of a mere causal sensitivity to the fact that my experience is reliable. But this need not require a high degree of intellectual sophistication – for instance, one can manifest a causal sensitivity to the reliability of experience in one's responses to defeaters, such as evidence that experience is unreliable.

Provisionally, then, I conclude that there is no compelling case for the claim that beliefs about the external world are non-inferentially justified by experience. Nevertheless, I think there is a more compelling case for the claim that beliefs about

experience are non-inferentially justified by experience. Just as we can ask how experience justifies beliefs about the external world, so we can ask how experience justifies my beliefs about one's own experience. The natural answer, of course, is that beliefs about experience are justified by *introspection*. But this raises a further question about the nature of introspection. After all, the term 'introspection' is typically used as a mere placeholder for an account of the distinctive source of justification that we have for beliefs about our own experience, so the task remains to give a positive account of the nature of introspection.

According to *inferentialist* theories of introspection, my justification to believe that I have some experience depends upon my justification to believe the premises of an argument for the conclusion that I have the experience in question. For instance, Ryle (1949) notoriously claimed that my justification to hold beliefs about my experience depends upon my justification to hold beliefs about my behavior. In many cases, however, my experience exerts no causal influence on my behavior and so there is no basis from which to draw conclusions about my experience. Insofar as I have justification for beliefs about my behavioral dispositions, such as my disposition to accept a bet that pays me if I have a certain kind of experience, this depends on my justification to hold beliefs about my experience, rather than the other way around.

More recently, Byrne (2005, 2012) has defended an inferentialist theory of introspection on which my justification to hold beliefs about my experience depends upon my justification to hold beliefs about the external world. For instance, my belief that I seem to see that I have hands is justified by inference from my believing

what Byrne calls a 'v-proposition' – that is, roughly, the representational content of my visual experience that I have hands. One objection to this proposal is that if I know that I am subject to illusion, then I won't believe the contents of my visual experience, although I might have introspectively justified beliefs about my visual experience. In responding to this objection, Byrne claims that one always believes the contents of visual experience, although the beliefs in question are inferentially encapsulated in the visual system in such a way that they may conflict with the subject's other beliefs without thereby impugning one's rationality. However, this claim is controversial because it raises difficult questions about how to draw the distinction between beliefs and non-doxastic visual representations.

According to non-inferentialist theories of introspection, my justification to believe that I have some experience does not depend upon my justification to believe anything else. On the contrary, it is plausible that I have justification to believe that I have some experience just by virtue of having the experience in question. For instance, I have justification to believe that I seem to see that I have hands just by virtue of seeming to see that I have hands. Examples of this kind motivate what (in Smithies 2012a) I have called *the simple theory of introspection*, according to which introspective justification is a distinctive kind of justification that one has to believe that one has a certain kind of experience just by virtue of having an experience of that kind. On this view, introspectively justified beliefs about one's own experience are non-inferentially justified by one's experience in a way that does not depend upon one's justification to believe anything else.

Proponents of inferentialism may protest that just as one's perceptual beliefs about the external world are justified in a way that depends upon one's justification to believe that perception is reliable, so one's introspective beliefs about one's own experience are justified in a way that depends upon one's justification to believe that introspection is reliable. But how exactly is this supposed to work? Perhaps the proposal is that one's introspective justification to believe that one has an experience E depends on one's justification to believe the premises of an argument of the following kind:

- (1) I am having experience E.
- (2) Introspection is reliable, so if I am having experience E, then I am having experience E.
- (3) So, I am having experience E.

But this argument is circular: it cannot explain my introspective justification to believe that I am having experience E, since this is presupposed in the first premise. Instead, perhaps the proposal is that one's introspective justification to believe that one has an experience E depends upon one's justification to believe the following:

- (1) I believe that I am having experience E.
- (2) Introspection is generally reliable, so if I believe that I am having E, then I am having experience E.
- (3) So, I am having experience E.

But this argument is circular too: it cannot explain my introspective justification to believe that I am having experience E, since the first premise presupposes that I have introspective justification for beliefs about what I believe. On an inferentialist account, my introspective justification to believe the first premise depends upon my justification to believe the premises of another argument:

(1) I believe that I believe that I am having experience E.

