

# INFINITISM AND PRACTICAL CONDITIONS ON JUSTIFICATION

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**ABSTRACT:** This paper brings together two recent developments in the theory of epistemic justification: practical conditions on justification, and infinitism (the view that justification is a matter of having an infinite series of non-repeating reasons). Pragmatic principles can be used to argue that, if we're looking for an 'objective' theory of the structure of justification – a theory that applies to all subjects independently of their practical context – infinitism stands the only chance at being the correct theory.

**KEYWORDS:** infinitism, pragmatic encroachment, reasons, justification

According to epistemic infinitism, as I will construe the view, in order for your reasons to justify some proposition for you, your reasons must constitute an infinite set. In this paper I argue that recent work on so-called 'pragmatic encroachment' in epistemology provides the infinitist with a novel way to argue for her view. To set the stage for this argument I'll first say a bit about what it means for a set of reasons to 'justify' a proposition.

## **I. Three Seemingly Incompatible Principles**

I soon will have difficulty breathing. How do I know? I am allergic to peanuts and I just ate a peanut butter sandwich: I still have the taste in my mouth. Allergies to peanuts – mine in particular – result in difficulty breathing shortly after the ingestion of products containing peanuts; and, of course, peanut butter – an essential component of peanut butter sandwiches – contains peanuts.

This is an incomplete list of the reasons I have bearing on the proposition that I will soon have difficulty breathing. Not mentioned in the list are various reasons having to do with my memories of consuming the sandwich and my own peanut allergy and reasons having to do with induction and the stability of laws of nature. If we were so inclined we could distinguish between those reasons that are 'background assumptions' and those reasons that are more operant in the formation of my belief. Such niceties aside, it is justified for me that I soon will have difficulty breathing. I mean the 'justified' here in an 'outright' sense; it's not just that there is some evidence that I soon will have difficulty breathing. There's an attitude I should have toward that proposition – the attitude of outright belief.

What justifies that proposition for me are the reasons I have that bear on the proposition that I soon will have difficulty breathing.

The set of reasons I have bearing on that proposition is not the only set that could justify that proposition for me. Here's another: a very strong man is approaching me. He just told me that he is going to strangle me and he is an honest man. He has a motive to strangle me: I took the parking space he'd been waiting to pull into. Strangulation, when done properly, cuts off a person's air supply, and the man approaching me is a man who can strangle properly. These are not reasons I have, but if I did have those reasons, rather than the set of reasons I do have, it would similarly be justified for me that I soon will have difficulty breathing.

Finally, there are sets of reasons such that, even if I had the reasons in those sets, it would not be justified for me that I soon will have difficulty breathing. For example, that I'm not in the pool – I'm 10 feet away – and that I am an excellent swimmer: if the reasons in this set exhaust the reasons I have bearing on the proposition that I soon will have difficulty breathing, then it is not justified for me that I soon will have difficulty breathing. Of course, this small set of reasons could be part of a larger set of reasons bearing on  $p$  that would confer justification for me if I had the reasons in the larger set (add, for example, a reason to the effect that I am unsupported above the pool and have a cramp in my leg). But if the smaller 'close to the pool' set exhausts the reasons I have bearing on the proposition that I soon will have difficulty breathing, it is not justified for me that I soon will have difficulty breathing.

The type of theory that tells us how propositions come to be justified for you by sets of reasons is normally called a theory of the structure of justification. The above observations suggest that such theories have at least two tasks. First, the *structure*-task: tell us what distinguishes the 'peanut allergy' and 'angry strangler' structures from the 'close to the pool' structure, and what distinguishes the 'close to the pool' structure from the larger structures of which the 'close to the pool' structures are a part. More generally, distinguish between those sets – or 'structures' – of reasons bearing on  $p$  that are potentially justification-conferring structures and those that aren't.

Second, the *relation*-task: tell us what relation is such that, when you stand in that relation to a potentially justification-conferring structure, the structure is yours. The 'angry strangler' structure is not my structure because I am not related to that structure in the right way. For one thing, my epistemic position with respect to many of the reasons in the structure is too weak: I may even know that many of the reasons are false. This is not the case with respect to the reasons in

the ‘peanut allergy’ structure. With respect to those reasons, my epistemic position is very strong. We can suppose, even, that I know all of them to be true.

Some ways for a theory to fulfill the relation-task render the structure-task otiose. Suppose a theory says that a structure is yours just in case you have further good reasons for all the reasons in that structure and that the reasons in the structure are situated, for you, in a larger structure of reasons that, all-together, makes it the case that  $p$  is justified for you. If that is the way the theory fulfills the relation-task, then it is all too easy to fulfill the structure-task: all structures are potentially justifying structures. Even the ‘close to the pool’ structure, on this way of fulfilling the relation-task, justifies the proposition that I soon will have difficulty breathing. Any theory, then, can render the structure task otiose by loading the differences between justification-conferring and non-justification-conferring structures into the fulfillment of the relation-task.

That blurs the two different ways that a structure of reasons bearing on  $p$  can leave  $p$  unjustified for you – the way in which the ‘angry strangler’ structure does and the way in which the ‘close to the pool’ structure does. What we want out of a theory of the structure of justification is a specification of potentially justifying *complete* structures and a specification of the *intrinsic* relations you might bear to those structures such that those structures confer justification for you, where a relation is *intrinsic* just in case your standing in that relation to the structure isn’t even partially constituted by your standing in that relation to reasons bearing on  $p$  outside the structure.

