Against the Taking Condition
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1. **Introduction**

Suppose you are wondering where you put your keys. You think to yourself:

They're either in my bag or my jacket;

They're not in my jacket;

So, they're in my bag.

Here you infer the conclusion that your keys are in your bag from the two preceding premises. To put it another way, you reason from belief in these premises to belief in this conclusion.

What is going on here? What exactly is inference, or theoretical reasoning? One thing we can say is that inference, in the sense at issue here, is a personal-level phenomenon, to be contrasted with subpersonal information-processing. And it involves mental causation, or so we assume: here, two beliefs cause a further belief. But it involves more than this. Inference appears to be an exercise of agency: inferring is something you do. Some beliefs might cause a further belief through some brute, non-rational process, without your doing anything. So, what's the difference between inference and mere causation of belief by belief?

Our aim in this paper is not to answer this question. Rather, we aim to cast doubt on a (partial) answer to it which has recently been influential. According to Paul Boghossian (2014: 5) and others, inference is subject to the

(Taking Condition)   Inferring necessarily involves the thinker *taking* his premises to support his conclusion and drawing his conclusion *because* of that fact.[1]

Thus, in making the inference described above you come to believe that your keys are in your bag because you take this conclusion to be supported by the facts that the keys are either in your bag or your jacket, and that they're not in your jacket.

Boghossian argues that the Taking Condition vindicates the appearance that inference is an exercise of agency, and that it has further important implications too. In particular, Boghossian argues, partly on the basis of some of the problems we outline below, that the Taking Condition shows inference to be a primitive, unanalysable phenomenon, and even that it challenges a naturalist view of the world. The Taking Condition is also naturally seen as a theoretical analogue of the famous idea that all action takes place under 'the guise of the good'. It may therefore be seen as giving support to that controversial view, or as making available a unified account of practical and theoretical inference.

The Taking Condition is thus highly significant if it is correct. However, we argue in this paper that it is not correct. In section 3, we review some problems with the Taking Condition. The problems are familiar and we will be relatively brief; our purpose is just to show that there are serious prima facie worries about the condition – serious enough that it should not be accepted unless there is strong reason to do so. The central contribution of the paper comes in section 4, where we consider some reasons that have been, or might be, offered in support of the Taking Condition, and argue that they fail to convince. The upshot is that the condition should be rejected. We conclude by noting what we take to be the kernel of truth in the Taking Condition.

2. **Preliminaries**

We begin with some preliminary points about how the Taking Condition is to be understood.

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[1] Besides Boghossian, defenders of the Taking Condition include Tucker (2012), Neta (2013), Broome (2014), Chudnoff (2014), Valaris (forthcoming), and Hlobil (ms).

First, what is 'taking'? As we understand it, taking is a kind of representing; to take p to support q is to somehow represent p as supporting q.[2] Thus, merely *treating* p as supporting q, in the sense of treating p in a way that would be appropriate only if it supported q, does not entail taking p to support q. In general, you can treat something in ways that would be appropriate only if it was an F without in any sense representing that thing as an F.[3] While the view that inference involves treating your premises as supporting your conclusion is plausible and may constrain accounts of inference, it does not have the significant upshots which are claimed for the Taking Condition.[4]

If taking is representing, the most natural interpretation is that it is belief. On this interpretation, the Taking Condition says that inferring q from p involves coming to believe q because you believe p and because you believe p supports q (cf. Valaris forthcoming). Call this latter belief 'the taking belief'. But other interpretations are also possible. Some philosophers have suggested that taking is a representational state which falls short of belief, such as an intuition, understood as a kind of intellectual seeming (Chudnoff 2014, Tucker 2012). Others have suggested that taking is a sui generis state (Boghossian 2014, Hlobil ms). We will comment on the differences between these options as they arise.

Second, we should ask what the content of the taking is supposed to be: what is the relevant notion of support? There are different options here. Broadly, we can distinguish between views which take the content to be normative and those which take it to be descriptive. Examples of the first group include the views that the content is that your premises provide a reason to believe your conclusion, and that your premises rationally commit you to your conclusion. Examples of the second group include the views that the content of the taking is that your premises entail your conclusion, that

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[2] For convenience, we will sometimes use 'p' and 'q' as propositional variables implicitly bound by the obvious quantifiers, sometimes as propositional constants, allowing context to disambiguate.