(2) Introspection is generally reliable, so if I believe that I believe that I am having E, then I believe that I am having experience E.

(3) So, I believe that I am having experience E.

And now we are embarked on an infinite regress. The general problem here is that there seems to be no non-circular way to explain how beliefs about one's experience are inferentially justified by beliefs about the reliability of one's beliefs about experience. Instead, it is more plausible to suppose that beliefs about one's experience are non-inferentially justified by one's experiences themselves.

2.3. Access Internalism

The experience thesis is motivated not only by examples of introspectively justified belief, but also by more general epistemological considerations. In particular, it is a plausible consequence of access internalism. I have argued for access internalism elsewhere (in Smithies 2012b, 2014), but for reasons of space, I will not repeat

those arguments here. Instead, I will argue for the conditional claim that if access internalism is true, then the experience thesis is needed to explain *why* it is true.¹⁰

Access internalism is the thesis that there are higher-level requirements on justification such that a belief is justified only if an appropriate higher-level belief is also justified. However, it is important to distinguish between *propositional* and *doxastic* versions of access internalism. According to the propositional version, one has justification to believe that *p* if and only if one has justification to believe that one has justification to believe that *p*. According to the doxastic version, by contrast, one believes that *p* in a way that is justified if and only if one believes that *p* on the basis of a justified belief that one has justification to believe that *p*.

There are compelling objections to the doxastic version of access internalism. First, there is an *over-intellectualization problem*: it is plausible that some non-human animals and human infants can have justified beliefs without having the conceptual or reflective abilities required to have beliefs about the epistemic status of their beliefs. And second, there is a *regress problem*: one's first-order beliefs are justified only if they are based on justified second-order beliefs, which are justified only if they are based on justified third-order beliefs, and so on ad infinitum. But no finite creature can have an infinite hierarchy of increasingly complicated higher-order justified beliefs, which generates the skeptical conclusion that no finite creature has any justified beliefs at all.

But these objections do not apply to the propositional version of access internalism. The over-intellectualization problem does not arise, since the propositional version does not imply that one's beliefs are justified only if they are

held on the basis of justified higher-order beliefs. It does generate an infinite regress, since it implies that one has justification to hold a first-order belief only if one has justification to hold a second-order belief, and one has justification to hold a second-order belief only if one has justification to hold a third-order belief, and so on ad infinitum. However, it does not imply that one must hold any of these higher-order beliefs and so the infinite regress is benign, rather than vicious. The infinite regress is vicious only if we assume that there are doxastic limits on propositional justification to the effect that one has justification to hold a belief only if one is capable of holding the belief in a way that is justified. As I have argued elsewhere, however, there are no good reasons to make this assumption.¹¹

Let us assume, at least for the sake of the argument, that we have good reason to believe that access internalism is true. Still, it is one thing to argue *that* access internalism is true, but it is another thing to explain *why* it is true. Let us say that a fact is *accessible* just in case one has justification to believe that it obtains when and only when it obtains. Access internalism is the thesis that the justification-facts – that is, the facts about which beliefs one has justification to hold – are accessible in this sense. However, access internalism stands in need of explanation because most non-epistemic facts are not accessible in this sense. In order to explain access internalism, we need an account of the way in which justification-facts are determined that explains why they are accessible.

Justification-facts are not brute facts. Like all epistemic facts, they are *determined* by non-epistemic facts in the following sense: there can be no epistemic difference between situations unless it holds in virtue of some non-epistemic

difference between those situations. In order to explain the accessibility of justification-facts, there must be some non-epistemic facts that are accessible and that also determine the justification-facts in a way that is accessible. This raises the following question: are there any plausible candidates for non-epistemic facts that determine the justification-facts in a way that satisfies this accessibility constraint?