When you stand in the right intrinsic relations to the reasons in a structure, say that you ‘have’ those reasons and that the structure is ‘yours.’ When a structure of reasons bearing on  $p$  is a potentially justification-conferring complete structure – when, were the structure yours,  $p$  would be justified for you – say that the structure ‘justifies’  $p$  and that  $p$  is ‘justified by’ that structure. On these senses of ‘justifies’ and ‘yours,’ theories of the structure of justification should all respect the following Justifying Structure Principle: for all structures of reasons (R), bearing on some proposition ( $p$ ), and subjects (you),

(Justifying Structure Principle) If R justifies  $p$  and R is your structure, then  $p$  is justified for you.

A reason *bearing on*  $p$  is a proposition such that your strength of epistemic position with respect to that proposition is relevant to your strength of epistemic position with respect to  $p$ . Some reasons bear on  $p$  only when situated in a structure of other reasons, and perhaps against background assumptions. That you just ate a peanut butter sandwich is not normally a reason bearing on the

proposition that you soon will have difficulty breathing, but it can be when situated in a structure that includes the proposition that you are allergic to peanuts.<sup>1</sup>

What is it for  $R$ , rather than some other structure,  $R'$ , to be your structure of reasons? Perhaps for  $R$  to be your structure is simply for you to have all the reasons in  $R$ . This would allow  $R$  to be your structure while you have defeaters for  $R$  and for  $p$ . Suppose  $R$  consists of the propositions that you just ate a peanut butter sandwich and that you are allergic to peanuts. Let  $p$  be the proposition that you soon will have difficulty breathing and suppose that  $p$  is justified by  $R$ . Both “you just ate a peanut butter sandwich” and “you are allergic to peanuts” are reasons you have bearing on  $p$ . If for  $R$  to be your structure is simply for you to have all the reasons in  $R$ , then, by the Justifying Structure Principle, it is justified for you that you soon will have difficulty breathing. But suppose “the peanut butter in the sandwich you just ate is ‘allergy-safe’” is a reason you have bearing on  $p$ . Then it is not justified for you that you soon will have difficulty breathing, which would make the Justifying Structure Principle’s consequent false. Therefore, for the Justifying Structure Principle to be true, that  $R$  is your structure must entail that you not only have all the reasons in  $R$ , but that the only reasons you have bearing on  $p$  are reasons in  $R$ . That the peanut butter in the sandwich you just ate is allergy-safe is a reason you have bearing on  $p$ . Because that proposition is a reason you have bearing on  $p$ ,  $R$  isn’t your structure, even though you have all the reasons in  $R$ .<sup>2</sup>

But when exactly *is*  $R$  your structure? Different kinds of theories might seek different kinds of answers to this question. *Objective* theories might seek for context-neutral answers: what epistemic relation is such that, necessarily, when a subject bears that relation to a justification-conferring structure,  $p$  is justified for that subject? *Subjective* theories might seek for context-dependent answers: what epistemic relation is such that, when you, in your specific practical context, bear that relation to a justification-conferring structure,  $p$  is justified for you?

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<sup>1</sup> This may require some background assumptions, like “peanut allergies tend to result in difficulty breathing soon after the consumption of peanut-products.” Alternatively, the proposition that you are allergic to peanuts should itself count as a background assumption. Either way, your structure of reasons includes both the proposition that you are allergic to peanuts and that peanut allergies tend to result in difficulty breathing soon after the consumption of peanut-products.

<sup>2</sup> In order for  $R$  to be your structure, need it only be the case that you have each reason in  $R$ ? Or must you have the conjunction of those reasons as well? There are lottery considerations, here, though not decisive ones. Nothing of substance hinges on it, and I leave the matter open.

Objective theories have this advantage: they apply to all subjects equally, regardless of practical context – independent of needs, goals, purposes, stakes, desires, hopes, and fears. There are some for whom this latter feature will seem like a disadvantage. Good epistemological theories, they will say, *do* take into account the particular practical contexts in which subjects find themselves. But they will say this, presumably, because they think there are no intrinsic epistemic relations and complete structures of reasons such that, necessarily, if you bear those relations to those structures, *p* is justified for you, no matter what your practical context is. We can think this, though, while agreeing that it would be a good thing if some objective theory were true and also agreeing that it would be valuable to figure out what the true objective theory is, if there is a true objective theory. And, of course, it's difficult to know whether some objective theory is true unless one first investigates what such a theory would say.

It's clear that many of the traditional theories of the structure of justification do strive to be objective. This may be partly because it has been thought that if two subjects in different contexts bear the same epistemic relation to the same structure, *p* will end up justified for both, or for neither. On that assumption, there is no fundamental difference between subjective and objective theories. But even if that assumption is false, it is still worthwhile to search for objective theories.

On objective theories, the 'having' relation is purely epistemic. Whether *p* is a reason you have, according to any objective theory, is determined solely by what intrinsic epistemic relations you stand in to *p*: two subjects who stand in the same intrinsic epistemic relations to *p* either both have it or neither do. The 'your' relation is also purely epistemic. Because whether a structure of reasons is yours depends only on your intrinsic epistemic relations to reasons bearing on *p*, two subjects who stand in the same intrinsic epistemic relations to all those reasons will share the same structure of reasons bearing on *p*. More formally, objective theories of the structure of justification are committed to the following Objectivist Presumption: for all subjects (you) and structures of reasons (R), there is an intrinsic epistemic relation (E) such that

(Objectivist Presumption) If you stand in E to R, then R is your structure.