[3] Cf. Sylvan (forthcoming: §3.3) for the distinction between treating and taking. Sylvan also suggests in passing that manifesting a certain sort of disposition to treat p as supporting q can amount to taking p to support q (forthcoming: §4). Without further elaboration though, we don't see the motivation for this claim. Schlosser 2012 offers a different dispositional account of 'taking'; we think Schlosser's account is better understood as an account of treating as a reason.

[4] For similar reasons, being caused to believe q by p's supporting q doesn't count as taking p to support q. You can be caused to do something by a's being F without representing a as an F. For the idea that inference involves such causation see Arpaly and Schroeder 2014: ch.3.

your premises probabilify your conclusion, and that it's simply a conditional, 'if p then q'. These differences mostly won't matter here; we'll comment on them only when they do.[5]

Third, the Taking Condition says that the conclusion of an inference is drawn *because* it is taken to be supported by the premises. The taking is supposed to be part of what *explains* your drawing the conclusion. The Taking Condition must thus be distinguished from the superficially similar:

(Consequence Condition)   Inferring q from p entails taking p to support q.

The Consequence Condition is entailed by the Taking Condition but is weaker than it, since it does not attribute to the 'taking' any particular explanatory role. Thus the Consequence Condition, but not the Taking Condition, is consistent with the idea that in reasoning we take our premises to support our conclusion just in virtue of reasoning from the former to the latter.[6] We return to this idea in the conclusion, though for the most part we focus on the Taking Condition itself.

The Taking Condition should also be distinguished from two further claims:

(Commitment Condition)   Inferring q from p commits you to taking p to support q.

(Negative Condition)   Inferring q from p entails not taking p not to support q.

Both these claims are naturally thought of as weaker than both the Taking Condition and the Consequence Condition. Being committed to doing something doesn't entail doing it. For example, believing p commits you to believing (many of) the logical consequences of p, but believing p does not consist in or entail, nor is it explained by, your believing each of those logical consequences. Nor

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[5] Boghossian 2014, Neta 2013, and Valaris forthcoming seem to fall into the first group. Broome 2013, 2014 defends a view of the second kind. One way in which this dispute matters is that it seems that only views of the first kind are properly parallel to the idea that action 'aims at the good'.
[6] Valaris 2014. Nagel 1970: 31 endorses a similar claim.

does not taking p not to support q entail taking p to support q – for instance, you might have no view either way.

Finally, as should by now be clear, the Taking Condition is highly substantive. *Taking* is understood as an attitude with a content, which helps to explain your coming to believe your conclusion. It is not just a placeholder for whatever it is that distinguishes reasoning from mere causation. Nor is saying that you take your premises to support your conclusion just another way of saying that you reason from the former to the latter. It is only when understood substantively that the Taking Condition can place constraints on accounts of reasoning, and generate the significant implications which are claimed for it.[7] For similar reasons, our target in this paper is the view that the Taking Condition is a general condition on inference, not views to the effect that there is some special, reflective kind of inference that requires meeting the condition.

3. Problems for the Taking Condition

In this section we describe some problems for the Taking Condition. We begin with problems that arise when taking is understood as belief. We then argue that most of those problems remain even if taking is understood as something other than belief. We will be brief and do not take the problems as described here to be decisive. Nonetheless, they clearly put pressure on the Taking Condition and place a burden on its proponents to provide compelling motivation for it - something that, we will argue in the following section, they have not done.

3.1 Taking as Belief

(i) Overintellectualisation

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[7] To emphasise: rejecting the Taking Condition does not mean denying that there is any significant condition on inference that distinguishes it from mere causation among beliefs. We agree that there are such conditions. Our aim in this paper is negative. We offer more of a positive story n McHugh and Way (ms).

If taking is believing, then the Taking Condition requires all reasoners to have beliefs about, and hence the concept of, the relevant notion of support. For example, suppose we take this notion to be that of providing a reason. In that case, the condition implies that all reasoners must have the concept of a reason. On the face of it, this seems very demanding. For example, we might think that children and animals can reason although they lack this concept (Boghossian 2014: 6-7, Kornblith forthcoming).

