1

THE REGRESS PROBLEM

1.1 Introduction: A Thought Experiment

Imagine that a team of scientists develops a device that can scan your brain and record everything you believe. You put on the special helmet, the device scans your brain, and the scientists print it all out so you can take home *Your Book of Beliefs*. Thumbing through the pages, you come across many beliefs you expected to find in *Your Book of Beliefs*. You also discover some beliefs you didn't expect to find in there – for example, beliefs that play a role in guiding your behavior but which are for the first time being brought to your attention for critical inspection.[1] For better or worse, *none* of your beliefs has escaped detection by this remarkable helmet (not even the embarrassing ones). 1.1

Your Book of Beliefs is, in one sense at least, very useful. You find out, once and for all, everything you believe – which is very helpful to know! But you realize something important is missing. You notice there is nothing anywhere in *Your Book of Beliefs* that tells you which of your beliefs are actually worth keeping and which ought to be abandoned. 1.2

[1] Some philosophers distinguish between those beliefs that *merely* guide behavior, but which we would not be inclined to positively endorse on reflection (e.g. our suppressed beliefs, including those which might be painful to consider), from those we would be inclined to affirm as true. Ernest Sosa (e.g. 2017) terms the former "functional" beliefs and the latter "judgmental" beliefs. For the present purposes, we'll be referring to beliefs in a general sense. However, the distinction between functional and judgmental beliefs will be revisited in Chapter 11.

This Is Epistemology: An Introduction, First Edition. J. Adam Carter and Clayton Littlejohn.

1.3 If you've read a bit of psychology, you probably know that certain kinds of beliefs can be helpful to have simply because thinking about them makes you feel better about yourself, allows you to cope effectively with stressful experiences, etc. Such beliefs might be good to have simply because having them helps us get by.

1.4 While it might be nice to know which beliefs can help you to get by or find peace, the very fact that you're reading an epistemology book suggests you might not care *only* about whether your beliefs are useful to you in this way. If you have an inquiring mind, you might also be interested in having beliefs that actually match up with how things are, *regardless* of whether having them makes you feel happy or comfortable or helps you cope.

1.5 Let's assume you're like this, and so you want to work out which of your beliefs are worth keeping and which ought to be abandoned from the specific point of view (the epistemic point of view of interest in epistemology) where what matters is things like getting to the truth and having knowledge. That is, you want to sort your epistemically justified beliefs from your epistemically unjustified beliefs – and not to have them have them unhelpfully lumped all together (as they presently are in the book the scientists have given you).

1.6 So you begin creating a new book: *Your Book of (Epistemically) Justified Beliefs*.[2] Unfortunately, the scientists who created the helmet are simply not willing or able to help you fill out this second book. (They say that, as scientists, they are "in the business of *describing*, not *evaluating*".) When they scan your brain, the helmet is simply unable to detect things anything that philosophers call *normative* – like good and bad, right and wrong, justified and unjustified.[3] It simply includes in the book whatever beliefs you in fact do have, for better or worse. If you want to know which beliefs from *Your*

---

[2] The reader can assume that by "justified" we will always mean (throughout the discussion in this book) "epistemically justified" – viz. justified from the point of view where what matters is things like truth and knowledge – unless explicitly stated otherwise.

[3] The careful reader might have caught something here that seems problematic; what if some of the beliefs you have include words like "right" and "wrong", "good" and "bad", "justified" and "unjustified"? Given that the helmet – by stipulation – scans *all* of your beliefs, won't it scan *these* beliefs, too? And if so, then isn't it incorrect to suppose that the helmet does not detect normativity? Here it is important to distinguish between (i) the scientists' describing, without passing judgment, that you have some belief that includes a normative term (e.g. your belief that murder is wrong), and (ii) the scientists' being able to tell whether your beliefs actually *have* some kind of normative status (e.g. whether they are justified, unjustified). On the situation we're inviting you to imagine here, suppose what the helmet cannot do is, specifically, (ii).

Book of Beliefs belong in *Your Book of Justified Beliefs* (where being "justified" is a normative matter), you need to do some epistemology, which is the area of philosophy that studies this kind of thing. Epistemology, if done well, can help you figure out not only which (if any) beliefs you have are epistemically justified, but also which ones are *known*, and even how much knowledge you have.

But where to start? Here it helps to take things slowly. In order to figure out 1.7
which beliefs from *Your Book of Beliefs* should make it in to *Your Book of Justified Beliefs*, you'll obviously need to apply some kind of sorting method.[4]

Fortunately, you *already* have a decent grip – before doing much or any 1.8
epistemology – of which beliefs of yours seem already like the best candidates for justified beliefs (and which ones don't). Looking through *Your Book of Beliefs,* you notice the first two entries as:

B1 (Belief 1). Rental prices will continue to increase in London in the coming year.
B2. There are ghosts.

You are fairly confident that B1 is justified and that B2 is not, and this is helpful because if whatever sorting method or rule you apply doesn't get these rather easy cases right, it's – like flipping a coin – probably not a very good way to sort the justified from the unjustified beliefs.[5]

At any rate, it seems like *something* must account for why B1 and B2 differ 1.9
in their being justified.[6] In a bit more detail, B1 must have some feature that B2 lacks, and this feature must surely account for the difference in justification.

This basic idea – that any difference in justification must be explained by 1.10
some other difference that is not *itself* just a difference in justification – is an

[4] Flipping a coin is certainly a method you could apply! But it is an unreliable method, one that would lead you astray as easily as not.

[5] The philosophical strategy, more generally, of constraining our epistemological theorizing with reference to our judgments about obvious cases is developed in a notable way in epistemology by Roderick Chisholm (1973).

[6] But wait! Could there be a simple shortcut? What about the following "obvious" rule: "Put all and only *justified* beliefs in *Your Book of Justified Beliefs*." Following the "obvious rule" would result in your achieving your goal – for if you followed this rule, you'd get the easy cases (B1 and B2) right, along with all the rest. The obvious problem with the obvious rule, though, is that this rule doesn't actually *help* you do what you're trying to do. It doesn't help you work out which beliefs in *Your Book of Beliefs* are justified and which are not. You think you already know the easy cases. You're not sure about the rest. And you're not sure *why* the easy cases are right.

instance of a more general philosophical principle which is helpful for thinking about normative matters. Call it the *Principle of Sufficient Difference*.[7]

Principle of Sufficient Difference: if there is some normative difference between X and Y, there must be some further non-normative difference between X and Y that is responsible for this normative difference: that is, there must be some non-normative feature F such that (i) X has F, (ii) Y lacks F, and (iii) this difference is responsible for the normative difference between X and Y.

Note that the *Principle of Sufficient Difference* is not itself a full-blown method for determining which of your beliefs are justified. But it is a principle that *any* good method you apply with that aim in mind will have to respect. (Consider that a method that did *not* respect this principle would have to allow, for example, that two beliefs could have all the same properties with the exception that one of them is justified and the other is not. But that would be quite a pill to swallow.)

1.11 Back to business. With the *Principle of Sufficient Difference* in hand (along with an intuitive sense that B1 is justified and B2 is not), can you think of any *difference* between B1 and B2 that might plausibly account for why B1 is justified and B2 is not? If so, you're in a good position to appeal to this very difference when proposing a method for sorting your justified from your unjustified beliefs.[8]

1.12 But what might such a feature be? What seems to *favorably distinguish* your belief that rental prices will continue to increase in London in the coming year from your belief that there are ghosts? As you look through the pages of *Your Book of Beliefs*, you notice a good candidate for such a feature: you find various *other* entries that support B1. By 'support' here, what is meant is: entries that might serve as premises of good arguments, arguments that *support* B1. For example, you come across these entries:

- B645. There will not be an increase in the supply of housing in London during the coming year.

---

[7] For a discussion of the principle (under a less snazzy name), see Goldman (1999b, p. 2).

[8] The gist of the idea would be to, first, find some feature, F, that B1 has but B2 doesn't have, which could plausibly account for why B1, but not B2, is justified. Next, extrapolate from this difference between B1 and B2 to generate a rule, framed with reference to F, that looks something like this: "Include all and only beliefs with feature F in *Your Book of Justified Beliefs*."

- B646. There will be increased demand for housing in London during the coming year.
- B87. Price will increase if there is an increase in demand without an increase in supply.