There seems to be only one remotely plausible answer – that is, the justification-facts are determined by non-epistemic facts about one’s experiences that are *introspectively accessible* in the sense that one has introspective justification to believe that they obtain when and only when they obtain. As I claimed earlier, it is independently plausible that one’s experiences are introspectively accessible in this sense. Moreover, the simple theory of introspection is explicitly designed to account for the fact that one’s experiences are introspectively accessible in this sense. According to the simple theory, there is a distinctive kind of justification – namely, introspective justification – that one has for beliefs about one’s experiences just by virtue of having those experiences. On this theory, introspective justification is a species of non-inferential justification, since one’s beliefs about one’s experiences are justified by one’s experiences in a way that does not depend upon one’s justification to believe anything else.

In summary, the structure of the argument for the experience thesis is as follows. The first step is that access internalism is best explained by the thesis that the justification-facts are determined by introspectively accessible facts about one’s experiences. The second step is that the simple theory of introspection explains why facts about one’s experiences are introspectively accessible in this sense. The third

step is that the simple theory of introspection entails a version of the experience thesis on which beliefs about one's experiences are non-inferentially justified. Therefore, the experience thesis is a consequence of access internalism.

3. Defending Foundationalism

I have argued that foundationalism is motivated by the experience thesis, according to which some beliefs are non-inferentially justified by experience. I have given two arguments for the experience thesis: one intuitive and one theoretical. The intuitive argument is that the experience thesis is supported by compelling examples of beliefs about experience that are non-inferentially justified by introspection, whereas the theoretical argument is that the experience thesis is a consequence of access internalism. However, there is an influential argument that purports to establish precisely the opposite – namely, that if access internalism is true, then all beliefs are inferentially justified and so the experience thesis is false. If this argument is sound, then it undercuts much of the motivation for foundationalism. Therefore, in what follows, I examine the argument in some detail with a view to considering the best strategy for defending foundationalism.

3.1. The Anti-Foundationalist Argument

The argument against foundationalism has been developed in different ways by Sellars (1956), Bonjour (1978, 1985) and Klein (1999, 2005, 2007).

Sellars argues against a version of the so-called “Myth of the Given” on which observation is a source of non-inferential knowledge that presupposes no other

knowledge and constitutes the “ultimate court of appeals” for all other knowledge. According to Sellars, an observational report that something is green cannot express non-inferential knowledge unless it has *authority* in the sense that it is likely to be true; and, moreover, the person making the report must *recognize* that it has this authority. Thus, he writes, “a report must not only *have* authority, this authority must *in some sense* be recognized by the person whose report it is” (1956: 297). Translating this into the language of justified belief, my observational belief that something is green is justified only if I am justified in believing that I am reliable in the sense that my belief is likely to be true. But in that case, my belief is inferentially justified, since it depends upon the justification of another belief. Thus, Sellars (1956: 298) concludes: “observational knowledge of any particular fact, e.g. that this is green, presupposes that one knows general facts of the form *X is a reliable symptom of Y*. And to admit this requires an abandonment of the traditional empiricist idea that observational knowledge ‘stands on its own feet’.”

BonJour develops a Sellarsian argument against foundationalism that begins with the higher-level requirement that a belief is justified only if the believer has a *meta-justification* that shows that a belief justified in this way is likely to be true. According to BonJour, a belief is justified only if the believer has justification to believe the premises of a meta-justificatory argument of the following form:

- (1) Belief B has feature F.
- (2) Beliefs having feature F are highly likely to be true.
- (3) Therefore, B is highly likely to be true.

Moreover, Bonjour insists that one must be in “cognitive possession” of this meta-justification in the sense that one believes the premises of the meta-justificatory argument in a way that is justified. Therefore, Bonjour (1978: 5-6) concludes, “And if we now assume, reasonably enough, that for B to be justified for a particular person (at a particular time), it is necessary, not merely that a justification for B exist in the abstract, but that the person in question be in cognitive possession of that justification, we get the result that B is not basic after all since its justification depends on that of at least one other empirical belief.”

