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What the Tortoise Should Do: 
A Knowledge-First Virtue Approach to the 
Basing Relation

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Abstract: What is it to base a belief on reasons? Existing attempts to give an account of the basing relation encounter a dilemma: either one appeals to some kind of neutral process that does not adequately reflect the way basing is a content-sensitive first-personal activity, or one appeals to linking or bridge principles that over-intellectualize and threaten regress. We explain why this dilemma arises, and diagnose the commitments that are key obstacles to providing a satisfactory account. We explain why they should be rejected anyway, and then offer a new, knowledge-first virtue epistemological theory of the basing relation that shows how we can substantially theorize about mental processes without these commitments. The resulting view plausibly captures the way in which basing is an inherently mental and content-sensitive process.

Well now, would you like to hear of a race-course, that most people fancy they can get to the end of in two or three steps, while it really consists of an infinite number of distances, each one longer than the previous one?

“What the Tortoise Said to Achilles,” Lewis Carroll (1895).

Introduction

What is it to base a belief on reasons? The question is notoriously difficult to answer. In this paper we diagnose the source of the difficulty, showing how

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it rests on problematic assumptions about the nature of mental processes that should be independently rejected. We then, informed by the results of this diagnosis, develop an account of basing on which these assumptions are false. We begin by focusing on basing one belief on other beliefs, and then generalize the account to basing beliefs on other attitudes. We hope that the account can be extended without too much trouble to the basing of other attitudes such as emotions, decisions, or intentions, but we leave that to another paper.¹

This paper is organised into three central parts: critical, diagnostic, and positive, with the latter positive part built upon, and motivated by, the lessons drawn from the former two. Section 1 is expository and then critical; it provides additional clarity and precision on our subject matter, and it explains the dilemma for paradigmatic extant accounts of the basing relation. Existing accounts generally fall into one of two camps (or are hybrids of these camps). Put roughly for now, there are general process accounts that appeal to fully general, non-mental features of psychological transitions to explain what basing is (e.g. causal or counterfactual features). Such views fail to characterize the way basing is a different kind of process from other transitions that are either not psychological or not rationally assessable. On the other hand, there are relata-focused accounts. These aim to explain the way in which basing is a distinctive kind of psychological transition, but they do it by specifying distinctive kinds of relata that must be involved in the transition. These views over-intellectualize the phenomenon in ways that are subject to vicious regress. To illustrate this dilemma we consider sophisticated representatives in each camp and show that what are often thought to be the key problems to be avoided are in fact symptomatic of a deeper, common difficulty.

Surprisingly, neither side aims to characterize the distinctive mental features of the process of basing: the way in which the subject, in performing the activity of basing, has a content-sensitive perspective. What we need is an account of the nature of the mental process of taking certain considerations to suffice for the appropriateness of belief in some proposition \( p \) in forming or sustaining that very belief. We can then see that hybrid views of the sort that are becoming increasingly popular (Neta, 2019) cannot resolve the problem.

Section 2 is diagnostic; we identify the commitments that are key obstacles to providing a satisfactory account of the basing relation, and explain why these commitments should be rejected. First is a tendency to only specify processes in the most general, metaphysically non-committal terms (Causal Neutrality). Second is a conflation between what one of us elsewhere calls the Nature and Generative Projects (Miracchi, 2017). Third is the assumption of Mental Descriptiveness, the view that the natures of mental kinds and processes are inherently non-normative. If Mental Descriptiveness is true, then a characterization of the nature of the basing relation cannot involve normative properties, such as the proper appreciation of truth-preservation relations. However, the

¹Ram Neta (2019) calls these “rationally determinable conditions” and although we agree with him that structurally the same approach should be taken to all cases of basing, some of the details will differ. Thus we focus on epistemic basing here.
kind of content-sensitivity characteristic of basing seems to be like this. Luckily, with a clear distinction between Nature and Generative Projects, we can reject Mental Descriptiveness as well. Our task is to illuminate the nature of the basing relation, and this will consist in illuminating its inherently mental, inherently normative features.

Taken together – and in sum – the critical and diagnostic parts of the paper aim to bring into relief the ways in which old-fashioned causal and counterfactual theories – although rarely still defended – have not been sufficiently excised from the way contemporary problems are posed and addressed, regardless of whether these commitments are ignored, or explicitly endorsed or rejected, by authors working on the topic. One central aim of this paper is to help us see how, by thoroughly rejecting these commitments and resolving these conflations, we can productively advance our understanding of the basing relation.

Such an advancement is what we then propose in our positive account in Sections 3 and 4. In section 3, we suggest that knowledge-first and virtue theoretic approaches can help us develop a normative, process-oriented, account of the basing relation. We then show how a combined approach can provide us with an account of epistemic justification that inherently involves the first-person perspective and neither appeals to nor requires basing. Instead, we develop, using competence-theoretic tools, the idea of proper practical respect in pursuing one’s aim. In section 4 we show how basing can be understood as a species of exercise of epistemic competence involving this proper practical respect. We progressively develop an account of basing, starting with cases of knowledge formation from other knowledge and progressively generalizing to characterize epistemic basing generally. We close by discussing some important implications of the view for further research.

1 The Dilemma

We are primarily concerned with the basing of a belief \( B(p) \) on other beliefs \( B(r_1) \ldots B(r_n) \), where \( r_1 \ldots r_n \) are the reasons for which the agent believes that \( p \). These are often called motivating or operative reasons in related literatures (see Alvarez (2016); Scanlon (1998)). Sometimes we talk of basing \( B(p) \) on \( r_1 \ldots r_n \) rather than \( B(r_1) \ldots B(r_n) \). This better reflects colloquial usage, where we talk of basing a belief that \( p \) on reasons, or considerations, that we take to favor \( p \). We consider this a terminological issue.