B645, B646, and B87 all support B1. You don't see any other beliefs that support the ghost belief. So here's one difference between B1 and B2: B1 is supported by further beliefs, and B1 is not. Perhaps extrapolating from this difference will give us a good rule for determining which beliefs get to be entries in *Your Book of Justified Beliefs*:

Supporting Belief Rule: an entry in *Your Book of Beliefs* gets to be an entry in *Your Book of Justified Beliefs* iff it is supported by further beliefs.

The *Supporting Belief Rule seems* like a promising idea until you notice that there's another entry in the book:

- B465789. Your friends at school saw a ghost when they were camping.

You still think that B2 isn't justified, but the *Supporting Belief Rule* suggests that it *is* justified – after all, it is supported by a further belief: B465789.

1.13 The *Supporting Belief Rule* isn't a good rule. If it's silly to believe in ghosts, it's silly to believe that your friends saw a ghost. If a silly belief supports another silly belief, they remain equally silly, and neither seems to be a good candidate for justification. (Compare: you can't boost the strength of a weak link in a chain by supporting it with another weak link.) The trouble with the *Supporting Belief Rule*, then, seems to be that it doesn't place any sensible restrictions on *which* beliefs could confer justification by providing this support.

1.14 To fix this, we might modify the rule as follows:

Supporting Justified Belief Rule: an entry in *Your Book of Beliefs* gets to be an entry in *Your Book of Justified Beliefs* iff it is adequately supported by more justified beliefs.[9]

[9] What does "adequate" mean? A piece of evidence might provide some support for a belief without providing adequate support for a belief. We might say that a piece of evidence, E, supports your belief in *p* if adding E to your set of evidence increases p's probability. If the increase is very small, the evidence might support *p* without providing adequate support. The observation that someone is about to swim laps is *some* evidence that they'll drown and the observation that someone has been handed a

That's better, surely, for it explains why B2 doesn't get into *Your Book of Justified Beliefs*. It isn't justified, because the only beliefs that support it are unjustified. Notice, however, that if we move to the *Supporting Justified Belief Rule*, we face a new and entirely different problem.

1.15 In explaining why B1 is justified, you cited further beliefs (i.e. B645, B646, and B87). There's a nice little argument that takes you from these beliefs to B1, but the argument doesn't justify B1 unless its premises are themselves justified. So: are B645, B646, and B87 justified or not?

1.16 The *Supporting Justified Belief Rule* tells us that we need *more justified beliefs* (and not merely more beliefs) that support B645, B646, and B87 if these beliefs are going to justify B1. Convinced that B1 really is justified, you press on. Surely something must support B645, B646, and B87. So surely *these* further beliefs contained in the pages of *Your Book of Beliefs* will show that B1 belongs in *Your Book of Justified Beliefs*.

1.17 The situation we face here is similar to the situation we faced earlier. We notice that there's a normative difference between two things (e.g. B1 and B2). The *Principle of Sufficient Difference* tells us that such a difference is possible only when there's some further difference that accounts for it (e.g. B1 is supported by justified beliefs and B2 is not). When we cite the factors that distinguish a justified belief like B1 from an unjustified belief like B2, the *Supporting Justified Belief Rule* tells us that the factors will be more justified beliefs (e.g. B645, B646, and B87). The *Principle of Sufficient Difference* will apply again to these new beliefs and the *Supporting Justified Belief Rule* will tell us that we need beliefs other than B645, B646, and B87 to justify B645, B646, and B87 (Figure 1.1). This could go on for a while, in a way that seems to threaten an *infinite regress*.

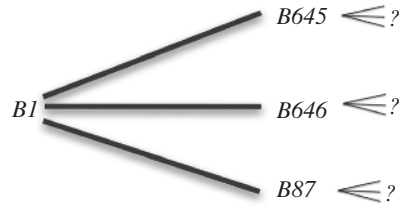

Figure 1.1 The *Supporting Justified Belief Rule* tells us that we need beliefs other than B645, B646, and B87 to justify B645, B646, and B87.

---

lottery ticket is *some* evidence that they'll soon be rich. These observations increase the probability of the relevant beliefs ever so slightly. They don't provide an adequate basis for belief, however. We will discuss this further in the chapter on inference.

It is beginning to look as though demonstrating that B1 is justified (which we originally thought was obviously justified) is difficult to do. And this looks like a problem – what epistemologists call a *regress problem*. After all, repeated application of the *Supporting Justified Belief Rule* tells us to find more and more justified beliefs (threatening infinite regress), but perhaps the required stock of justified beliefs just isn't there. 1.18

One somewhat depressing move at this juncture is to abandon the attempt to show that B1 (or any other of your beliefs is justified) and simply accept *skepticism about epistemic justification*: 1.19

Skepticism about epistemic justification: no beliefs are justified.[10]

If skepticism is correct, *Your Book of Justified Beliefs* is (despite what you may think) empty; none of your beliefs, including B1 and other beliefs you originally took to be justified, are actually justified. Unfortunately, *Your Book of Beliefs* – the one the scientists gave you – is filled with entries. Its pages *should* be blank. Or so this view maintains.[11]

Although some serious thinkers have reached this skeptical conclusion,[12] the very idea that your beliefs are unjustified *en masse* takes us a long way 1.20

[10] Typically, skeptics about epistemic justification (particularly those persuaded by the kind of regress argument we are discussing in this chapter) have embraced not only the contingent, descriptive thesis that no beliefs are justified, but, even more, the necessary, modal thesis that epistemic justification is *impossible*. For the present purposes, we'll sidestep this distinction – for the contingent descriptive thesis that no beliefs are justified suffices for at least one interesting kind of skepticism – and return to it in Chapter 11.

[11] Interestingly, many of the philosophers associated with the doctrine of skepticism about epistemic justification would be disinclined to say that they *know* or even justifiably believe the doctrine to be true. Pyrrhonian skeptics typically were led, through argument, to a position called *equipollence*, which involved withholding assent entirely, on either all propositions (as in the case of rustic Pyrrhonians) or on controversial propositions (as in the case of urbane Pyrrhonists). Academic skeptics were more inclined to assert philosophical doctrines (such as the thesis that skepticism about epistemic justification is true); however, as Michael Frede (1998) has noted, even these bolder skeptics were often disinclined to say they *knew* the truth of their own skeptical doctrine, even if (unlike Pyrrhonian skeptics) they were inclined to assert the theses.

[12] See, most notably, Sextus Empiricus' *Outlines of Pyrrhonism* (1976). Unlike the radical skeptic of Descartes' *Meditations* who denies that any of our beliefs are known, the Pyrrhonian skeptic denies that beliefs even attain the status of being

from common sense, which tells us that some of our beliefs are in much better shape than others. Plus, the skeptic hasn't offered any compelling positive argument for skepticism yet, so we shouldn't be too hasty to conclude that none of our beliefs are justified. After all, doesn't the *Supporting Justified Belief Rule* tell us that justification is within reach? All it takes to have justified beliefs like B1 is to have more justified beliefs like B645, B646, and B87. We haven't seen any reason yet to think that these beliefs aren't justified, have we?

1.21 In the remainder of this chapter, we'll articulate and critically discuss three non-skeptical views: *infinitism*, *coherentism*, and *foundationalism*. In outline form, these views maintain the following:

Infinitism: all justified beliefs are justified because of support from further justifiers. The chain of justifiers justifies beliefs only when it forms an infinite series of non-repeating justifiers. No belief can be justified without support from a further justifier that belongs to such a series.

Coherentism: all justified beliefs are justified because they belong to a coherent set of beliefs that support them (i.e. beliefs that are mutually supporting in that they lend deductive, inductive, or abductive support to other members). No belief can be justified without support from a further justified belief.

Foundationalism: all justified beliefs are justified because of support from further justified beliefs or because they are justified without such support. Any justified belief is either a properly basic belief or it derives its justification from such beliefs.

1.2 Infinitism and the Regress Problem

1.22 Infinitism tells us that a belief is justified iff it is appropriately supported by an infinite collection of non-repeating justifiers (i.e. justified beliefs or available supporting reasons). This is tantamount to accepting the *Supporting Justified Belief Rule* and taking it to its logical conclusion *without* ceding to the skeptic.

---

justifiably held. For some helpful contemporary discussion of how to interpret the Pyrrhonian's controversial epistemological thesis, see Burnyeat and Frede (1997) and, in particular, Barnes (1998) and Frede (1998). Cf. Fine (2000) for related discussion concerning the distinction between Cartesian and Pyrrhonian skepticism.