Klein develops an argument against foundationalism along similar lines, although he departs from Sellars and Bonjour in proposing infinitism rather than coherentism as an alternative to foundationalism. He imagines a proponent of foundationalism, Fred, who engages in a process of critical reflection on his justification for a certain belief. He traces back the chain of inferential justifications for this belief until he reaches some foundational belief that he takes to be non-inferentially justified. Fred is committed, on pain of arbitrariness, to acknowledging that there is some feature F in virtue of which the belief in question is non-inferentially justified. But then the question arises whether beliefs that have F are likely to be true. And now there seem to be two options. If Fred ducks the question, or answers it in the negative, then his belief is epistemically irresponsible and so unjustified. But if he answers in the affirmative, then Klein (2007: 15) concludes, “the regress has continued because Fred has located a very good reason for thinking that *b* is true, namely, *b has F and propositions with F are likely to be true.*”

In each case, the general form of the argument is as follows. The starting point is an appeal to a version of access internalism on which there are higher-level requirements on justified belief. On a doxastic form of access internalism, a belief is justified only if it is held on the basis of an appropriate higher-level belief that the first-order belief in question is justified, or reliable, or likely to be true. But if one's justification for a first-order belief depends upon one's higher-level justification to believe that one's belief is justified, or reliable, or likely to be true, then one's belief is inferentially, rather than non-inferentially, justified. The argument can be summarized as follows:

- (1) Necessarily, if the belief that p is justified, then it is held on the basis of a justified higher-order belief about the epistemic status of the belief that p .
- (2) Necessarily, if the belief that p is held on the basis of a justified higher-order belief about the epistemic status of the belief that p , then it is inferentially justified, rather than non-inferentially justified. Therefore,
- (3) Necessarily, if the belief that p is justified, then it is inferentially justified, rather than non-inferentially justified.

In what follows, I consider three different strategies for resisting this argument against foundationalism that appeal, respectively, to confusing epistemic levels, epistemic over-determination, and transmission failure.

3.2. Level Confusions

Criticism of the anti-foundationalist argument has tended to focus on the internalist conception of justification that is presupposed in the first premise. The standard response is to deny the internalist thesis that there are higher-level requirements on justification. According to some externalist theories of justification, a belief is justified only if the premises of a corresponding meta-justificatory argument are *true*, but it does not follow that these premises must be *known* or even *justified* for the subject in question. Indeed, William Alston (1989) suggests that the internalist commitment to higher-level requirements on justification stems from a confusion between epistemic levels. James Pryor also endorses this kind of response in a more recent survey of contemporary epistemology:

The now-standard reply to Bonjour's argument is that it builds into justified beliefs *about the world* conditions which really ought to apply only to our higher-level, reflective beliefs that *our beliefs about the world are justified*. For you simply *to have* a justified belief about the world, this reply says, that belief may need to *have* features that make it reasonable or likely to be true, but you need not, in addition, be justified in believing it has such features. (2001: 101)

In my view, however, the standard reply is inadequate, since it fails to distinguish sharply enough between propositional and doxastic versions of access internalism.

Much of the opposition to access internalism stems from objections to doxastic versions of access internalism, according to which a belief is doxastically justified only if it is held on the basis of an appropriate higher-order belief that is also doxastically justified. However, the standard objections to doxastic versions of access internalism do not arise for propositional versions, according to which a belief is propositionally justified only if an appropriate higher-belief is also propositionally justified. Moreover, the argument against foundationalism can be reformulated in terms of a propositional version, rather than a doxastic version, of access internalism as follows:

- (1) Necessarily, if one has justification to believe that p , then one has justification for a higher-order belief about the epistemic status of the belief that p .
- (2) Necessarily, if one has justification for a higher-order belief about the epistemic status of the belief that p , then one's justification to believe that p is inferential rather than non-inferential justification. Therefore,
- (3) Necessarily, if one has justification to believe that p , then one's justification to believe that p is inferential rather than non-inferential justification.

Of course, some foundationalists reject both propositional and doxastic versions of access internalism. In my view, this is a mistake, although it is beyond the scope of this chapter to argue this point in any detail. But the question remains whether the commitment to access internalism is sufficient to undermine the motivations for foundationalism sketched earlier. In what follows, I will argue that foundationalism

can be reconciled with a commitment to access internalism, since the argument against foundationalism fails for independent reasons.