This worry looks no less serious on most alternative ways of understanding the notion of support. For example, it's equally unclear that children and animals have the concept of entailment or probability.[8]

(ii) What Makes the Taking Belief Rational?

If taking beliefs play an essential role in inference, then it is natural to think that a taking belief must be rational in order for the inference it is involved in to be rational. The belief connects the premises and conclusion and drives the reasoner's move from the one to the other; it's thus hard to see how the move could be rational if the belief isn't.[9] But what could make a taking belief rational?

Some taking beliefs could be made rational by prior inferences. But on pain of regress, not all taking beliefs can be made rational in this way. So some taking beliefs must be rational without inference.

It's not clear how this is possible. Consider a taking belief – e.g. the belief that the fingerprints on the weapon support the conclusion that the butler did the deed. On the face of it, this looks like the kind of belief which would ordinarily be acquired inferentially – from the belief that the butler's fingerprints are on the weapon, together with belief in some more general principle, e.g. the principle that when someone's fingerprints are on a weapon, that supports the conclusion that they used that weapon. And indeed, it's hard to see how else this belief could rationally be acquired. The paradigm case of non-inferential rational belief is perceptual belief. But it doesn't seem like taking

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[8] The worry might be met if the content of the taking belief is just a conditional. But the third worry below looks particularly acute on this view.
[9] Boghossian 2014, Valaris forthcoming.

beliefs are perceptual – we don't observe support relations.[10] Perhaps we can also acquire rational belief in general epistemic principles non-inferentially. But believing such a principle is not the same as having a taking belief. A principle is a general claim – that premises of a certain type support conclusions of a certain type. The content of a taking belief is particular – that some particular consideration supports some specific conclusion. Even if you believed a principle, it looks like you would still need to perform an inference before arriving at any taking belief (though see Gregory ms and Miller 2015).

In response, it might be observed that not all cases in which a belief is based on other beliefs come about through inference. Thus the belief that p supports q might be made rational by being based on a non-inferential rational belief in a general principle, without being inferred from this general principle. However, it is doubtful that this move solves the problem. First, several of the motivations for the Taking Condition which we will survey below seem to apply to basing as much as inference. It is thus not clear whether there are principled grounds for holding that the Taking Condition applies to inference but not basing. Second, it is plausible that basing between beliefs involves a disposition to reason. Thus, if you base the belief that p supports q on belief in a general principle, you are disposed to reaffirm that p supports q on the grounds of the principle, if the question of whether p supports q comes up. If so, the Taking Condition entails that you must be disposed to believe that the principle supports the claim that p supports q. Plausibly, you must be disposed to believe this rationally if your belief that p supports q is rational. But it's not clear what would make *this* belief rational if not further basing or inference. Thus, the problem of explaining the rationality of taking beliefs without regress remains.[11]

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[10] It might be suggested that taking beliefs are non-inferentially based on non-perceptual seemings - on intuitions, say. For example, perhaps one simply has an intuition that the fingerprints on the weapon support the conclusion that the butler did it. However, if such intuitions are always involved in reasoning, it's not clear why reasoners should also have to form beliefs on the basis of them; it would be more plausible simply to endorse a version of the Taking Condition that construes taking as intuition (Tucker 2012, Chudnoff 2014).

[11] Another way to avoid regress is to follow Valaris (2014) and say that the taking belief can be rational "based on no independent grounds" (18). On Valaris' view, the rational status of non-inferential taking beliefs "depends on the epistemic status of the inference in question" (19). Note though that this move seems to require Valaris to give up the "because" in the Taking Condition: on his view, basic reasoning involves taking your premises to support your conclusion in virtue of reasoning from the former to the latter, rather than the other way round. (Though compare Valaris forthcoming).

(iii) What Does the Taking Belief Do?

The Taking Condition gives the taking belief a role: the conclusion is drawn because of it. But how exactly does this work?