For obvious reasons, infinitism looks like quite a difficult pill to swallow. 1.23
The elephant in the room here is that the collection of non-repeating justifiers must be *infinite*. Should a view that is premised upon such a seemingly overwhelming suggestion be dismissed out of hand? Perhaps not. As proponents of infinitism John Turri and Peter Klein have suggested, the principal reason that we should accept infinitism is that whatever problems infinitism faces, the problems that face the only two alternatives are *worse*.[13] They state this overarching "process of elimination argument" for (non-skeptical[14]) infinitism as follows:

Master Argument for Epistemic Infinitism

P1 (Premise 1). There are three possible, non-skeptical solutions to the regress problem: foundationalism, coherentism, and infinitism.

P2. There are insurmountable difficulties foundationalism and coherentism.

P3. Infinitism faces no insurmountable difficulties.

P4. Not having insurmountable difficulties is better than not.

C (Conclusion). Therefore, infinitism is the best non-skeptical solution to the regress problem.[15]

P1 is widely taken for granted by all parties to the dispute, and P4 is likewise uncontentious.[16] P2 and P3 are where the action lies. Whether P2 is true requires a careful engagement with foundationalism and coherentism (which we will turn to in more detail later in this chapter). In abridged form, though, the crux of the infinitist's defense of (2) goes as follows: our beliefs cannot be justified by some finite set of justifiers (as per foundationalism and coherentism), because all such sets will either involve (i) a belief that's not supported by further beliefs or (ii) circles of justification. If the former, the inferential beliefs cannot be justified because the non-inferential

[13] See, for example, Turri and Klein (2014, p. 3).

[14] It is possible to be a skeptical infinitist by insisting that the structure of justification is as the infinitist says it is, and then to submit further that this structure is not instantiated in any human mind. See, for example, Aikin (2005). For our purposes, we will be discussing only non-skeptical infinitism.

[15] This is a paraphrased reconstruction of the argument as stated initially by Turri and Klein (2014, p. 3).

[16] That's not to say there are not various in-house disputes between coherentists and foundationalists that lead some coherentist and foundationalist views to end up looking very different from one another.

beliefs that they depend on seem arbitrary. If the latter, the beliefs cannot be justified because the circles of justification cannot confer justification upon these beliefs.

1.24 Let's suppose for a minute that P2 is correct, and that the above-noted (and perhaps related) difficulties to foundationalism and coherentism really are insurmountable as the infinitist insists. Even if that were so, the *Master Argument for Epistemic Infinitism* establishes C only if P3 can be established – viz. only if the problems that face infinitism are not *equally* insurmountable. Before we turn to examine the problems that face foundationalism and coherentism, let's first see how well infinitism holds up to the objections it faces.

1.3 Objections to Infinitism

1.25 The infinitist insists that a given belief is justified iff that belief is supported by an infinite set of non-repeating justifiers. One standard complaint about this proposal is that it puts justification out of our reach because – given the kind of cognitively limited creatures we are – we simply don't *have* an infinite set of justifiers available to support our beliefs. If this is right, infinitism doesn't provide us with a non-skeptical response to the regress problem. Here's the argument in outline – that is, the *Argument from Finite Minds*:

Argument from Finite Minds
P1. You have a finite number of beliefs.
P2. Nothing could be a justifier that supports your beliefs at any given time unless it is itself a belief.
C1. You have a finite number of justifiers that support your beliefs at any given time.
P3. Infinitism tells us that a belief is justified only if supported by an infinite set of non-repeating justifiers.
C2. Infinitism implies that none of your beliefs could be justified.

An initial line of response the infinitist could offer here would be to contest the *relevance* of P1 to the truth of infinitism. As this line of thinking goes, infinitism is a thesis about epistemic justification "in and of itself" and not merely about justification that's accessible to the kinds of minds that humans happen to have.[17] Accordingly, what infinitism says about epistemic

[17] This line of reply is briefly canvassed by Sosa (1980, p. 10).

justification is not beholden to anything we might discover about human minds and their distinctive limitations. Leaning on this point, though, would not be very good strategy for the infinitist, all things considered. After all, even if the reply is granted, a counterreply awaits: infinitism still implies that no human beliefs can be justified. Thus, infinitism is not a non-skeptical response to the regress problem when it comes to the very kind of justification we're most interested in: the kind we humans (with whatever limitations we have) are capable of attaining.

A more promising line of response to the *Argument from Finite Minds* is 1.26
that it rests on a mistaken picture of justifiers. While a justified belief might be a perfectly good justifier, maybe – and contrary to P2 – not every justifier is another justified belief.[18] For instance, if we understand justifiers as justified beliefs *or* available reasons that an agent could cite if challenged, the set of justifiers might be larger than the set of beliefs. It might (as the infinitist says) be *infinite* even if what we actually believe is not.

This might seem like a decent line for the infinitist to press, though it 1.27
invites a new kind of problem. Consider that to respond to the *Argument from Finite Minds* the infinitist has had to broaden the class of justifiers to include things that aren't now believed but are nevertheless *available* in some sense. Perhaps these are things that we would accept or believe and cite in support of our beliefs if challenged or asked for a justification.[19] If this line of reply could be made to work, then it would free the infinitist up to deny that justification requires having more beliefs than we really have.

At this same time, though, if the set of justifiers that would justify the 1.28
beliefs you hold now could consist not entirely of things that moved you to form the beliefs in the first place, then a new kind of worry surfaces, which is that the infinitist would have no way to distinguish *justification* from *mere rationalization* (e.g. citing reasons that weren't your *actual* reasons, but which you might nonetheless cite if pressed).

One strategy in response to this kind of worry that has been pursued by 1.29
Peter Klein (2005, pp. 135–136) is to clearly differentiate the infinitist's

[18] Recall that in attempting to come up with a method for determining which entries in *Your Book of Beliefs* should be included in *Your Book of Justified Beliefs*, you are in the main searching for some feature which could potentially serve to distinguish the justified from the unjustified beliefs; the feature of *being justified by further beliefs* is but one such candidate potential feature. As we'll see in Section 1.5, foundationalists are disinclined to think the feature of *being justified by further beliefs* is the feature we should be looking for.

[19] The sense of "availability" at issue here will be of relevance to the viability of infinitism; we engage with this point later in this section.

demands on two distinct kinds of epistemic justification: *propositional justification* (roughly, the kind of justification you have for a proposition if it would be reasonable for you to believe it) and *doxastic justification* (roughly, the kind of justification you have for *beliefs* held on the basis of reasons you're propositionally justified in believing[20]). For the infinitist, the proposition expressed by B1 (i.e. *rental prices will continue to increase in London in the coming year*) is propositionally justified for you just in case there is available to you at least one infinite non-repeating series of propositions (or reasons) such that R1 is a good reason to believe B1, R2 is a good reason to believe R1, R3 is a good reason to believe R2 … and so on.[21] But to be *doxastically* justified in believing B1, the mere fact that B1 is propositionally justified for you is not sufficient. A further necessary condition is that you must have appropriately provided, as Turri (2013, p. 792) puts it, "enough reasons along at least one of the infinite non-repeating series of reasons, in virtue of which [sic. your belief] is propositionally justified for you, to satisfy the contextually determined standards." Regarding "contextually determined standards": in short, the idea is that providing several reasons (from the infinite series that is available to you) may suffice for doxastic justification in an epistemically friendly setting, whereas in the context of a hostile interrogation, say, doxastic justification might require that you provide (say) 10 or 35 of them. But you are not required to provide an infinite series of reasons.

1.30 By drawing this distinction – in particular, by insisting that infinitist propositional justification is not sufficient for infinitist doxastic justification – the infinitist looks initially to be in a position to sidestep the kind of rationalization worry noted above. After all, once the distinction is drawn in the way Klein draws it, your actually citing certain reasons (from the relevant infinite non-repeating series) is doing some of the heavy lifting in accounting for your belief's doxastic justification.

---

[20] For presentational purposes, we are setting aside the contested question of what basing a belief on a reason involves. Some philosophers think it is a matter of a reason causing your belief. Others think it is a matter of having beliefs about your reasons supporting your beliefs. Others still take the notion to be a theoretical primitive. See Korcz (2015) for an overview and Carter and Bondy (eds.) (2019), for a recent volume of papers that engages with a range of contemporary views on epistemic basing.

[21] Turri (2013, pp. 791–792).