3.3. Epistemic Over-Determination

A second strategy for blocking the anti-foundationalist argument appeals to the possibility of *epistemic over-determination*: a belief can be epistemically over-determined in the sense that it is justified both inferentially and non-inferentially.

There is nothing in the definition of non-inferentially justified belief that rules out the possibility of epistemic over-determination: to say that a belief is non-inferentially justified is not thereby to deny that the belief is inferentially justified. Rather, to say that a belief is non-inferentially justified is to say something about the *source* of its justification. But one and the same belief may have two distinct sources of justification – one inferential and one non-inferential – that is, one that has its source in one's justification to believe other propositions and one that does not.

At best, the anti-foundationalist argument establishes that all beliefs are inferentially justified. Given the possibility of epistemic over-determination, however, this is consistent with the claim that some beliefs are non-inferentially justified in addition. And so, the response continues, the argument fails to pose any threat to foundationalism. Any successful argument against foundationalism needs to establish not merely that all beliefs are inferentially justified, but also that no beliefs are non-inferentially justified.

One problem with this response is that it generates a circularity problem. After all, foundationalism claims not only that some beliefs are non-inferentially

justified, but also that all other justified beliefs are inferentially justified by their relations to non-inferentially justified beliefs. In other words, every chain of inferentially justified beliefs must come to an end in some non-inferentially justified belief. But if all non-inferentially justified beliefs are also inferentially justified, then we have a circular chain of justification in which inferentially justified beliefs not only justify, but are also justified by, non-inferentially justified beliefs. Arguably, however, there cannot be a circular chain of justification of this kind.¹²

Some foundationalists might deny that the circularity is problematic. However, this is a dialectically suspicious move. After all, one of the central arguments for foundationalism is that it is indispensable for solving the regress problem. But if there can be a circular chain of inferential justification, then this undercuts the motivation for the foundationalist solution to the regress problem by making room for a coherentist solution or a hybrid solution on which not every chain of inferentially justified beliefs comes to an end in some non-inferentially justified belief. Fortunately, though, there is one more strategy to consider.

3.4. Transmission Failure

The third strategy for blocking the anti-foundationalist argument appeals to the possibility of *transmission failure*. An argument *transmits justification* if and only if one has justification to believe the conclusion in a way that depends on one's justification to believe the premises. So, if one's justification to believe the premises of an argument depends upon one's justification to believe the conclusion, rather than vice versa, then the argument *fails to transmit justification*.

Not all valid arguments transmit justification from their premises to their conclusion. To illustrate the point, suppose that I come home from work and look around the house to see if my wife is at home. I know from past experience that she is usually at work or at home around this time of day, but since I can't find her at home, I conclude that she must be still at work. In other words, I reason as follows:

- (1) My wife is either at home or at work.
- (2) My wife is not at home.
- (3) So, my wife is at work.

This argument is valid and it also transmits justification because my justification to believe the conclusion depends upon my justification to believe the premises. But now consider the following argument:

- (1) My wife is either at home or at work.
- (2) My wife is at work.
- (3) So, my wife is not at home.

This argument is also valid, but it fails to transmit justification, since my justification to believe the second premise depends upon my justification to believe the conclusion, rather than vice versa. Whether an argument transmits justification depends on the details of the case, but in this case, only first argument captures the relations of justificatory dependence that hold among my beliefs.

Here is a more controversial example that has been extensively discussed in the contemporary literature. It is widely agreed that there is something intuitively question-begging about the following Moorean argument against skepticism:

- (1) I have hands.
- (2) If I have hands, then I am not deceived by an evil demon.
- (3) So, I am not deceived by an evil demon.

However, there is much less agreement about why exactly it begs the question. Assuming that justification is closed across entailment, it is necessary that if I have justification to believe the premises, then I also have justification to believe the conclusion. However, this leaves open a further question about the direction of justificatory dependence between premises and conclusion. On the one hand, Pryor (2000, 2004) argues that my justification to believe the conclusion depends upon my justification to believe the premises, and so the argument transmits justification, although it may be dialectically ineffective in resolving unjustified skeptical doubts about its conclusion. On the other hand, Wright (2002, 2004) claims that the argument fails to transmit justification because my justification to believe the first premise depends upon my having independent justification to believe the conclusion, rather than vice versa.