Seemingly in tension with this Objectivist Presumption is recent work alleging a tight connection between knowledge and action. On these views, whether a subject knows or is justified is importantly related to what the subject cares about or is rational in doing or what sound practical reasoning is available to the subject or what practical reasons the subject has or what counterpossibilities

are salient to the subject.<sup>3</sup> To use (misleadingly) Jon Kvanvig's evocative phrase, there is 'pragmatic encroachment' in epistemology.

The reason for the 'misleadingly' parenthetical is that to affirm pragmatic encroachment, in the strict sense, is not just to affirm that there are conceptual connections between knowledge (or justification) and the practical. It's to affirm that knowledge (or justification) that *p* can come and go with changes only in your practical context – even if your epistemic position with respect to *p* remains constant. Some who have argued for conceptual connections between knowledge and the practical – e.g. Unger and Hyman – have not gone on to draw the more radical conclusions. Nonetheless, I lump their views in with the more recent 'pragmatic encroachers,' like Hawthorne, Stanley, and Fantl and McGrath, as far as the label goes. I do not include this stronger view as a condition on what I am labeling 'pragmatic encroachment' here. All I assume is the more modest claim – that, for example, what you know has consequences for what you should do.

Even among those who advocate such claims, there are differences in the details. For example, there are debates about whether knowing that *p* is necessary or sufficient for being rational to act on *p*.<sup>4</sup> Because I am interested in what lessons

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<sup>3</sup> Advocates include (among others) Peter Unger, "Two Types of Skepticism," *Philosophical Studies* 25 (1974): 77-96; John Hyman, "How Knowledge Works," *The Philosophical Quarterly* 49, 197 (1999): 433-51; Jeremy Fantl, Matthew McGrath, "Evidence, Pragmatics, and Justification," *The Philosophical Review* 111, 1 (2002): 67-94, and Jeremy Fantl, Matthew McGrath, *Knowledge in an Uncertain World* (Oxford: Oxford University Press, 2009); John Hawthorne, *Knowledge and Lotteries* (Oxford: Oxford University Press, 2004); Jason Stanley, *Knowledge and Practical Interests* (Oxford: Oxford University Press, 2005); and John Hawthorne and Jason Stanley, "Knowledge and Action," *Journal of Philosophy* 105, 10 (2008): 571-90.

<sup>4</sup> Hawthorne recommends a sufficiency condition for knowledge: "one ought only to use that which one knows as a premise in one's deliberations." (Hawthorne, *Knowledge and Lotteries*, 30) Stanley has a similar principle (which in his "Replies to Gilbert Harman, Ram Neta, and Stephen Schiffer," *Philosophy and Phenomenological Research* 75, 1 (2007): 201, he labels "KAP"): "one should act only on what one knows." (Stanley, *Knowledge and Practical Interests*, 9) Fantl and McGrath endorse necessary conditions on knowledge and the justification required for knowledge: "S knows that *p* only if S is rational to act as if *p*" (Jeremy Fantl, Matthew McGrath, "On Pragmatic Encroachment in Epistemology," *Philosophy and Phenomenological Research* 75, 3 (2007): 559) and "S is justified in believing that *p* only if S is rational to act as if *p*." (Fantl, McGrath, "Evidence, Pragmatics," 78) And, in a change of heart, Stanley ("Replies," 202) says, "I now think it was a mistake to emphasize KAP to the exclusion of other possible connections between knowledge and action," endorsing instead a "considerably less contentious principle that knowing that *p* is sufficient for acting on one's belief that *p*" (or, in other words, a "far less controversial claim that if one knows that *p*, it is

the core of the literature can teach us about the structure of justification, I will discuss mainly what seems to be the growing consensus among those who advocate knowledge-action connections – that, at the very least, the following Practical Condition on Knowledge is true: for all propositions ( $p$ ) and subjects (you),

(Practical Condition on Knowledge) you know that  $p$  only if you are rational to act on  $p$ .<sup>5</sup>

I recognize that the growing consensus among pragmatic encroachers is far from being the consensus among others, though much of the hostility to principles like the Practical Condition on Knowledge is directed either at the other direction of those principles or to the more radical contention that knowledge can come and go with changes merely in your practical situation. It is an interesting matter what the consequences of the more modest pragmatic principles might be, and that is what I investigate here.

What is it about knowledge that guarantees, as the Practical Condition on Knowledge states, that if you know that  $p$ , you are rational to act on  $p$ ? That you are rational to act on  $p$  does not follow from your believing that  $p$ . For you might believe  $p$  even if believing  $p$  is irrational for you, which would make your acting on  $p$  in some important way irrational. Nor is whether you are rational to act on  $p$  dependent on whether  $p$  is true.  $p$  might be false, though it is irrational for you to believe that  $p$  is false.  $p$  might be false though justified for you. In that case, you would be rational to act on  $p$ , though  $p$  is false. Finally, whether you are in a Gettier-type situation is irrelevant, in the sense intended, to whether you are rational to act on  $p$ : when you are in a Gettier-type situation, it is justified for you that the Gettier-type situation does not obtain. Whatever it is about knowledge that guarantees that you are rational to act on  $p$  when you know that  $p$ , it cannot be that you believe that  $p$ , that  $p$  is true, or that you are not in a Gettier-type

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rationally permissible to act on one's belief that  $p$ .” Hawthorne joins Stanley in arguing for both directions in their “Knowledge and Action.” And Hyman endorses both directions in his “How Knowledge Works”: “the fact that  $p$  cannot be  $A$ 's reason for doing something if  $A$  does not know that  $p$ ” (448) and “if  $A$  knows that  $p$  then the fact that  $p$  can be  $A$ 's reason for doing something.” (450)

<sup>5</sup> The expression “act on  $p$ ” is ambiguous between “use  $p$  as a reason for acting in accordance with  $p$ ” and “act in accordance with  $p$ .” I favor the latter.

situation. It must be that  $p$  is justified for you.<sup>6</sup> Therefore, if the Practical Condition on Knowledge is true, so also, plausibly, is a companion principle about justification:

(Practical Condition on Justification)  $p$  is justified for you only if you are rational to act on  $p$ .