However, it's hardly the case that the infinitist is in the clear simply by drawing the distinction noted. To appreciate this point, consider the following two infinite series: 1.31

Series 1: R1, R2, R3, R4, R5 …
Series 2: R1, R3, R2, R4, R5 …

Assume that these two series contain the same infinite number of reasons, but in a different order; while there is no reason in Series 1 that does not occur in Series 2, and vice-versa, Series 1 might suffice to justify your belief while Series 2 does not. (After all, R2 might be a good reason to believe R1, but R3 might not be.[22])

As Podlaskowski and Smith (2011) have argued, this fact – in short, that "ordering matters" – turns out to be relevant to whether Klein's strategy of response to the *Argument from Finite Minds* ultimately works.[23] Podlaskowski and Smith's objection proceeds as follows (pp. 521-2): *even if* it is granted that we have an infinite series of beliefs available to us, we don't have such a series available to us *in the right order*! 1.32

This is initially a perplexing point. Why, exactly, would they think this? Their reasoning has two steps. The first is to point out that Klein is by his own lights committed to thinking about the notion of "availability" present in the infinitist's account of propositional justification in terms of dispositions[24] – viz. that every reason in the infinite chain is one that you'd be disposed to cite at an appropriate point. While Klein doesn't think you have to actually possess (for some reason in the infinite chain, R) the first-order disposition to cite R at the appropriate point, you must at least possess the (second-order) *disposition to form the relevant first-order disposition* to cite R at the appropriate point in the series. 1.33

[22] Note that for the purposes of this discussion, we are setting aside issues to do with the distinction between inductive and deductive support relations, which is a central topic in Chapter 4, on inference.

[23] Note that Podlaskowski and Smith offer a more sophisticated normativity-based argument which builds on the argument we are discussing in this chapter. For space constraints, we won't be surveying the normativity argument.

[24] Dispositions are often theorized in terms of *counterfactual conditionals*. For example, the disposition "flammability" corresponds with the counterfactual conditional: if it were struck (in appropriate conditions), it would catch fire. For an overview, see Choi and Fara (2016).

1.34 But, as Podlaskowski and Smith (2011) argue, you (constituted as you are) don't actually have that second-order disposition! As they put it:

> Faced with an infinite chain of reasons to cite, it is more likely that, at some point along the chain, S has the disposition to offer a guess or become bored with the whole enterprise (instead of having the epistemically credible disposition to continue citing reasons). There is good reason to think, then, that for a great many cases, S does not possess the relevant second-order dispositions whatsoever.

Some infinitists have attempted to get around this worry by appealing to a rather weak notion of a second-order disposition that is needed for the relevant reasons to count as "available" to cite in the right order;[25] for instance, as Turri says, "even if it's more likely that at some point you'll fail to correctly cite the next reason in the chain, due to a performance error [e.g., boredom], it doesn't follow that you lack *any* disposition to correctly cite the next reason" (p. 794).

1.35 Taking a step back from this dispute, we can see a dilemma materializing for the infinitist. If the sense in which the relevant reasons in the infinite series must be "available" to you (for propositional justification to be secured) is understood so weakly that cases like Podlaskowski and Smith's will not be problematic, then it's perhaps *too weak* for the availability of such an infinite series to contribute in a suitably significant way to (what is, according to the infinitist) *doxastic* justification.[26] However, if "availability"

---

[25] See, for example, Turri (2013). For a counterreply to Turri, see Podlaskowski and Smith (2014).

[26] Recall that doxastic justification for the infinitist requires two components: first, that the belief be propositionally justified, and, second, that the agent cite enough of the reasons from the series to satisfy contextual demands. If the notion of availability is weakened in the sense that it might have to be in order to get around Podlaskowski and Smith's objection, then it looks as though the infinite series of reasons "available" to you in such an attenuated sense has a marginalized role to play in explaining your doxastic justification. And, correspondingly, the reasons you cite to satisfy contextual demands play a comparatively larger role in accounting for your doxastic justification. But at this point, the position begins to look like a version of *foundationalism* rather than infinitism! Doxastic justification would in the main be a matter of citing a finite number of reasons (the last of which plays a special role in "clinching" the contextual provision demand), whereas the infinite series that is available to you includes reasons you'd more likely than not fail to cite correctly.

is understood strongly enough that the infinite series available to you plausibly contributes to your doxastic justification, then objections like Podlaskowski and Smith's begin to look problematic again.

Let's set aside the *Argument from Finite Minds* and consider an entirely 1.36
different kind of worry that infinitism faces, one that doesn't concern issues to do with human cognitive limitations. To this end, consider that one of the main motivations for infinitism is a desire to satisfy this principle:

> *Principle of Avoiding Arbitrariness*: for all propositions, x, if x is warranted for a person, S, at t, then there is some reason, r1, available to S for x at t; and there is some reason, r2, available to S for r1 at t, etc., and there is no last reason in the series. (Klein 2005, p. 136)

Infinitists want to satisfy this principle in the main because they think a belief that isn't supported by such a set of non-circular reasons will be held on the basis of a foundational belief that is itself arbitrary, since no further belief would support it.

If a belief is supported by further beliefs that ultimately turn out to be 1.37
unfounded, it can seem that the whole chain of beliefs is unfounded. For some beliefs, however, it doesn't seem that many reasons, if any, are required. Consider, for example, beliefs about your present sensations (e.g. your belief that your nose itches or that your head aches), beliefs about your present thoughts (e.g. your belief that you are currently thinking of New Jersey), and your perceptual beliefs (e.g. your belief that the page you're reading right now is covered with black marks). Even if you cannot think of *any* independent considerations to offer in support of these beliefs, these beliefs look like good candidates for justification and knowledge. Consider the belief that you're in pain, for example. It wouldn't be an *arbitrary* thing to believe if it's formed in response to the kinds of experiences you'd have when touching a hot iron or skinning your knee.[27]

One of the oddities of the infinitist view is that it will try to account for 1.38
the fact that the beliefs just mentioned can be justifiably held by positing an infinite series of reasons where the reasons it posits seem to be more epistemically problematic than the belief that they're supposed to support. If you believe that you're in pain and someone asks you to identify a good reason to think that you are, you might come up with something. You might

[27] Incidentally, this is a point that Sosa (1980, p. 19) appeals to in objecting as well to coherentism.

say that you're sweating and showing the standard physiological responses to pain, and you might point out that you need painkillers. But even if we have these reasons, they might seem otiose.

1.39 While considerations such as these might be good reasons for *someone* to believe that you're in pain, why would *you* need them to justifiably form this belief? How could such considerations account for the fact that it would be right for you to be *much* more confident that you're in pain than you are confident that any of the supporting reasons you've just mentioned are true?

1.40 This general idea is captured famously by Ludwig Wittgenstein in his posthumous *On Certainty* (1969) in the following passages, where Wittgenstein suggests it would not be promising to adduce what is less certain to one in the service of supporting what is more certain to one.

> My having two hands is, in normal circumstances, as certain as anything that I could produce in evidence for it. That is why I am not in a position to take the sight of my hand as evidence for it. (OC, §250)
>
> If a blind man were to ask me "Have you got two hands?" I should not make sure by looking. If I were to have any doubt of it, then I don't know why I should trust my eyes. For why shouldn't I test my eyes by looking to find out whether I see my two hands? What is to be tested by what? (OC, §125)

Wittgenstein, in making these remarks, is taking the proposition that one has hands to be (like the proposition that one is in pain) the sort of thing that you know if you know anything at all.[28] And such bedrock certainties (what Wittgenstein calls "hinges") are difficult to support by appealing to any kind of evidence that's more certain to one than these bedrock certainties themselves.

1.41 At some point – in the case of what is most obvious to us – it seems that the ability to just see that something is so using the finite reasons at hand should be enough for knowledge and justification if these epistemic standings are attainable. The intuitive force of this point is hard to ignore, and if this point is conceded, then it's unclear why there would have to be some further infinite set of reasons waiting in the wings for our beliefs to constitute knowledge or to be justifiably held. *If* you can just see that

[28] The fact that it makes little sense to support the more certain with the less certain is why Wittgenstein objected to G.E. Moore's (1939) famous attempt to *prove* through argument that the external world exists – something Moore knows if he knows anything at all (including the reasons he could cite as evidence for it). For further discussion of Moore's proof, see Chapter 11 on skepticism.

something is true, it wouldn't be right to describe your belief as being held on an arbitrary basis.