The moral to be drawn from these examples is that we need to distinguish carefully between claims of the following kind:

(1) Necessity: a *necessary condition* for one's justification for a belief is that one has justification for other beliefs.

(2) Dependence: one's justification for a belief *depends upon* one's justification for other beliefs.

This point is crucial for seeing how foundationalism is consistent with higher-level requirements on justification that are integral to the thesis of access internalism. We can now distinguish the following claims:

(1) Necessity: a *necessary condition* for one's justification for a belief is that one has justification for a higher-order belief about the epistemic status of that belief.

(2) Dependence: one's justification for a belief *depends upon* one's justification for a higher-order belief about the epistemic status of that belief.

Access internalism makes claims about necessity, rather than dependence. There is no commitment to the claim that one's justification for a belief depends upon one's justification for a higher-order belief about the epistemic status of that belief.

Indeed, one's justification for higher-order beliefs about the epistemic status of one's first-order beliefs plausibly depends upon one's justification for those first-order beliefs, rather than vice versa. As a result, there is no transmission of justification from higher-order beliefs to first-order beliefs, but this blocks the

argument for the conclusion that one's first-order beliefs are inferentially justified by their relations to higher-order beliefs.

The distinction between necessity and dependence is key to understanding the debate between foundationalism and infinitism. Foundationalism is consistent with the claim that there is an infinite series of propositions such that, necessarily, if one has justification to believe any member of the series, one has justification to believe the next in the series. The following series is a case in point: p , I have justification to believe that p , I have justification to believe that I have justification to believe that p , and so on. Infinitism goes further in claiming that one has inferential justification to believe that p in virtue of one's justification to believe an infinite series of propositions of this kind. According to foundationalism, by contrast, one has justification to believe an infinite series of propositions of this kind in virtue of having a justification to believe that p – one that is either non-inferential or ultimately grounds out in non-inferential justification to believe other things.

The debate between foundationalism and infinitism is best construed as a debate about the structure of justificatory dependence relations. As we have seen, relations of dependence are more fine-grained than relations of necessitation.¹³ The moral of this section is that the anti-foundationalist argument fails precisely because it neglects this distinction between necessitation and dependence.

4. Klein on Reflective Knowledge

Klein (this volume) argues against the foundationalist solution to the regress problem on the grounds that it cannot explain how non-inferentially justified beliefs

can amount to what he calls *Meno-type knowledge*. In this section, I will explain how I think an internalist version of foundationalism should respond to this challenge.

Klein's challenge relies on a distinction between two conceptions of knowledge – namely, *animal knowledge* and *reflective knowledge* – that he draws from Sosa's work. Sosa explains the distinction in the following passage:

One has *animal knowledge* about one's environment, one's past, and one's own experience, if one's judgments and beliefs about these are direct responses to their impact – e.g. through perception or memory – with little or no benefit of reflection or understanding. One has *reflective knowledge* if one's judgment or belief manifests not only such direct response to the fact known but also understanding of its place in a wider whole that includes one's belief and knowledge of it and how these come about. (1991: 240)

On Sosa's (1991: 145) account, animal knowledge is true belief that is "apt" – that is, reliable – and derives from an "intellectual virtue" – that is, a reliable disposition of the believing subject. This kind of knowledge is relatively easy to come by, since it does not require any capacity for reflection. As such, it is knowledge that can be possessed by unreflective creatures, such as human infants and non-human animals. In fact, Sosa goes as far as to suggest that any reliable mechanism that represents its environment can have knowledge of this kind, including thermostats, supermarket doors, email programs, immune systems, and so on. Following Sosa (1991: 95), Klein calls this *servo-mechanical knowledge*.