Famously, it can't be that the content of the taking belief is a further premise, whether of the initial inference or of some higher-order inference. That's because the condition would apply again to the expanded set of premises or to the higher-order inference, and so any inference would require either an infinitely large set of premises or an infinite regress of prior inferences (Carroll 1895). Alternatively, the taking belief might be an enabling condition on inference. One way in which this suggestion might be pursued is to say that the taking belief plays a role in the application of a rule of reasoning.[12] There is good reason to distinguish rules from premises, so this proposal might avoid the problem of infinitely large premise-sets. However, more needs to be said about exactly what role the taking plays in applying a rule of reasoning. And it's not clear how this is to be done. For instance, perhaps applying a rule of reasoning involves drawing a conclusion because you accept the rule. But as we have seen, accepting a general rule is not the same as satisfying the Taking Condition for any particular inference. Satisfying the Taking Condition would seem to require a further inference: from accepting a rule and believing that a certain inference instantiates it, to having the taking belief with regard to that inference. This makes seemingly simple bits of reasoning implausibly complicated, and leads to the regress problem noted above.[13]

3.2 Taking as Falling Short of Belief

Might it help to avoid these problems if taking is something other than belief, such as an intuition?

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[12] In a weak sense, any necessary consequence of inference – e.g. that you exist – is an enabling condition. Fans of the Taking Condition will want to say that the taking-belief plays a more substantial role than this. See Boghossian 2014 for a further worry about distinguishing premise- and enabling-beliefs.

[13] These points might be thought to constitute an objection against rule-following accounts of reasoning more generally (cf. Valaris forthcoming). But we think that what they in fact show is that we should reject models of rule-following that give an essential role to beliefs about what would conform to a rule. Rule-following can instead be thought of along dispositional lines. Such accounts do not require, or vindicate, the Taking Condition. (*Pace* Boghossian 2014: 12, following a rule that tells you to φ in circumstances C does not entail taking C to give a reason to φ – see Broome 2014: 24.)

(i) Overintellectualisation

The overintellectualisation worry concerned the *content* of the attitude of taking – and the concepts which entertaining such contents requires. Thus, insofar as an intuition that your premises support your conclusion has conceptual content – and this is surely the most natural construal – the view that taking is an intuition fares no better with this worry.

(ii) Where Makes the Taking Rational?

The worry here was that it was hard to see what could make taking beliefs rational, if not further inferences. The view that taking is an intuition does have an advantage here, since intuitions can arguably rationalise without themselves requiring rationalisation in turn.

(iii) What Does the Taking Do?

These problems remain: it's not clear how a taking intuition is supposed to get you to draw your conclusion, if not by providing an extra premise or being involved in some additional reasoning (cf. Boghossian 2014: 9 and Wright 2014; 31-3).

In sum, the Taking Condition still faces serious difficulties if taking is understood as intuition. Moreover, as we explain below, this version of the Taking Condition doesn't explain everything that the condition is invoked to explain.

Might taking be something other than a belief or an intuition? As noted, some seem to suggest that taking is a sui generis type of state (Boghossian 2014) However, without further elucidation this neither explains anything nor solves any of the problems we have outlined; and indeed it's hard to see how it could fail to face some versions of problems (i) and (iii), at least.[14] And certainly, we

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[14] Hlobil (ms) defends a sui generis notion of taking and attempts to address some of these issues in light of it. Unfortunately we lack the space here to discuss this work.

should accept such a posit only if there are very strong reasons for thinking that that the Taking Condition holds. In the next section, we consider whether there are such reasons.

4. **Is the Taking Condition Worth Saving?**

So we shouldn't accept the Taking Condition unless there are strong reasons to. Are there? We will now consider the most prominent or obvious lines of support for the Taking Condition and argue that they do not provide such reasons. While new considerations might always be put forward, we take our discussion here to cover the most promising ways of trying to motivate the condition, and thus to amount, in combination with the considerations of the previous section, to a strong presumptive case against accepting it.

4.1 Explaining What's Wrong with Invalid Inferences

A simple way to motivate the Taking Condition is to note that something goes wrong when you make an invalid inference, even when the premises and conclusion are true. One might think the Taking Condition explains this: if the condition holds, then, when you make an invalid inference, you wrongly take the premises to support the conclusion (cf. Valaris forthcoming).