1.4 Coherentism

Think about your two books, *Your Book of Beliefs* and *Your Book of Justified Beliefs*. The *Supporting Justified Belief Rule* tells us that a belief in the first book, B1, earns a place in the second iff it's supported by other beliefs that have a place in the second book. If we adhere to this rule and there's a finite (but non-zero) number of entries in *Your Book of Justified Beliefs*, infinitism must be mistaken. Let's now consider an alternative to infinitism, *coherentism*. 1.42

Imagine that you have *Your Book of Beliefs* in hand. A team of epistemologists has promised to send you a copy of *Your Book of Justified Beliefs* once they finish a thorough investigation of you, your beliefs, and your belief-forming habits. Curiosity gets the better of you, so you start to wonder which entries in your book will be entries in theirs. The *Supporting Justified Belief Rule* tells you this much: if *any* of your beliefs is included in both books, it's because there's something in both books that supports it. You start to look for connections between the entries. You discover that you can group the entries into categories like this: 1.43

- Entries that fit with a significant number of other entries and do not conflict with any other entries.
- Entries that conflict with other entries and are not supported by a significant number of entries.
- Entries that neither conflict with other entries nor fit with other entries.
- Entries that fit with a significant number of other entries but also conflict with other entries.

According to the *Supporting Justified Belief Rule*, the entries that fit into the second and third categories won't be justified. You won't expect to find these entries in *Your Book of Justified Beliefs*. The fourth category is tricky. On the one hand, some of these entries might receive strong support from other entries and so you might think that the conflict doesn't really threaten them. Some of these entries might receive weak support and look bad in light of well-supported entries. Let's set these aside for the time being.

The best candidates for entries in *Your Book of Justified Beliefs* will be those in the first group – viz. entries that fit with a significant number of 1.44

other entries and do not conflict with any other entries. Question: could it be that *all* it takes for a belief to be justified is for it to fit into the first category? Could mutual support between beliefs be all that's required for these beliefs to be justified? This is indeed what the coherentist thinks. As Catherine Z. Elgin (1996) states the idea, beliefs that are justified are parts of a system where the parts are "reasonable in light of one another" (1996, p. 13).

1.45 There is are two key components to this core idea: (i) items that *aren't* contained in *Your Book of Beliefs* simply won't have a direct bearing on whether beliefs that belong to a coherent system are really justified or not; and, second, (ii) justified beliefs are justified *because* of their place in a system of mutually supporting items. Instead of thinking of your justified beliefs as forming a structure like a tower or pyramid with foundational beliefs at the bottom and inferential beliefs at the top, think about your system of justified beliefs as forming a piece of woven cloth. The strength of a piece of woven fabric has all to do with the interlocking warp and weft strings. It doesn't require any unsupported supporters.

1.46 As you examine your beliefs, you might find that some beliefs aren't supported by any further beliefs. These beliefs, according to the coherentist, lack the kind of support required for justified beliefs. There is not some other source of rational support that isn't some further belief. As Donald Davidson remarked, "nothing can count as a reason for holding a belief except another belief" (1986, p. 141). The coherentist will say that there are various causes of our beliefs (e.g. experiences, sensations, apparent memories, etc.), but will insist that it's just relations between beliefs that determine whether they're justified.[29]

1.47 Even the critics of coherentism will acknowledge that there are cases where coherence seems to play an important role in the justification of our beliefs, but the crucial question isn't whether the overall coherence of a system of beliefs plays *some* role in the justification of belief, but whether the justification of our beliefs could be wholly determined by the coherence of the system. Coherentists like to think of justified beliefs as part of a web of belief that has a sufficiently high degree of coherence, in part because we cannot divide the parts of a web into parts, isolating the foundations and distinguishing them from the superstructure. In a web, every part is supported by the other parts, and every part lends its support to the structure as a whole.

---

[29] Ernest Sosa (1980, p. 8) refers to this general position – that justification is a matter of relations between beliefs – as an Intellectualist Model of Justification.

Unsurprisingly, coherentism's critics object to the view on the grounds 1.48
that it fails to recognize the role that things external to the web of belief play in the justification of the beliefs that constitute the web. The coherentist doesn't look *at all* beyond the web of belief for further support that would justify the beliefs bound up in the web. But shouldn't she do so?

If coherentists wants to convince us that our justified beliefs are justified 1.49
because they cohere with each other, they need to show that the beliefs that provide rational support for our beliefs derive their justification exclusively from further beliefs, and not *from anything located outside the circle of belief*. If they don't, there will always be that nagging feeling that some of the justificatory work is done by intuition, experience, testimony, or something outside the circle of belief.

An example should help to make this worry vivid. Imagine we are play- 1.50
ing a game in which your friend places something on a platter, covers it with a silver cloche, and lifts the cloche with a flourish so that you can see what's on the platter. Before your friend lifts the silver cloche, you have no beliefs at all about what's on the silver platter. (For all you know, it could be anything small enough to fit under a cloche, from a battery to a coin to a piece of cheese.) After the reveal, everything changed – there's a tomato! You quickly came to believe that the thing on the platter was a tomato. Let's suppose that that's *all* you came to believe and let's suppose that you didn't just *believe* that the thing on the platter was a tomato. Let's suppose that you *knew* that it was and so *justifiably* believed that it was.

If this is a plausible description of what happens, we have the makings of 1.51
a good objection to coherentism:

Isolation Objection

P1. The belief that the object is a tomato couldn't be justified before the reveal.
P2. The belief that the object is a tomato could be justified after the reveal.
P3. difference in justification is a normative difference.
P4. If there is a normative difference between beliefs formed before and after the reveal, there must be some further difference between the beliefs that accounts for this normative difference.
C1. There must be some further difference between the beliefs formed before and after the reveal that accounts for this difference in justification before and after the reveal.
P5. According to the coherentist, the only difference between beliefs that could account for a difference in justification is how well they cohere with the rest of the believer's beliefs.

P6. The belief that the object is a tomato coheres with the rest of the subject's beliefs equally well before the reveal and after it.

C2. Thus, if coherentism is true, then there is no difference between the beliefs formed before and after the reveal that could account for the relevant difference in justification before and after the reveal.

The crucial point is this. Prior to the reveal, the belief that the object is a tomato wasn't supported by other beliefs. (You might have had good reason to think *something* would be under the cloche, but you didn't have good enough reason to believe that it was a tomato, a fruit, something red, etc.) When the tomato was revealed, there was a short time when your beliefs stayed the same but your experiences changed. It's only when there's a difference in your *experience* that we think that you're in a position to justifiably judge that the object is a tomato. It's worth emphasizing that what changes here and seems to account for the fact that you are now in a good position to judge that it's a tomato on the plate is your *experience*, not your *beliefs*. Thus, while it might seem to you that something of great significance changed when your experience changed, there's nothing that the coherentist can appeal to in trying to explain why it's a consequence of the reveal and the experience of the tomato that you can now justifiably judge the object to be a tomato.

1.52 Might the preceding line of objection against the coherentist be too quick? Here's a natural line of response. In setting up the example, you've been asked to imagine that only *one* new belief is formed as a consequence of the great reveal. But perhaps *that* is psychologically implausible. Wouldn't we expect subjects to form an additional belief, such as the belief that the thing on the plate looks like a tomato?[30] If we have *two* beliefs here, couldn't the coherentist say that these two beliefs are mutually supporting? Couldn't she say that the belief that the thing is a tomato supports the belief that it looks like a tomato, and that the belief that it looks like a tomato is something that supports the belief that it is a tomato? If she said that, she could say that there *is* something that changes after the great reveal. Before that,

[30] This line of thinking could be further developed so as to indicate that your belief that the *singular proposition* "There is a tomato" is true, after the reveal, will accompany not only other demonstrative singular propositions (e.g. such as that *the thing* on the platter looks like a tomato) but also *general propositions* – for example, that something is on the table. Our response to the worry (expressed without reference to general propositions) applies *mutatis mutandis* to a version of the worry that included general propositions. For discussion about the difference between the two, see Fitch and Nelson (2016).

she didn't have any belief that supported her belief that the thing is the tomato. After that, however, she did. She formed the beliefs that the thing is a tomato and that it looks like one concurrently, and each supports the other.