Reflective knowledge, on Sosa's account, requires not only true belief that is formed in a reliable way, but *knowledge that* one's belief is formed in a reliable way. Thus, he writes: "For reflective knowledge, you need an epistemic perspective that licenses your belief by its source in some virtue of faculty of your own" (1991: 277). This is a more demanding kind of knowledge that is unique to human adults in contrast with human infants, non-human animals, and reliable mechanisms. Klein says this is "the most highly prized" type of knowledge and, in homage to Plato, he calls it *Meno-type knowledge*.

Klein argues that foundationalism cannot explain how non-inferentially justified beliefs can rise to the level of *Meno-type knowledge*. To make the point, he imagines two subjects, S1 and S2, each of whom has a belief B that is non-inferentially justified in virtue of having feature F. The only relevant difference between them is that S2 has (and S1 does not have) a higher-order belief that her belief B has feature F and that beliefs with feature F are more likely to be true. Klein argues, quite plausibly in my view, that S2 is better justified than S1 in holding belief B and hence that S2 has *Meno-type knowledge* of a more highly prized kind, whereas S1 has only an inferior kind of animal knowledge. The objection is that foundationalism cannot explain this epistemic difference between S1 and S2 since each of them has a belief B that is non-inferentially justified in virtue of having property F.

I want to argue, in response to Klein, that foundationalism can explain the epistemic difference that he identifies, but we first need to characterize the epistemic difference more precisely. I accept that there is an important distinction to be drawn between animal knowledge and reflective knowledge, although I do not

accept Sosa's account of this distinction. In particular, I reject his claim that mere reliability of a certain kind is sufficient for animal knowledge. On my view, all knowledge is justified in a way that is reflectively accessible, at least in principle, but not all knowledge is held on the basis of reflective access to the fact that one is so justified. On this view, reflective knowledge is distinguished from animal knowledge on the grounds that it is not only justified in a way that is reflectively accessible, but it also held on the basis of a justifying activity of reasoning that enables one to access the fact that one is justified.

Following Alston (1989), we can draw a distinction between the activity of *justifying* a belief and the property that a belief has when it is *justified*. Justifying a belief is, roughly, a matter of reflecting on what makes it justified. Not all justified beliefs result from an activity of justifying: for instance, animal knowledge is justified belief that requires no reflection on what makes it justified. This is consistent with a claim that Klein insists upon – namely, that justifying one's beliefs makes them *more fully justified* than they otherwise would have been:

When we provide reasons for a proposition, *p*, we can contribute to making a belief-state more fully justified. 'Justifying' ...is an achievement verb that indicates the successful completion of an activity. (This volume: xx)

We can insist that animal knowledge is always justified, while acknowledging Klein's point that human knowledge is always *better justified* than animal knowledge insofar as it results from an activity of justifying. The challenge for foundationalism

is to explain how reflective knowledge can be more fully justified than animal knowledge even when both are justified in virtue of some foundational property F.

The distinction between propositional and doxastic senses of justification provides the key to answering this challenge. In Klein's example, S1 and S2 have the same degree of propositional justification to hold belief B in virtue of having feature F. Moreover, both S1 and S2 hold the belief B in a way that is doxastically justified to some degree by virtue of holding it in a way that is sufficiently sensitive to feature F. But sensitivity comes in degrees and reflection can increase one's degree of sensitivity to features that are foundational sources of propositional justification. So, we can say that S2 is doxastically justified to a greater degree than S1 because reflection enables her to hold belief B in a way that is more sensitive to feature F. In short, the activity of justifying can make one's beliefs more justified in the doxastic sense but without thereby making them more justified in the propositional sense.

Recall the account of transmission failure given in section 3.4. Following Bonjour, we can maintain that anyone who has non-inferential justification for belief B in virtue of having feature F thereby has justification to believe the premises of a meta-justificatory argument of the form:

- (1) Belief B has feature F.
- (2) Beliefs having feature F are highly likely to be true.
- (3) Therefore, B is highly likely to be true.