This line of thought is unconvincing. An equally natural and attractive explanation of what goes wrong when you make an invalid inference is that the inference itself goes wrong as an inference – it fails to satisfy a central norm of inference. It's no surprise that inference should be subject to a norm of truth-preservation. Inference is a kind of transition, an attempt to stay on track in acquiring new beliefs on the basis of things already taken to be true. Its norms govern the transition itself, not just the starting or end points. Our best means to stay on track is to make transitions that are truth-preserving. Thus, when you infer invalidly, you are doing it badly, even if you have a lucky success in arriving at a true conclusion.[15]

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[15] For recent discussion of norms of reasoning, see Broome (2013), Dogramaci (forthcoming), and McHugh and Way (forthcoming).

This alternative explanation also avoids a problem which the appeal to the Taking Condition raises. If taking can occur without inference – as it must surely be able to do, if taking is either a belief or an intuition – then the appeal to taking doesn't explain what's *distinctively* wrong with invalid inferences. You've gone wrong if you take p to support q when it doesn't, but you've gone wrong again if, in addition, you infer q from p.

Note further that the intuition version of the condition is even worse off. While false intuitions might be faulty in some sense, *you're* not doing anything wrong when you have one, as you are when you make an invalid inference.

4.2 Moorean Arguments

Something like the Taking Condition is often motivated by noting that it would be very odd to infer q from p while judging that p does not support q. For instance, it would be very odd to infer that you will pass the test from the fact that your horoscope promised great things for you, while also judging that your horoscope's predictions do not support the conclusion that you will pass the test. Let's call such a state *inferential akrasia*. The idea is then that the oddness of inferential akrasia is best explained by assuming the Taking Condition.[16] But how is this explanation supposed to go?

Hlobil (2014: 420) characterises the 'Inferential Moorean Phenomenon' roughly as follows:

(IMP)   It is either impossible or seriously irrational to infer q from p and to judge, at the same time, that p does not support q.

(IMP) thus says that inferential akrasia is either impossible or seriously irrational. Suppose it is impossible. We might be tempted to explain this as follows:

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[16] Cf. This sort of argument is developed in most detail by Hlobil 2014, ms. Setiya 2013: 186 offers a similar argument for the claim that basing is subject to a taking condition. See also Tenenbaum 2009: 108ff for some related considerations concerning belief and action.

Inferring q from p entails believing that p supports q. But someone who believes that p supports q and believes that p does not support q has contradictory beliefs. And it is impossible to have contradictory beliefs.

Note that this explanation in fact requires only the Consequence Condition, not the Taking Condition. But in any case, it does not seem the best explanation. Firstly, if inferential akrasia is impossible, this could be directly explained by the Negative Condition. There's no need for a positive requirement of taking. Secondly, if it is impossible to have contradictory beliefs, there must be some explanation of this – after all, most combinations of attitudes are possible. It is hard to see what this explanation could be if not that there are certain constraints on how irrational we can be (cf. Davidson 1985). More precisely, the idea must be that no-one could be so irrational as to have blatantly contradictory beliefs. But once this kind of explanation of psychological impossibility is on the table, why not apply it directly to inferential akrasia? After all, inferential akrasia would also be blatantly irrational. If some states are so irrational as to be impossible, why can't inferential akrasia simply be another example of this?

Suppose inferential akrasia is not impossible but just highly irrational. Again, the Taking Condition offers a potential explanation:

Inferring q from p entails believing that p supports q. But someone who believes that p supports q and believes that p does not support q has contradictory beliefs. And it is highly irrational to have contradictory beliefs.

Again, this only requires the Consequence Condition, and again it is not the best explanation in any case. Having contradictory beliefs is not the only way to be highly irrational. Inferential akrasia looks like a plain example of high irrationality, insofar as it amounts to going severely wrong by your own lights. It might thus be taken as a further basic form of irrationality, or it might be taken to fall under

the rational constraint against akrasia. Alternatively, if inference essentially aims at leading to true beliefs (McHugh and Way ms), inferential akrasia might fall under the rational constraint against taking what you acknowledge to be unreliable means to your ends. We don't need to assume that it also involves contradictory beliefs in order to hold that this is irrational.

A more general reason to doubt that the Taking Condition offers the best explanation of either the impossibility or irrationality of inferential akrasia turns on the parallel between inferential akrasia and *doxastic akrasia*: believing *p* while believing that there is no reason to believe *p*. Doxastic akrasia would also be highly irrational and may even be impossible (cf. Streumer 2013: 196-7). But the explanation of this is surely not that believing *p* entails believing there is reason to believe *p*. This explanation immediately sets off an infinite regress. You don't need to have an infinite number of beliefs in order to have any.