But even if the coherentists said this, it wouldn't get them out of the jam. 1.53
Suppose that you were playing this game with a friend. Upon seeing the tomato, you spontaneously formed these (allegedly) mutually supporting beliefs:

1. This looks like a tomato. This is a tomato.

Your friend, let's suppose, formed these beliefs: 1.54

2. This looks like a lemon. This is a lemon.

Now, we're not supposing that your friend suffered from some sort of illu- 1.55
sion or hallucination. They had an experience indistinguishable from yours. We're not supposing that they're confused about how tomatoes and lemons look. We're also not supposing that you've shared your answers yet. You spontaneously judge that the beliefs in (1) are correct, and your friend spontaneously judges that the beliefs in (2) are correct. It's surely possible for one's beliefs to fail to "match" one's experience and for one to fail to notice this. Suppose that such a mistake is what happened in the case of your friend's assessment of the fruit in plain view.

Yours and your friend's sets of beliefs are equally coherent. Thus, from 1.56
the perspective of coherentism, there are no grounds for saying that your beliefs are better justified than your friend's beliefs. And yet it seems that there's a clear difference between your beliefs, and that your beliefs are better justified than theirs. This is a different normative difference from the one we started with, and it doesn't look like the coherentist can account for this difference.

It seems that the coherentist's fixation on the internal relations between 1.57
beliefs leads them to overlook the rational significance of mental factors external to belief (e.g. relations between beliefs and experiences). Moreover, it seems that a natural story about how the beliefs in (1) are justified is one that adverts to experience. Your beliefs are justified and your friend's beliefs are not because your beliefs fit your experiences and theirs do not. *This* difference is *not* a difference in terms of how coherent your beliefs are. This factor plays no role in filling the pages of *Your Book of Beliefs*, but this just seems to be an indication that there's more to the explanation as to how

your beliefs are justified than what's contained in that book. Perhaps we cannot really tell which of your beliefs belong to the book of *Your Justified Beliefs* until we know something about your experiences and how they fit with your experiences.

1.58 We didn't need perceptual beliefs to make the point. The point could have been made equally well using introspective beliefs, the beliefs you form straight off about your own mental life. And, indeed, such an introspective example is offered by Ernest Sosa, in his famous paper "The Raft and the Pyramid" (1980). Consider this passage, in which Sosa poses the following thought experiment:

> Thus take my belief that I have a headache when I do have a splitting headache, and let us suppose that this *does* cohere within my present body of beliefs … such a belief may well have relevant relations of explanation, logic, or probability with at most a small set of other beliefs of mine at the time: say, that I am not free of headache, that I am in pain, that someone is in pain, and the like. If so, then an equally coherent alternative is not far to seek. Let everything remain constant, *including* the splitting headache, except for the following: replace the belief that I have a headache with the belief that I do *not* have a headache, the belief that I am in pain with the belief that I am *not* in pain, the belief that someone is in pain with the belief that someone is *not* in pain, and so on. I contend that my resulting hypothetical system of beliefs would cohere as fully as does my actual system of beliefs, and *yet my hypothetical belief that I do not have a headache would not therefore be justified*. What makes this difference concerning justification between my actual belief that I have a headache and the hypothetical belief that I am free of headache, each as coherent as the other within its own system, if not the actual splitting headache? But the headache is *not* itself a belief nor a relation among beliefs and is thus in no way constitutive of the internal coherence of my body of beliefs. (1980, p. 19, italics added)

1.59 Sosa's thought experiment offers reason to doubt that the justification for introspective beliefs such as that you have a headache right now derives from facts about how your beliefs are related to one another. This is all thse more reason to see why the *Isolation Objection* is a pressing one in light of the coherentist's claim that the only relevant difference between justified and unjustified beliefs is how well they cohere with the rest of the believer's beliefs.

1.60 The intuition that underwrites the *Isolation Objection* is related to another influential objection to coherentism. Some of the clearest cases of irrational belief are cases in which someone is caught in the grips of delusion or subject to brainwashing. It doesn't matter whether our example

involves a cult member brainwashed into believing that billions of years ago rational beings navigated the universe in spaceships that looked very similar to the cars of the 1950s or whether our example involves someone who firmly believes that their loved ones have been replaced by impostors.[31] While the beliefs of such believers seem to be paradigmatic cases of irrational belief, it doesn't seem that we can account for the irrationality of such beliefs in terms of considerations of coherence. We want to say that our beliefs are rational, theirs are not, and that it's clear that there's a significant normative difference between them, but this difference cannot be traced to something like a degree of coherence that our beliefs display that theirs lack or the presence of incoherence that their beliefs display that ours do not. Part of what's so disturbing about subjects like this, subjects we'd describe as "having lost touch with reality," is that their beliefs are often chillingly coherent. The most salient difference between our beliefs and theirs is that our beliefs are tethered to reality because they are properly responsive to new experiences. Unfortunately for the coherentists, they cannot straightforwardly accommodate this point, as they see justification as having all to do with relations between beliefs.[32]

1.5 Foundationalism

The infinitists and coherentists try to account for the possibility of justified belief in terms of the rational support provided by more justified beliefs. On this view, the justification for any justified belief is derivative in the sense that it derives the necessary rational support from further justified beliefs. The coherentists and infinitists disagree about how supporting beliefs have to be structured to ensure that justified beliefs are justified, but they agree that stopping the justificatory regress doesn't involve any belief that (i) can justify further beliefs and that (ii) does not derive its justification from any further belief. These beliefs, which have been called *properly basic*, 1.61

[31] For helpful discussions of irrationality and delusion, see Bortolotti (2014) and Sacks (1985). The example of people who believe that there had been spaceships shaped like cars is taken from Wright (2013).

[32] Note that some self-described forms of coherentism maintain that coherence cannot justify beliefs from scratch but maintain nonetheless that coherence can justify beliefs that already have some initial degree of justification (even if miniscule) from something other than coherence. As Olsson (2014, Section 1) observes, however, such views might be better described as *weak foundationalism* as opposed to coherentism.

foundational, *non-inferentially justified*, and *immediately justified* beliefs, are, according to the foundationalist, epistemically essential. Without them, none of our beliefs could be justified.

1.62 Foundationalists would say that we should modify the *Supporting Justified Belief Rule* to allow for properly basic beliefs:

Supporting Justified Belief or Non-Doxastic Justifier Rule: an entry in *Your Book of Beliefs* gets to be an entry in *Your Book of Justified Beliefs* iff it is adequately supported by more justified beliefs or *something else*.

1.63 As the foundationalist sees things, every justified belief will either derive its justification from a set of justified beliefs that provide adequate support *or* derive its justification from something else. The foundationalists will disagree among themselves about what this something else might be. The crucial points are these:

- First, all justification will ultimately derive from something outside of the circle of belief. This justification will then flow "upwards" from the non-inferential beliefs to other beliefs through inference.
- Second, this source of justification can sometimes provide all the justification needed for a belief.

1.64 If we're going to settle the debate between the infinitists, coherentists, and foundationalists, we'll have to settle the question as to whether there can be properly basic beliefs. Let's look at two arguments for foundationalism before turning to objections.

1.65 Perhaps the most influential argument for foundationalism is the *Regress Argument for Foundationalism*:[33]

Regress Argument for Foundationalism

P1. There are some justified beliefs.

P2. If there are some justified beliefs, either some of these beliefs are justified without requiring support from further beliefs or they are all justified only because of the support provided by further justified beliefs.

C1. Either some of the justified beliefs are justified without requiring support from further beliefs or they are all justified only because of the support provided by further justified beliefs.

[33] Note that the Regress Argument, understood as an argument for foundationalism, is distinct from the more general Regress Problem canvassed in Section 1.1.

P3. If all of the justified beliefs are justified only because of the support provided by further justified beliefs, the set of required supporting beliefs will either form a circle or extend back infinitely.
P4. Neither circular structures of justificatory support nor infinite chains of justified beliefs can provide the support required for a belief to be justified.
C2. So, not all of the justified beliefs are justified only because of the support provided by further justified beliefs.
C3. So, some justified beliefs are justified without requiring support from further beliefs.