BonJour's argument against foundationalism fails because it does not follow that propositional justification is transmitted from premises to conclusion in the sense that one's justification for believing the conclusion depends upon one's justification to believe the premises. But even if the argument fails to transmit propositional justification from premises to conclusion, reflecting on the argument can enhance the epistemic status of one's belief in the conclusion by making one more sensitive to the presence of feature F and thereby increasing one's degree of doxastic justification.¹⁴ That is why S1 is more justified than S2 in the doxastic sense, but not in the propositional sense.

In conclusion, foundationalism can answer Klein's challenge of explaining how non-inferentially justified beliefs can rise to the level of reflective knowledge. Animal knowledge is justified when it is sufficiently sensitive to the properties that are foundational sources of propositional justification, but reflective knowledge is always better justified and so "more highly prized" because reflection increases one's sensitivity to these properties. In this way, foundationalism can explain the power of reflection to enhance doxastic justification but without endorsing an infinitist account of the structure of propositional justification.

5. Conclusion

This chapter has two goals: to motivate the foundationalist solution to the regress problem and to defend it against a prominent objection. Both the motivation and the defence of foundationalism raise larger questions about the relationship between foundationalism and access internalism. I have argued that foundationalism is not in

conflict with access internalism, despite influential arguments to the contrary, and that access internalism in fact supplies a theoretical motivation for foundationalism. Therefore, I conclude that foundationalism and access internalism form a coherent and well-motivated package. In the process, I hope to have cast some new light on an old debate about the structure of epistemic justification.¹⁵

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¹ Some authors use the terminology of 'mediate' versus 'immediate' justification, rather than 'inferential' versus 'non-inferential' justification, but this is a purely terminological difference. See, for example, Alston (1989), Pryor (2000, 2005) and Silins (2008).

² Proponents of foundationalism include Chisholm (1977), Alston (1989), Audi (1993), Fumerton (1995), Pollock and Cruz (1999), Pryor (2000, 2005) and Huemer (2001).

³ Proponents of coherentism include Sellars (1956), BonJour (1978, 1985), and Davidson (1986), although Sellars is hard to classify and BonJour (2001) has more recently endorsed foundationalism. Klein (1999, 2005, 2007, this volume) is the most prominent contemporary proponent of infinitism.

⁴ It is a further question which coherent systems or infinite series of belief are of the right kind to confer justification – for instance, whether they must stand in certain relations to experience.

See section 2.1 below for discussion of the distinction between pure and impure forms of coherentism and infinitism.

⁵ I do not assume that the regress of justification always comes to an end in beliefs that are non-inferentially justified by experience. Experience is the foundational source of a posteriori justification, but the foundational source of a priori justification is another topic altogether.

⁶ This is a generalization of the distinction that is often drawn between pure and impure forms of coherentism, e.g. Pryor (2005). Klein (this volume) is an example of an impure anti-foundationalist, since he allows that a “kosher etiology” may be necessary for a belief to be justified.

⁷ See Pryor’s (2005) discussion of what he calls ‘the master argument for coherence’ for a detailed assessment of Davidson’s thesis.

⁸ Inferentialism is endorsed by Bonjour (2001), Wright (2004) and Fumerton (1995, this volume) and non-inferentialism by Pollock and Cruz (1999), Huemer (2001), Pryor (2000, 2004) and Silins (2008, this volume).

⁹ See Pryor (2000) and Silins (2008, this volume) for these arguments.

¹⁰ The argument of this section is developed in slightly more detail in Smithies (2012a).

¹¹ See Smithies (2012b, 2014) for more detailed discussion.

¹² Compare Klein’s Principle of Avoiding Circularity (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.” (1999: 298)

¹³ This is a central theme of contemporary discussions in metaphysics. See Fine (2001) and Schaffer (2009) for the claim that grounding – that is, dependence – is more fine-grained than necessitation.

¹⁴ There may be some conflict here with Klein’s claim that “circular reasoning is impermissible”. While I am sympathetic to Klein’s (PAC) as a principle about propositional justification, I am less sympathetic to an analogous principle about doxastic justification, but the issue deserves a more extended discussion than I can give it here.

¹⁵ Many thanks to participants in my epistemology seminar at the Ohio State University in Winter 2012 and to Peter Klein, Ram Neta and Nico Silins for helpful comments and discussion.