So the Taking Condition is not needed to explain the Inferential Moorean Phenomenon, as characterised by Hlobil. However, this is not the only way to understand the oddity of inferential akrasia. One might also understand it in terms of how one would express a state of inferential akrasia. The natural way to do so would be to assert:

(Bad)   p, so, q; but p does not support q.

(Bad) would be a very odd thing to assert, in roughly the way in which 'Moorean' assertions – e.g. 'p but I don't believe p' – are odd. Again, the Taking Condition offers a potential explanation:

> Inferring q from p entails believing that p supports q. What's more, this is something which everyone at least implicitly knows. Because of this, the first conjunct of (Bad) conveys that you believe that p supports q. But the second conjunct denies that p supports q. Thus you seem to be asserting, or at least conveying, a contradiction.

However, this explanation fails for similar reasons to the arguments considered above. Once again, we can ask for an explanation of why it is odd to assert or imply a contradiction. And once again, plausible explanations of this oddness directly explain the oddness of asserting (Bad). For example, we might think that it's odd to assert or imply a contradiction because you thereby convey an irrational state of mind, or because what you say is of no use to the hearer in figuring out what to think, or because your assertion is manifestly useless for defending your own beliefs. All of these things are equally true of assertions of (Bad). In asserting (Bad), you convey an irrational state of mind. And you are granting that by your own lights, you shouldn't be trusted as a guide to what's the case, in which case you are failing to defend your own beliefs, and indicating that (at least in this matter) you are not a source to be trusted.

Once again, we can bolster these points by noting that the oddness of (Bad) is highly analogous to the oddness of asserting: p but I have no reason to believe p. As above, the explanation of this oddness cannot be that believing p entails believing that you have reason to believe p.

We've been arguing that Moorean considerations fail to support a version of the Taking Condition which understands taking as belief. Note that the intuition version of the Taking Condition is once again even worse off. It wouldn't help explain the Inferential Moorean Phenomena, or the oddness of asserting (Bad), since there needn't be anything odd about believing or asserting that things are not as they intuitively seem to you. For instance, even if it intuitively seems to you that Frege's Basic Law V is true, there need be nothing odd about believing or asserting that it is false, if you are aware that it's inconsistent.

4.3 Deviant Causation

As we began by noting, some philosophers have thought that the Taking Condition is part of what distinguishes inference from mere causation. More specifically, one might think that the Taking Condition helps to rule out 'deviant causal chains'. Boghossian (2014: 4) introduces the Taking Condition in just this way (cf. also Korsgaard 2008: 33-4):

A habitual depressive's judging 'I am having so much fun' may routinely cause and explain his judging 'Yet there is so much suffering in the world,' as directly as you please, without this being a case in which he is inferring the latter thought from the earlier one. What's missing?

I think Frege… put his finger on it… A transition from some beliefs to a conclusion counts as inference only if the thinker takes his conclusion to be supported by the presumed truth of those other beliefs.

However, as Boghossian (2014: n.2) then acknowledges, merely adding a taking belief is not enough to avoid the problem of deviant causation – we'll still need the taking belief to play the right kind of causal role (cf. also Setiya 2013).

Still, one might think, even if the Taking Condition doesn't rule out deviant causation, it does rule out *many* cases – for instance, the example of the depressive, above – where one belief merely causes another without any inference occurring. One might thus think that the Taking Condition is at least the beginning of the solution to the problem of deviant causation.

But this is not convincing. First, it's plausible that the solution to the problem of deviant causation, whatever it is, will also rule out these easier cases. Once we have the right causal connection between the premise-belief(s) and conclusion belief, appeal to taking will be superfluous. And, second, the literature provides plenty of other resources for ruling out these easy cases. For example, we might say that the depressive's thoughts do not count as inference because they do not involve rule-following (Broome 2013, 2014, Boghossian 2014), an aim of reasoning (McHugh and Way ms), rational dispositions (Wedgwood 2006), basing, and so on.