The basic argumentative strategy is simple. We list the three possible non-skeptical responses to the regress argument (i.e. infinitism, coherentism, and foundationalism). On the assumption that the objections to infinitism and coherentism outlined above are decisive, we conclude that the remaining view that hasn't been eliminated must be the right one. The objections discussed above are supposed to provide the support for P4. 1.66

Now, you might wonder about the argument's starting point, P1. In this discussion, it was assumed by all sides that some belief could be justified. And so the *Regress Argument for Foundationalism* simply tries to trace out an implication of this non-skeptical assumption. Thus, the *Regress Argument* shouldn't be thought of as an argument *against* skepticism. Rather, it should be thought of as an argument that purports to show that there must be two kinds of justified belief *if* the skeptic is wrong and some of our beliefs are justified. We'll be discussing the viability of skepticism in more detail in Chapter 11. 1.67

The *Regress Argument* is not, it should be noted, the only viable rationale for foundationalism. A second rationale is a kind of argument from cases.[34] When you think about beliefs about how you feel right now (tired? sad?), what you're trying to do or what you're doing (reading? tapping your feet?), what you're thinking about or imagining (epistemology?), or what the sum of two small numbers is, it is very difficult to imagine what propositions you'd have to rely on to justifiably form a belief about these matters. If you're typing (or trying to type), it seems you can know that that's what you're up to "straight off," in the sense that you form these beliefs, seemingly unimpeachably, without first explicitly considering other things. What *evidence* would you appeal to in order to justify your belief that you are trying to type? 1.68

[34] See Pryor (2014, p. 206).

1.69 It seems that in these kinds of cases at least, you can simply tell that you're tired or sad, that you're trying to type or tap your feet, that you're thinking about epistemology, or that the sum of two twos is four. If pressed, you *could* offer some sort of argument in support of these claims, but the idea that you ran through such an argument (consciously or not) in order to form a reasonable belief about these matters seems to misrepresent your epistemic position. Maybe *your friend* would have to consult some evidence to decide whether you were typing in your office or trying to type (e.g. gather witness statements, listen for the clicking and tapping, etc.), but your situation is very different from your friend's if you're the one trying to type. Similarly, you might try to gather evidence to determine whether you are tired; but wouldn't this be in a sense superfluous? Can't you just think about it and work it out without having to argue from some further assumptions about how red your eyes are or how much sleep you had the night before?

1.70 To understand the foundationalist's proposal, an analogy should be helpful. Consider this sudoku grid:[35]

	3	8	7	9	2	5	1	
	6	9	4		1	7		
2						4		
		4		1			6	
9	1						8	7
	2			8		1		
				7	3			1
		7	1			2	9	
	4	3		6	9	8	7	

1.71 Some of the boxes you start with will be empty. Some will already contain a number. The boxes that contain numbers from the start are given. You don't need to engage in any sort of reasoning to know that it's a 3 that goes in the second box from the left in the top row. That box is given to you for free. So are all the other boxes that contain numbers. The only rational basis for adding more numbers to the grid will derive other numbers from the

[35] We assume our readers will be familiar with sudoku. If you are not, you can check out the rules here: https://sudoku.com/how-to-play/sudoku-rules-for-complete-beginners.

numbers given. If there is no reasoning that is available to you that takes you from the numbers given to some conclusion about what number to put into an empty box, you simply cannot know what goes in there and cannot justifiably judge that some number gets in there. *If* nothing is given to you for free, you simply could not have any justified beliefs about what number would go where.

The foundationalist thinks that something similar is true when it comes 1.72
to the justification of any belief. Without non-inferentially justified beliefs (i.e. givens, or freebies, if you like), you couldn't rely on reasoning to provide you with any justified beliefs. The rational support for any justified belief has to trace back to the support provided to a non-inferentially justified belief. (In the limiting case, that belief will itself be one of the non-inferentially justified beliefs.) Happily, the foundationalist says, we *do* have some non-inferentially justified beliefs. They are justified even if we cannot find support for them in other justified beliefs we have, and they are the foundation that accounts for all the derivatively justified beliefs we form by reasoning well from these starting points.

1.6 Objections to Foundationalism

It might be useful to think about how far we can push this analogy, because 1.73
it will help us see why many philosophers have been critical of foundationalism, and help us see how foundationalists should respond to this criticism in fleshing out their view.

Thus far, foundationalism – as we've stated it – is a purely structural pro- 1.74
posal. It says that (i) every chain of justified beliefs *must* include at least some non-inferentially justified belief and (ii) every inferentially justified belief must derive its justification from non-inferentially justified beliefs. If this view is correct, nothing gets into *Your Book of Justified Beliefs* unless it derives its justification from another justified belief via inference or is non-inferentially justified and derives its justification from something other than another belief. We haven't yet said anything substantive about the *nature* of these non-inferentially justified beliefs, because we haven't said what these beliefs are about, what supports them, or how what supports them ensures that they have the right properties to be justified.

While the sudoku analogy can help us understand the sort of *structure* 1.75
that the foundationalist thinks has to be in place in order to have justified beliefs, it does highlight one of the features that some critics of foundationalism find objectionable. In sudoku, the given entries that serve as the

foundation for all subsequent thinking about the puzzle are beyond rational scrutiny and cannot be revised. (The given entries are simply *there*, in sudoku, and it's built into the game that there's no room to doubt them.) Does the foundationalist really think that the foundation for all our thinking about the world rests on foundations that we have no room to doubt? Thinking that such beliefs are in short supply, critics of at least one version of strong foundationalism could argue as follows:

Argument from Defeasibility

P1. If there are non-inferentially justified beliefs that are like the numbers given at the start of the puzzle, then you cannot form correct beliefs about the world by reasoning well from your justified beliefs in such a way that you're led to suspend judgment about whether one of these properly basic beliefs is true, and you cannot form the correct beliefs about the world by reasoning from your justified beliefs to the conclusion that one of these beliefs is false.

P2. However, none of our beliefs are immune to this sort of process of rational revision.

C. Thus, it isn't true that there are non-inferentially justified beliefs that are like the numbers given at the start of the puzzle.

1.76 To understand the *Argument from Defeasibility*, we need to understand what it means to say that justification is defeasible. In short, "defeasible" literally means "able to be defeated," or diminished. The kind of thing that can potentially defeat the justification you have for believing something is new information you might acquire. More specifically, this happens when the *rational force* of whatever evidence served to justify you holding a belief is *undermined* and *overridden* by you learning new relevant information.[36] The terms "undermining defeater" and "overriding defeater" are used to pick out two different ways that you can "lose" the justification you have for believing something.

1.77 To understand the difference between undermining and overriding defeat, think about promises. If you promise to meet a friend, that's a good reason to meet them. If you have no reason to do anything else, that reason might be decisive in that it might determine what you should do, all things considered. If, however, you make a promise to meet a friend and you then

[36] For a discussion of defeat in terms of *warrants* rather than in terms of evidence, see Lyons and Graham (2020).

encounter a child who needs your help, the reason you have to meet a friend could be overridden by a weightier reason, to render aid. Alternatively, if your friend calls the meeting off, the reason you had could lose its rational force because the ground of the reason has been cut away. In this case, the reason is undermined.[37]

1.78 Something similar happens with belief. The testimony of a friend might give you a good reason to believe that, say, they plan on staying around to have coffee with you. Seeing them slipping out a back entrance to the parking lot might override that, as it's strong evidence that they're sneaking away for some reason. In cases of *overriding* defeat, the justification provided by evidence for p is defeated or lost because you acquire strong evidence for $\sim p$. In tasting the orange juice, you might judge that there's something wrong with it because of a funny taste. You remember that you've just brushed your teeth and remember that the minty toothpaste affects how things taste to you. Here, the justification provided by your evidence is *undermined*. The funny taste is typically some reason to think that there's something wrong with the juice, but there's some additional evidence in the form of your knowledge that you've just brushed your teeth that you need to take account of. The *combined* evidence doesn't support the hypothesis that there's something wrong with the juice, not even if a part of that evidence (i.e. the way it tastes) could have supported that hypothesis that there's something wrong with the juice if only you didn't have the additional evidence that brushing your teeth affects the way things taste to you.

1.79 The *Argument from Defeasibility* challenges the idea that there are non-inferentially justified beliefs by challenging the idea that there are indefeasibly justified beliefs. Beliefs that are defeasibly justified are things that you can rationally reject or suspend judgment on as new evidence comes in. In the case of sudoku, there's no process that should lead you to believe that the rational way to solve the puzzle is to change the numbers given at the start of the puzzle. If non-inferential beliefs are akin to the numbers given at the start of the puzzle, shouldn't we think of these beliefs as rationally unrevisable? If so, since every belief is rationally revisable, shouldn't we think that there aren't any non-inferential beliefs?

[37] See Pollock (1986, pp. 29–30, 37–58) for the classic presentation of defeaters in epistemology.

1.80 What can the foundationalists say in response? They have two salient options which track different ways of characterizing the relationship between foundational beliefs and defeasibility:

Option 1: the foundationalist might agree that foundational beliefs have to be indefeasibly justified, and they might defend their view by trying to show that there are such beliefs and that there is a sufficient stock of such beliefs to serve as the foundation for all of our knowledge.