Here, then, are three principles that seem to be in tension:

(Justifying Structure Principle) If  $R$  justifies  $p$  and  $R$  is your structure, then  $p$  is justified for you.

(Objectivist Presumption) If you stand in  $E$  to  $R$ , then  $R$  is your structure.

(Practical Condition on Justification)  $p$  is justified for you only if you are rational to act on  $p$ .

Here is an argument that these three principles are mutually inconsistent: first, because  $E$  is an intrinsic epistemic relation between you and  $R$ , then whether you stand in  $E$  to  $R$  can't vary with variations in non-epistemic features of your situation. Therefore, on the Objectivist Presumption, if you stand in  $E$  to  $R$ , then whether  $R$  is your structure can't vary merely with variations in non-epistemic features of your situation. Neither can whether  $R$  justifies  $p$  vary with variations in non-epistemic features of your situation, because whether  $R$  justifies  $p$  – whether  $R$  is a potentially justification-conferring structure – is an objective relation between  $R$  and  $p$ . Therefore, by the Justifying Structure Principle, if  $R$  justifies  $p$  and  $R$  is your structure, whether  $p$  is justified for you can't vary with variations merely in non-epistemic features of your situation.

However, whether you are rational to act on  $p$  can vary (or so it seems) merely with variations in non-epistemic features of your situation. So, by the Practical Condition on Justification, even if  $p$  is justified for you, whether  $p$  is justified for you can vary merely with variations in non-epistemic features of your situation. Contradiction: even if  $R$  justifies  $p$  and  $R$  is your structure, whether you are rational to act on  $p$  both can and cannot vary merely with variations in non-epistemic features of your situation.

Is there any way for all three principles to be true? I'll argue in this paper that there is, but only if epistemic infinitism is true. The three principles therefore

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<sup>6</sup> For more fully developed arguments see Fantl and McGrath, *Knowledge in an Uncertain World*, 96-111.



provide heretofore unnoticed resources for epistemologists looking to argue in favor of epistemic infinitism. A full development of that sort of argument would require sufficient positive support for each of the three principles. There is not space in this paper to both do that and show that the three principles together entail infinitism. The work mounting defenses of each of the principles themselves must wait until another time.

Therefore, the modest goal of this paper is simply to show that if those three principles are true, then infinitism is true: no objective theory of the structure of justification that allows finite structures to justify can be true. Such theories include all objective versions of foundationalism and some objective versions of coherentism. If the Objectivist Presumption is true, there is no finite structure of reasons bearing on any proposition such that, necessarily, the proposition is justified for you if that structure of reasons is yours. To use the shorthand: no proposition is justified by any finite structure of reasons.<sup>7</sup>

## II. The Argument from the Practical Condition on Justification

If the Practical Condition on Justification is true, then for all finite structures of reasons (R), all propositions ( $p$ ), and all intrinsic epistemic relations (E), you might stand in E to R while  $p$  fails to be justified for you. Here's why:

Suppose the Practical Condition on Justification. And suppose, for reductio, that there is a proposition,  $p$ , that is justified by some *non-maximal* structure of reasons R, where R is non-maximal just in case there is a larger structure of reasons, R+, of which R is a part, such that  $p$  is more justified for any subject whose structure is R+ than for any subject whose structure is R. By the Objectivist Presumption, there is an intrinsic epistemic relation, E, such that if you stand in E to R, then R is your structure. Suppose you stand in E to R. R, then, is your structure. Because R is non-maximal, though, the stakes might be high enough that you are not rational to act on  $p$ .<sup>8</sup> By the Practical Condition on Justification,  $p$  is not justified for you, even though R is your structure of reasons. By the Justifying Structure Principle, therefore,  $p$  is not justified by R. This contradicts

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<sup>7</sup> The influential defender of infinitism is Peter Klein. See, for example, his "Human Knowledge and the Infinite Regress of Reasons," in *Epistemology*, ed. James E. Tomberlin, *Philosophical Perspectives* (Cambridge: Blackwell, 1999), 297-326. The most extended single-text defense of infinitism is Scott F. Aikin, *Epistemology and the Regress Problem* (New York: Routledge, 2011).

<sup>8</sup> The argument for this premise is below.

the assumption for reductio. Therefore, there is no proposition that is justified by any non-maximal structure of reasons.

This does not get to the conclusion that no propositions are justified by any finite structure of reasons. It allows that propositions can be justified by finite but maximal structures of reasons – finite structures of reasons whose degree of justification conferred could not be increased with further reasons. Were your structure of reasons for a proposition finite but maximal, it is less plausible that a change in stakes could affect whether you are rational to act on the proposition. The degree to which the proposition is justified would be maximal and, it seems, could survive any raising of the stakes.