4.4 Agency

As we also noted at the beginning, Boghossian thinks that the Taking Condition is required to vindicate the appearance that inference is an exercise of agency:

> [R]easoning is something we *do*, not just something that happens to us. And it is something *we* do, not just something done by sub-personal bits of us. And it is something we do with a (personal-level) aim – that of figuring out what follows or is supported by other things one believes. It is hard to see how to respect these features of reasoning without something like the Taking Condition (2014: 5).

Of course, some philosophers would deny that inference is active (Setiya 2013, Strawson 2003). But we are happy to accept this, along with Boghossian's claim that inference counts as agency in virtue of being done with an aim. We are more sceptical of his claim about what one aims at in inference. It is surely more plausible that the aim of inference is something like finding out what is true, rather than finding out facts about what one's own beliefs support. Nonetheless, there might still seem to be a route from this thought to the Taking Condition. In general, it might be assumed, doing X with the aim of achieving Y requires you to believe that doing X promotes Y. So, if you infer q from p with the aim of acquiring a true belief about whether q, you must believe that inferring q from p promotes acquiring a true belief about whether q. And you can believe that, we might think, only if you believe that p support q. Thus when you infer q from p, you must do so partly because you believe that p supports q.

However, though it rests on natural assumptions, this way of understanding the idea that inference aims at finding out what's true seems untenable. It implies that any inference depends on a prior piece of practical reasoning: from the aim of acquiring a true belief about whether q, and the belief that, since p supports q, inferring q from p would promote or achieve this, to making the inference from p to q (or intending to do so). But if inference - theoretical reasoning - is done with an aim, then surely practical reasoning is too. Note, for instance, that practical reasoning seems as much of

an exercise of agency as theoretical reasoning. And in that case, this account of how reasoning is done with an aim immediately sets off a regress: every bit of practical reasoning, and thus every bit of theoretical reasoning too, would require a prior one.

The idea that inference is done with an aim must thus be understood in a different way. It is a good question, though one we cannot discuss here, how this is to be done. The crucial point for present purposes is that, since it is hard to see how an account could appeal to means-end beliefs without setting off a regress, any account that does so must be rejected. And in that case, the above argument for the Taking Condition fails.

The idea that inference is an exercise of agency thus does not support the Taking Condition, when taking is understood as belief. The version of the Taking Condition which understands taking as an intuition seems no better off here, since a taking-intuition, as much as a taking belief, would have to be involved in prior reasoning in order to play the role the argument suggests.

4.5 Inductive v Deductive Inference

Boghossian (2014: 5) suggests that the Taking Condition allows us to distinguish inductive and deductive inference. In deductive inference, we take our premises to entail our conclusion; in inductive inference, we take our premises to probabilify our conclusion.

However, this proposal does not require the Taking Condition. The difference between induction and deduction is in the first instance a distinction between different normative standards for good reasoning, or perhaps between different sorts of arguments. Of course, you can intend or take yourself to be making a deductively valid inference, or a merely inductively strong one. To that extent, Boghossian is right that there is also a psychological distinction between inductive and deductive reasoning, and that this distinction is neatly understood in terms of what the reasoners take themselves to be doing. However, it doesn't follow that in every case of reasoning, you must be either reasoning inductively or deductively. It seems entirely possible to reason while having no view on whether your premises entail your conclusion or merely make it likely (cf. Harman 1986: 17-18).

So accepting Boghossian's account of the difference between these kinds of reasoning does not force us to accept, or even push us towards accepting, that all reasoning is subject to the Taking Condition.

4.6 Impossible Inferences

Boghossian's final argument for the Taking Condition turns on the observation that some inferences seem not just irrational but impossible. For instance, it seems impossible for ordinary thinkers to infer directly – without making use of intermediate steps – from the Peano Axioms to Fermat's Last Theorem. Boghossian offers the Taking Condition as an explanation of this: you couldn't make this inference directly, because you couldn't take it that the Peano Axioms support Fermat's Last Theorem – or rather, you couldn't think this without relying on a proof, or testimony of a proof (2014: 5-6).