Option 2: the foundationalist might deny a foundational belief has to be indefeasibly justified. As they see it, so long as a belief is supported by something that isn't a belief and the support this belief receives isn't defeated, this could be good enough to justify a belief. Much as a promise, say, *can* justify an action in the absence of defeating reasons, perhaps an experience – or perhaps a certain causal source – *can* justify a belief in the absence of defeaters.

1.81 We may call foundationalists who opt for Option 1 *classical foundationalists* and those who opt for Option 2 *modest foundationalists*. The classical foundationalist simply embraces the idea that our foundationally justified beliefs have the two features that the given numbers in sudoku have, which is that they are (i) beyond rational revision as well as (ii) the foundation for all justified belief. The modest foundationalist, by contrast, rejects the idea that these two features come together. As they see it, the sudoku analogy is useful, but only within reasonable limits. As they see things, an important difference between, say, our beliefs about the external world and our beliefs about the grid is that the former can be justifiably held on the basis of reasons that provide only defeasible support.

1.82 We'll have more to say about the respective virtues of the classical and modest foundationalism in Chapter 2 (in connection with perception) and in Chapter 3 (in connection with the particular and vexed case of a priori justification). The important point to take from the present discussion is that there are two ways for the foundationalist to respond to the *Argument from Defeasibility* and thus two ways to flesh out the details of that view.

1.83 Whereas the *Argument from Defeasibility* invites us to take a side in a disagreement between classical and modest foundationalists without forcing us to abandon foundationalism altogether, a further line of argument poses a serious threat to foundationalism in any form.

1.84 What distinguishes the foundationalists from the critics of foundationalism is a commitment to the possibility of non-inferentially justified belief. It should be possible, on the foundationalist model, for a belief, *p*,

to be justified in virtue of possessing some feature, F, even if the subject doesn't have any opinions about whether her belief that *p* even *has* this feature F.[38]

And here, according to BonJour (1978), is the source of the problem. For 1.85
a belief to be justified, it is supposed to be properly connected to the truth. Presumably, this is what F does. The possession of F ensures that beliefs that are F are properly connected to the truth. Here's the problem. BonJour thinks that it's important to the very idea of a justified belief that such a belief is *responsibly* held. To be responsibly held, however, he thinks that the believer would have to be cognizant of the fact that her beliefs have this feature F. This, however, creates trouble for the idea that the relevant belief is *immediately* justified. To be cognizant of the fact that the belief has this feature F, the subject would have to have an opinion – some *further* belief – about whether her belief had this feature. But *this* is incompatible with the idea that the relevant belief's justification doesn't derive, in part, from the subject's other beliefs.

We can state the crux of BonJour's argument as follows: 1.86

Doxastic Ascent Objection

P1: if some belief (e.g. B1) is non-inferentially justified, it must be possible for B1 to be justified simply because it has some feature F (i.e. justified in such a way that B1's justification does not derive from any further beliefs the believer has about B1).

P2: it is not possible for B1 to be justified simply because it has some feature F because justified beliefs are responsibly held and it's not responsible to hold B1 unless you recognize that B1 has F.

C: B1 cannot be non-inferentially justified. (And what goes for B1 goes for B2, B3, B4, etc.)

How powerful is this objection? Notice that the objection rests on two 1.87
crucial assumptions:

Assumption 1: justified beliefs are responsibly held beliefs.

[38] According to some foundationalists, the relevant property here is simply the truth of the belief. On such views, foundational beliefs are *self-justifying*. According to Turri and Klein (2014, pp. 6–7), this kind of position is usually associated with what they call "traditional" foundationalism, whereas those they term *meta-justificatory* foundationalists deny that the property doing the justifying work for foundational beliefs must be the truth of such beliefs.

Assumption 2: a belief isn't responsibly held unless we have beliefs about the features of this belief (e.g. beliefs about what's good about this belief).

1.88 Assumption 1 seems harmless enough. One way to show that a belief isn't justified is to show that it isn't responsible to have an opinion about the issue.[39] It's Assumption 2 that seems problematic. Why should we think that responsibility requires meta-beliefs?

1.89 It helps to remember the kinds of things that foundationalists might offer in giving a substantive specification of F. They might say that if you have a spontaneous visual belief about your surroundings or a spontaneous introspective belief about what you're currently thinking about, these beliefs will be justified non-inferentially. When you think about good candidates for F, you're supposed to think of the things that would be good resources for settling a question. You might think that to believe responsibly is just to use the best resources for settling a question, in which case there'd be nothing more to responsible believing than forming F-beliefs. To responsibly settle the question as to whether we're low on milk, you check the fridge. To responsibly settle the question as to what sort of mood you're in, you introspect. It doesn't seem to be a failure on your part that would merit the charge of irresponsibility if – after checking the fridge and seeing that it's empty – you don't continue to think about the reliability of vision. Isn't checking the fridge and judging straight off that there's no milk hiding in the empty fridge a perfectly responsible way of settling that question?

[39] At least, this assumption seems innocent enough provided we are taking responsible beliefs to be those beliefs that are not irresponsibly held. Some philosophers build further requirements into the notion of a responsible belief, beyond it not being held irresponsibly. Linda Zagzebski (1996) requires that a responsibly held belief is in some way praiseworthy – viz. attributable to some kind of intellectual virtue on the part of the subject. It is more contentious whether responsible beliefs must be not merely not-irresponsible but also praiseworthy. Sosa (2017, pp. 147–149), for example, suggests that the belief one has that the room has just gotten dark, immediately as the light goes off, is not something that can be credited to one's agency, given that in such circumstances, one couldn't help but to form such a belief (e.g. if one tried to believe the room was not dark, one would fail). Putting this all together: *if* the requirement that beliefs be responsibly held is unpacked in a robust way so as to involve praiseworthiness on the part of the agent, Assumption 1 looks less plausible. If read as a minimal claim to the effect that justified beliefs cannot be irresponsibly held, the claim looks beyond reproach.

Recall again the argument from cases. The intuitions that underwrote 1.90
that argument were supposed to show that there were clear cases where a person can come to have knowledge or justified belief "straight off," without having to do any further reasoning. They simply rely on introspection (i.e. reflecting on your own mental states) or perception, say. Part of what accounts for this intuition seems to be that we see this kind of openness to the deliverances of introspection or perception as the manifestation of epistemic responsibility. If we didn't, we presumably wouldn't find the intuition gripping. What this suggests is that the intuitions that underwrite this argument speak directly against the crucial assumption in BonJour's argument (Assumption 2).

1.7 Conclusion

The epistemic regress problem arises when we try to identify the features 1.91
that distinguish justified from unjustified beliefs. The *Principle of Sufficient Difference* tells us that there must be some further difference between these beliefs that accounts for the fact that the justified ones are justified and the others aren't. The natural place to look to understand this difference is to the kind of rational support these beliefs enjoy. Clear cases of justified belief are cases in which further beliefs provide strong support for those beliefs. Clear cases of unjustified belief are cases in which further beliefs lack such support. As we've seen, there is disagreement about the *structure* of this support. The coherentists and infinitists don't think that there are (or could be) foundational beliefs that terminate the regress, justified beliefs that can justify further beliefs without themselves being justified by any further beliefs. The foundationalists, for their part, don't think that any putative structure of justification could really justify the beliefs embedded in that structure unless there are foundational beliefs that can transmit that support to further elements in the structure via inference.

While the infinitists, coherentists, and foundationalists all have to deal 1.92
with serious objections, the standard objections to foundationalism seem most clearly surmountable. In the chapters to come, we'll look at some of the different ways that the foundationalist view might be fleshed out. Most contemporary foundationalists believe that our perceptual beliefs are among the foundational beliefs, so we'll look at some debates about the nature of perceptual experience in the next chapter and discuss the significance of these debates for the foundationalist project in the chapter after that.

Free Internet Resources

Internet Encyclopedia of Philosophy, http://www.iep.utm.edu. See entries for Foundationalism (Ted Poston), Infinitism in Epistemology (Peter Klein and John Turri), Coherentism in Epistemology (Peter Murphy), Ancient Greek Skepticism (Harald Thorsrud).

Stanford Encyclopedia of Philosophy, http://plato.stanford.edu. See entries for Foundationalist Theories of Epistemic Justification (Ali Hasan and Richard Fumerton), Coherentist Theories of Epistemic Justification (Erik Olsson).