Unfortunately, all finite structures of reasons are non-maximal. There is no finite structure of reasons bearing on any proposition such that the degree to which the proposition is justified could not be increased with further reasons. This even goes for necessarily true propositions and seemingly directly evident propositions like “I have a headache.” There are worries about fallibility even regarding propositions as compelling as these, and if you could answer objections to error theories in math and logic, or demonstrate that this is one of those cases in which introspection has not led you astray, the degree to which those propositions are justified would increase. You might be able to know such propositions without those further reasons. It’s just to say that it’s possible to increase the degree to which even those propositions you are most sure of are justified, by adding further reasons to a finite structure; there are no maximal finite structures of reasons. If there are no maximal finite structures, then the above conclusion – that no proposition is justified by any non-maximal structure of reasons – entails the stronger conclusion – that no proposition is justified by any finite structure of reasons.

If it is always possible for further reasons to increase the degree to which a proposition is justified, then it is likewise possible for your pragmatic situation to be such that, unless the degree to which the proposition is justified has increased, you ought not act on it. There will, for example, always be a hypothetical gamble which, if offered, you would not be rational to take, even if it now is rational to act on the proposition, having not been offered the gamble. As Hawthorne says, “I wouldn’t even bet on the law of noncontradiction at any odds, and I think myself rational on that score.”<sup>9</sup> By the Practical Condition on Justification, then, even the propositions you are most sure of can become unjustified for you. And, given the

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<sup>9</sup> Hawthorne, *Knowledge and Lotteries*, 29.

Justifying Structure Principle, it follows that not even the propositions you are most sure of are justified by any finite structure of reasons.

Is it really true that, given the right gambles, you might fail to be rational to act on even the propositions you are most sure of – e.g. that you have a headache? The argument relies on two premises:

1. the degree to which the true proposition that you have a headache is justified is not maximal; it can be increased with further reasons.
2. if the degree to which the true proposition that you have a headache is justified can be increased with further reasons, then there are states of affairs in which you are not rational to act on the true proposition that you have a headache.<sup>10</sup>

If both of these premises are true, then there are states of affairs in which you are not rational to act on the true proposition that you have a headache. By the Practical Condition on Justification, in those states of affairs, it is not justified for you that you have a headache. If the argument is sound, then because the true proposition that you have a headache is as justified for you as propositions get, the lessons are general: if there are states of affairs in which you are not rational to act on the true proposition that you have a headache, then for any proposition, there are states of affairs in which the proposition is true and you are not rational to act on that proposition.

Are the premises true? The first is a consequence of a companion principle to some widely respected defeater conditions. The defeater conditions I have in mind suggest that if it is justified for you that some proposition is unjustified for you, then that proposition is unjustified for you. As stated, this is too strong to be uncontroversial. However, a weaker condition in the neighborhood seems safer. Undercutting defeaters, even if not always sufficient to destroy justification, are at least relevant to the epistemic status of the propositions they undercut: they are relevant to the degree to which the propositions they undercut are justified for you. In short, if, *ceteris paribus*, it becomes more justified for you that  $p$  is unjustified for you, then it becomes less justified for you that  $p$  (though the degree to which  $p$  is justified for you need not fall below the threshold for knowledge or outright justification).

Likewise, we should think there are analogous support conditions. An unnecessarily strong condition might say that if it is justified for you that some

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<sup>10</sup> The argument, below, for this premise discharges the promised duty incurred in footnote 8.

proposition is justified for you, then that proposition is justified for you. But if the milder defeat condition above is acceptable, a milder support condition should be as well: *ceteris paribus*, if it becomes more justified for you that  $p$  is justified for you, then the degree to which  $p$  is justified for you increases as well.<sup>11</sup>

While it is implausible that you could acquire additional direct, justification-increasing support for the true proposition that you have a headache, it is not implausible that it can become more justified for you that “you have a headache” is justified for you. For, that proposition is about, among other things, the theory of justification and what is required for a proposition to be justified for you. You are not in nearly as strong a position regarding such issues – not in nearly a strong enough position that the justification of propositions in such domains can’t be increased with further reasons. Therefore, it can become more justified for you that it is justified for you that you have a headache. Given the milder support condition, it can therefore become more justified for you that you have a headache. If such is possible with propositions about headaches, then such is possible with any proposition.

One worry about this argument is that it might only become more justified for you that you have a headache if you already have doubts about the reliability of introspection. Philosophers might have doubts about introspective beliefs and if it becomes justified for these ‘epistemic sophisticates’ (to put it kindly) that introspection is reliable in some particular case, then that might shore up for them the proposition that they have a headache. If the doubts had never arisen – a situation they arrived at only after some thought – the original proposition could have remained perfectly well justified – as justified as, or perhaps moreso than, it is once those worries are justifiedly removed. That it can become more justified for you that you have a headache does not entail that it can become more justified for anyone. For many, the degree to which it was justified that they had a headache was never reduced to a degree that allows for improvement.