This argument suffers from a similar flaw to the Moorean arguments. It takes for granted one kind of psychological impossibility to explain another. Moreover, just as we can ask why it's not possible to infer from the Peano Axioms to Fermat's Last Theorem, we can ask why it's not possible to (directly) take the Peano Axioms to support Fermat's Last Theorem. It's plausible that the explanation of the latter will help explain the former, or at least that there will be an explanation of the former which is parallel to the latter. For example, to explain why one can't directly take the Peano Axioms to support Fermat's Last Theorem, we might appeal to the idea that there are limits on how irrational we can be. But again we might appeal to this idea to directly explain why one can't directly infer Fermat's Last Theorem from the Peano Axioms. For example, we might point out that any rule permitting you to make this inference would be a rule that it is highly irrational for thinkers like us to follow. Thus insofar as there are alternative explanations of why it is impossible to make such

inferences which look no less promising than Boghossian's, this argument also offers little support to the Taking Condition.[17]

5. **Conclusion**

The arguments for the Taking Condition that we have considered are not compelling. And there are strong reasons to reject the Condition. So it looks like we should reject it.[18]

Some of what we have said also puts pressure on the Consequence Condition in particular, and so on the idea that in reasoning you take your premises to support your conclusion in virtue of reasoning from the former to the latter. In particular, the arguments of section 4 undermine central lines of support for the Consequence Condition.[19]

Does anything remain of the Taking Condition? The problems discussed in section 3 do not appear to count against either the Negative Condition or the Commitment Condition. And some of the arguments for the Taking Condition discussed in section 4 do support those conditions. For example, if inferential akrasia is impossible, then the Negative Condition holds. And if inferential akrasia is irrational, then it's plausible that a version of the Commitment Condition holds. More precisely, suppose, as seems plausible, that it's irrational to infer q from p while either believing p not to support q or withholding judgment on whether p supports q. In that case, we have a clear enough sense in which inferring q from p commits you to taking p to support q: you will be irrational if you

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[17] For further discussion of why some highly irrational inferences seem impossible, see McHugh and Way ms; cp. also McHugh and Way forthcoming, 5.2).

[18] For completeness, let us mention three other arguments we have seen or heard offered for the Taking Condition. Broome suggests that a dispositional account of reasoning vindicates the condition: 'we may treat your disposition to believe the conclusion when you believe the premises, and for this to seem right, as itself implicitly taking the premises to support the conclusion' (2014: 23-4). But Broome does not explain why such a disposition amounts to an implicit taking. In particular, Broome's notion of 'seeming right' (2014: 22-3) is very weak – at most it might support the Negative Condition. Setiya (2013: 186) attributes to Boghossian the claim that we cannot give up the Taking Condition without losing 'our ability to think of ourselves as rational agents', since 'full rationality' requires us to endorse our conclusions in a 'self-aware process of reasoning'. But it is unclear how this claim, if true, is supposed to support the Taking Condition, which concerns all reasoning, fully rational or otherwise.

Finally, consider how we express inference: 'p, so, q'. It might be thought that 'so' here indicates that you take p to support q. But absent other reasons to accept the Taking Condition, it is unclear why we should think this. We might instead simply take 'so' to mark that you're making an inference.

[19] The Consequence Condition also raises worries about overintellectualisation. As Valaris 2014 argues, it may fare better with worries about regress.

infer q from p while having any (doxastic) attitude towards the proposition that p supports q other than belief.

We will not here consider whether it really is impossible to make an inference while taking your premises not to support your conclusion. But we are happy to accept that inferential akrasia is irrational, and so grant the above version of the Commitment Condition. More generally, we are happy to accept that, in reasoning, you treat the premises *as if* they supported the conclusion: you treat them in a way that would be appropriate only if they supported the conclusion. This line of thought also suggests a version of the Commitment Condition: when you infer q from p you are committed to p's supporting q in that what you are doing is defensible only if p does support q. But this Condition is substantially weaker than the Taking Condition: it does not imply that inference requires, involves, or is explained by thoughts about support. Indeed, in the same weak sense, we are committed to everything we do and think being well supported, or at least permissible. This weak claim lacks the striking implications that Boghossian and others claim for the Taking Condition.

Our aim in this paper has been negative - to argue that what distinguishes inference from mere mental causation is not the Taking Condition. This is not, of course, to suggest that *nothing* distinguishes them. If inference is active, involves treating your premises as supporting your conclusion, and thus commits you to their doing so, then these facts require explanation by a substantive account of inference. We leave the positive task of providing such an account for another occasion.[20, 21]

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[20] We make a start in McHugh and Way (ms).

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