At issue is the layperson who has never considered doubts which would, if considered, undermine propositions currently justified for him. Is such a layperson epistemically better off than one who has considered those doubts? Meno thought so, telling Socrates,

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<sup>11</sup> This mild support condition is put loosely and includes a reference to justification simpliciter. A more official statement of the principle might be this: *ceteris paribus*, for all degrees of justification,  $d$ , if it becomes more justified for you that  $p$  is justified for you at least to degree  $d$ , then the degree to which  $p$  is justified for you increases as well.

you seem to me both in your appearance and in every other way, to be like the broad torpedo fish, for it too makes anyone who comes close and touches it feel numb, and you now seem to have had that kind of effect on me, for both my mind and my tongue are numb, and I have no answer to give you. Yet I have made many speeches about virtue before large audiences on a thousand occasions, very good speeches as I thought, but now I cannot even say what it is. I think you are wise not to sail away from Athens to go and stay elsewhere, for if you were to behave like this as a stranger in another city, you would be driven away for practicing sorcery.<sup>12</sup> (80a-b)

Meno goes wrong for any number of reasons. For he thinks he is in a better position before considering doubts than after, even though his starting position is in fact quite thoroughly unjustified. Socrates is therefore quite right to respond as he does after interrogating the slave boy:

Even now he does not yet know, but then he thought he knew, and answered confidently as if he did know, and he did not think himself at a loss, but now he does think himself at a loss, and as he does not know, neither does he think he knows. (84a-b)

It surely is better to live in doubt than to have unjustified belief thought justified. But what of the case in which, by raising unanswered doubts, we have eliminated – or, in the case of headaches, very slightly reduced – genuine justification? Socrates does worry about this, saying, “So now I do not know what virtue is; perhaps you knew before you contacted me, but now you are certainly like one who does not know.” (80d) Laypeople’s beliefs in their own headaches are, while perhaps thoughtless, nonetheless justified. Why is it better to raise doubts about those beliefs? Might they not be in a better epistemic position precisely because they haven’t considered doubts or raised objections – what Catherine Elgin<sup>13</sup> calls, “the epistemic efficacy of stupidity”?

We might think that we are still epistemically better off with a reduction of thoughtless justification in the service of greater wisdom. But this is not to the point. What we are to compare is our epistemic state having raised and *answered* doubts with our state before the doubts were raised. It is surely better to have raised those doubts and justifiedly answered them than not to have had them raised at all. One is epistemically better off after having justifiedly responded to

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<sup>12</sup> See Plato, “Meno,” in *Five Dialogues*, trans. G. M. A. Grube (Indianapolis: Hackett Publishing Co., 1981), 59-88.

<sup>13</sup> Catherine Elgin, “The Epistemic Efficacy of Stupidity,” *Synthese* 74 (1988): 297-311.

those doubts because one is able to answer objections that one could not answer before, even though those objections would not easily have come to mind. Therefore, the epistemic sophisticate who has justifiably shored up her worries is in a better epistemic position, not only than the epistemic sophisticate who has not shored up her worries, but than the epistemic naïf who, in virtue of never having considered the worries, never lost any justification for the original belief.<sup>14</sup>

The second premise is that if the degree to which a proposition is justified for you can be increased with further reasons, then there are states of affairs in which your structure of reasons is the unimproved, original structure, and in which you are not rational to act on the proposition. The easiest way to increase the degree to which a proposition is justified for you is to get evidence for it. So, the degree to which it is justified for you that the fair six-sided die came up 2 or higher is pretty high. Once you look at the die and see that it came up 4, the degree to which it is justified for you is even higher. If the epistemic status of the proposition can be improved in this way, it is clear that there are gambles you are rational to take after looking at the die that you are not rational to take before looking at the die. After looking at the die, you are rational to bet 1 dollar on the proposition, with a potential payoff of \$1.05. Before looking at the die, you are not. Therefore, there are states of affairs – states of affairs before looking at the die and in which you are offered the relevant gamble – in which you are not rational to act on the proposition that the fair six-sided die came up 2 or higher.

Here, the degree to which it is justified for you that the fair six-sided die came up 2 or higher is increased rather directly by new information. But the degree to which *p* is justified for you can also be increased ‘indirectly’ merely by it becoming more justified for you that *p* is justified for you. For example, you might find out that your recent bout of delirium tremens – the one that caused you to see all those spots – has finally come to an end. This makes it more justified for you – even after looking at the die and seeing 4 spots on the facing surface – that the fair

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<sup>14</sup> Importantly, the epistemic sophisticate who has shored up her worries is more thoroughly rational to act on the relevant propositions than the epistemic naïf who has never considered those worries and can’t answer them. The epistemic sophisticate has all the justifying factors in her favor that the naïf has – the direct presentation of the headache, for example. In addition, the sophisticate has a justified answer to certain objections – that, e.g., introspection is not reliable in this situation. Therefore, if a gamble is offered on whether, despite the objection, she still has a headache, the sophisticate will be rational to take it. The naïf, who has never considered the objection and lacks a justified response, will not be rational to take it.

six-sided die came up 2 or higher, because it eliminates a defeater: that the 4 spots you think you see are in fact caused by your DT.

When the degree to which a proposition is justified for you is increased in this way, is it as clear that there are gambles you are not rational to take before the improvement that you are rational to take after the improvement? If we take seriously the claim that the degree to which the proposition itself is justified is increased, the answer is yes. Before it becomes more justified for you that the proposition is justified for you, you are not able to answer certain objections, e.g. "Maybe those 4 spots are just the product of your delirium tremens." Therefore, if the stakes got too high, you shouldn't be able just to assume the die did come up 4. The ability to answer objections, which is what an increase in the degree to which it is justified for you that a proposition is justified for you always allows you to do (provided that the increase is the result of further reasons), also makes more hypothetical gambles rational for you to take.

Therefore, if the degree to which  $p$  is justified for you can be increased either directly or indirectly by supplementing the reasons in  $R$  with further reasons, there are states of affairs in which  $R$  is your structure and in which you are not rational to act on  $p$ . As we have seen, when  $p$  is supported by only a finite  $R$ , the degree to which  $p$  is justified for you can always be increased with the addition of further reasons. Therefore, by the Practical Condition on Justification, for all propositions ( $p$ ) and finite structures of reasons ( $R$ ), there is a subject whose structure of reasons is  $R$  but for whom  $p$  is not justified. By the Justifying Structure Principle,  $p$  is not justified by  $R$ . But  $R$  is just an arbitrary finite structure of reasons bearing on the arbitrary  $p$ . So, no proposition is justified by any finite structure of reasons. That's just to say that there is no finite structure of reasons bearing on  $p$  and no intrinsic epistemic relation such that if you bear that relation to that structure,  $p$  is justified for you.

This does not mean  $p$  can't be justified for you if your structure of reasons bearing on  $p$  is only finite. What it means is that, though  $p$  might be justified for you whose structure of reasons bearing on  $p$  is finite, no theory can correctly say, of any particular finite structure of reasons bearing on  $p$ , that there is an intrinsic epistemic relation such that  $p$  is justified for anyone who bears that relation to that structure.

Let me be clear about one further point: the conclusion is not just that no finite structure is 'conclusive' or that you are fallible about any proposition for which you have only a finite structure of reasons. The conclusion requires also that no proposition be justified by any inconclusive structure. Some fallibilists might think otherwise. But if there is pragmatic encroachment on justification,

then no inconclusive structure – so, no finite structure – is sufficient for justification.

We could give up the Objectivist Presumption, of course. But to abandon the Objectivist Presumption just is to abandon the search for an objective theory of the structure of justification. That's because such theories are precisely those that tell us whether  $p$  is justified for you simply based on your intrinsic epistemic relations to one of the allowed structures of reasons bearing on  $p$ . One may not care much about finding objective theories of the structure of justification. But there is no denying that many extant theories of the structure of justification are attempts to be exactly that. And 'giving up' on the Objectivist Presumption wouldn't change the fact – if it is one – that there is one theory – infinitism – that is consistent with the Objectivist Presumption, the Justifying Structure Principle, and the Practical Condition on Justification. It is to this argument I turn in the next and final section.

### III. The Case for Infinitism

Objective theories of the structure of justification can tell us either what is necessary for justification or what is sufficient for justification. For the former, a theory must tell us what your structure of reasons,  $R$ , needs to be like for  $p$  to be justified for you by  $R$ . For the latter, a theory must tell us what  $R$  needs to be like so that  $p$  is guaranteed to be justified for you by  $R$ . Ideally, a theory of the structure of justification would tell us both. If only one kind of theory stands a chance at telling us both, that is a powerful reason to favor that kind of theory.

Foundationalism has traditionally been thought to (at least attempt to) tell us both. According to foundationalism, it is required for  $p$  to be justified for you by  $R$  that  $R$  contain an immediately justified reason and sufficiently strong connections among the reasons and between the reasons and  $p$ . The concept of an immediately justified reason is notoriously unclear, but I'll characterize immediately justified reasons as reasons that can be justified for subjects even if those subjects don't have further reasons for them. If one is an externalist, one may be happy allowing many kinds of reasons to be immediately justified in this sense. If one is a traditional foundationalist, one may want to limit such reasons to Chisholmian directly evident propositions.<sup>15</sup> What is important for our purposes is that, on this construal of immediately justified reasons, foundationalism may very

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<sup>15</sup> As Roderick Chisholm says, in defining the directly evident, "what justifies me in counting it as evident that  $a$  is  $F$  is simply the fact that  $a$  is  $F$ ." (Roderick Chisholm, *Theory of Knowledge*, vol. 2 (Englewood Cliffs: Prentice-Hall, Inc., 1966), 28.)



well be right about what is required for  $p$  to be justified for you by R: perhaps  $p$  is justified for you by R only if R contains reasons that can be justified without further reasons and if there are the right sorts of connections among the reasons in R and between R and  $p$ .

It is in saying that satisfying this requirement is also sufficient for  $p$  to be justified for you by R that objective versions of foundationalism go wrong. Objective versions of foundationalism say that if R contains an immediately justified reason and the right sorts of connections,  $p$  is justified by R. Therefore, it allows that  $p$  can be justified by R even if R is finite. As we have seen, no proposition is justified by any finite structure of reasons. Though immediately justified propositions can be justified for you even if you lack further reasons, it will sometimes be the case, when the stakes are high enough, that you need further reasons bearing on  $p$  – reasons that answer important objections – if you are to be rational to act on  $p$ . By the Practical Condition on Justification, your structure of reasons may be one of the foundationalism-licensed structures, yet  $p$  fail to be justified for you. By the Justifying Structure Principle,  $p$  is not justified by that structure of reasons. Therefore, the foundationalist sufficiency condition is false.

If  $p$  cannot be justified by finite structures, then the natural move is to an infinitist theory of the structure of justification – a view that makes justification a matter of having an infinite series of non-repeating reasons. A rough sketch of such a view might say that, for  $p$  to be justified by R, R must be infinite. A parallel sufficiency condition might say that, when R is infinite,  $p$  is justified by R (provided R satisfies some other conditions<sup>16</sup>). But this is too quick. Even if  $p$  is justified in this sense by an infinite R, the degree to which  $p$  is justified might still be increased with further reasons. An infinite structure of reasons need not include every reason. If there is some objection that goes unanswered by the infinite R, then even if you (miraculously) have R, the stakes can be raised so that the objection becomes pressing: you will no longer be rational to act on  $p$ , and so  $p$  will no longer be justified for you, despite your having the infinite R. By the Justifying Structure Principle, then,  $p$  is not justified by the infinite R (though  $p$  could be justified for you were you to have R and your stakes to remain low).

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<sup>16</sup> Of course, not just any infinite structure will do – just as, for foundationalists, not just any finite structure will do. For the infinitist, only an infinite structure of good reasons (for Klein, objectively and subjectively available reasons) bearing the right relations to each other suffices for justification.

What we need is something stronger – a structure of reasons bearing on  $p$  such that, when that structure is yours, the degree to which  $p$  is justified for you cannot be increased with further reasons. As an initial attempt, say that  $p$  is justified by  $R$  when  $R$  is constituted by an infinite series of reasons in support of  $p$  and an infinite series of reasons in answer to all possible challenges to all inferences and reasons in  $R$ .<sup>17</sup> I have no decisive argument that, were your structure of reasons to be a structure of this sort, the degree to which  $p$  is justified for you could not be increased with further reasons. But it is hard to imagine what sort of reason could be added to such a structure that would increase the degree to which  $p$  is justified for you. (It might be suggested that you could add a meta-reason to the effect that you have such a structure. But, plausibly, this reason would already be included in the structure you have because, plausibly, such a reason would figure in the answer to certain kinds of challenges.)

What, then of objective versions of coherentism? According to coherentism, it is required for  $p$  to be justified by  $R$  that  $R$  be sufficiently coherent and that  $p$  contribute to that coherence. This necessity condition, like foundationalism's, might well be right: perhaps there has to be a certain coherence within  $R$  and perhaps  $p$  has to contribute to that coherence for  $p$  to be justified by  $R$ .<sup>18</sup> The sufficiency condition is more complicated. According to coherentism, when  $R$  satisfies these requirements – when  $R$  is sufficiently coherent and  $p$  contributes to that coherence –  $p$  is justified by  $R$ . The fate of this proposal depends on whether the coherentism in question admits of an infinitist construal.

Laurence Bonjour's coherentism, for example, explicitly requires "that the regress of justification does not go on forever, which would involve an infinite number of distinct beliefs, but rather circles back upon itself, thus forming a closed system."<sup>19</sup> Bonjour might be saying that, if you have an infinite number of distinct beliefs,  $p$  cannot be justified for you. Therefore, if you, with a finite, coherent set of beliefs, managed to become a god, with an infinite, coherent set of

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<sup>17</sup> For more details, see Jeremy Fantl "Modest Infinitism," *Canadian Journal of Philosophy* 33, 4 (2003): 557-58).

<sup>18</sup> Notice that the infinitist's sufficiency condition does not conflict with either the foundationalist's or the coherentist's necessity conditions. The infinitist can accommodate the requirements in explicating the notions of *a reason* and *support*. See, for example, Fantl, "Modest Infinitism," 554-55, and Klein's discussion of the various ways for the infinitist to account for 'objective availability.' (Klein, "Human Knowledge," 299.)

<sup>19</sup> Laurence Bonjour, "The Coherence Theory of Empirical Knowledge," in *Empirical Knowledge: Readings in Contemporary Epistemology*, ed. Paul Moser (Totowa: Rowman and Littlefield, 1986).

beliefs, you would lose all justification. This is not plausible. Alternatively, Bonjour might be saying that we can't require, for justification, an infinite number of distinct beliefs; you can be justified with a finite number of distinct beliefs. This is so. It's also not a sufficiency condition. It is one thing for there to be a coherent finite structure such that there is a subject whose structure it is and who is justified. It is another for there to be a coherent finite structure such that all subjects whose structure it is are justified. To get a sufficiency condition, we need to say that the smallest system sufficient for justification is finite. This sufficiency condition is false. There is no finite system that is sufficient for justification;  $p$  is justified by no finite  $R$ .

Keith Lehrer's coherentism has no such explicit anti-infinitist stipulation. It requires merely that a subject can adequately respond to all objections:

$S$  is personally justified in accepting that  $p$  at  $t$  if and only if everything that is an objection to  $p$  for  $S$  on the basis of the acceptance system of  $S$  at  $t$  is answered or neutralized on the basis of the acceptance system of  $S$  at  $t$ .<sup>20</sup>

There is nothing antithetical to infinitism here; it's pretty close to the infinitist view recommended above. If we think that the only way that every objection to  $p$  can be answered using only reasons in  $R$  is if  $R$  contains an infinite series of reasons in support of  $p$  and an infinite series of reasons in answer to all possible challenges to all inferences and reasons in  $R$ , then Lehrer's (modified) view entails the infinitist view above.

We can ask of any objective version of coherentism whether it allows the structure it says is sufficient for justification to be infinite. If it does, then, suitably modified, it can give an adequate sufficiency condition for justification. If it doesn't, then it can't give an adequate sufficiency condition for justification. Therefore, an infinitist coherentism will be a decent objective theory of the structure of justification, while a non-infinitist coherentism won't be. The issue is whether we need an infinitist element in any objective theory of the structure of justification. I have argued that we do.

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<sup>20</sup> Keith Lehrer, *Theory of Knowledge* 2nd ed. (Boulder: Westview Press, 2000), 137.