It is worth registering that there are separate strands of relevant literature that have evolved, with overlap, on the epistemic basing relation and on reasoning, which results in basing.² For our purposes, we are concerned with the nature of the psychological transition from some contentful attitudes to a belief that \( p \) that results in the subject holding beliefs for reasons.

²For some relevant overviews, see, e.g., Sylvan (2016), Korcz (2015) and (eds.) Carter and Bondy (2019, Ch. 1).
Even in cases where we base our beliefs on reasons that do not justify them, this process is subject to a certain sort of epistemic assessment: *Has the subject properly taken her reasons to be sufficient support for believing that p?*

We are also concerned here with the nature of the psychological process of sustaining a belief on the basis of reasons, for example in the face of counter-evidence. This too is a candidate for being a rational process in the sense at issue (we will henceforth drop this qualification, calling processes that are not rationally assessable in this way “a-rational”). Properly sustaining a belief makes or keeps the belief rational; improperly sustaining a belief can make the belief irrational if it isn’t so already.3

At this point we leave open whether there are possible cases of justified belief possession that do not involve rational basing. This would include cases where beliefs are formed or maintained but not on the basis of other mental states (perhaps e.g. sub-personal states), or they are results of transitions and sustaining processes that are not subject to the kind of rational assessability basing is. In such cases, one’s belief B(p) would be caused or causally sustained by B(r₁) ... B(rₙ), or some other contentful attitudes, but they wouldn’t be the reasons *for which* one believed B(p), and so one wouldn’t be epistemically assessable in the same way. These would be merely explanatory but not operative reasons.

Cases involving deviant causal chains, famously, fall into this category.4 In such cases, the belief is caused or causally sustained by reasons that are intuitively sufficient for justifying the belief, but do not cause or sustain the belief *in the right way*, so the resulting belief is not held for those reasons. For example, consider Plantinga (1993)’s example:

Suddenly seeing Sylvia, I form the belief that I see her; as a result, I become rattled and drop my cup of tea, scalding my leg. I then form the belief that my leg hurts; but though the former belief is a (part) cause of the latter, it is not the case that I accept the latter on the evidential basis of the former (p. 69, n. 8).5

Intuitively, Plantinga’s belief that he sees Sylvia is a mere cause of his belief that his leg hurts, not a reason for *for which* he believes this.

Similarly, the kinds of belief-production mechanisms that are imagined in cases offered to support internalism about justification, such as TrueTemp (Lehrer, 1990) and Clairvoyant (Bonjour, 1980) cases, are not rationally assessable in the way basing is. In those cases there is some mental “widget” that reliably outputs true beliefs, perhaps even using as inputs other mental or sub-personal psychological states. These cases were introduced as cases where the resulting belief is intuitively unjustified because the subject does not believe

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3 In certain cases, the sustaining process can make a belief rational that was not previously rational.

4 These are not Gettier cases; these are cases where the way the subject forms the belief is so deviant as to prevent standard methods of justification altogether. See (1973) for seminal discussion of deviant causal chains as they relate to intentional action.

5 Also discussed in Korcz (2015).
for reasons at all, let alone properly. Whether justified or not, such beliefs are not held for reasons in the sense at issue.

What is the difference, then, between the kinds of psychological processes that are basing processes: that result in or sustain beliefs held for reasons, and those that are a-rationally held? Here accounts of the basing relation diverge along familiar dividing lines.\(^6\)

1.1 General Process Accounts

First, there are what we will call general process accounts, which provide causal, counterfactual, or otherwise subject- and content- neutral accounts of the nature of the basing process, i.e., that doesn’t involve distinctively mental properties.\(^7\) They are primarily concerned with the gap between propositional and doxastic justification, and they take features of the relata of the basing process to be what determines rationality and indeed rational assessability. They seek to provide an account of the features of the transition from premises to conclusion that is extensionally adequate.

A main difficulty such views face is the problem of distinguishing basing from cases of deviant causal chains (Korcz, 2015). We think that the deviant causal chain problem isn’t the root of the general process account’s difficulty here, but rather a symptom of the real problem: that basing is a distinctive kind of psychological transition which must be specifically characterized in terms of the subject’s first-personal sensitivity to content relations. Any attempt to characterize the basing relation without explicit inclusion of these factors will fail to be extensionally adequate, let alone sufficiently illuminating.

To appreciate why this is so, consider for illustrative purposes, a toy example causal-sustaining account of the basing relation on which a subject S’s belief that p is based on a reason R iff S’s belief that p is causally sustained by R. While the simple example account straightforwardly succumbs to the kind of “widget” problem discussed above, so will other more sophisticated general process accounts – so long as such accounts lack explicit inclusion of the subject’s first-personal sensitivity to content relations.

For instance, consider Turri’s (2011) proposed supplementation of a causal sustaining account of the basing relation with a causal-manifestation condition according to which reason R is among your reasons for believing p if and only if R’s causing your belief that p manifests (at least some of) your cognitive traits. (2011, 393). Granted, the addition of such a condition looks like it will help causal accounts to rule out basing in cases like Plantinga’s (e.g., in that case, Plantinga’s belief that he sees Silvia is a cause of his belief that his leg hurts, but its doing so does not manifest any cognitive trait of his). Also, it looks – at

\(^6\)Here is of course not the place to offer anything aspiring to be a comprehensive taxonomy of positions-type on the basing relation. Our division of approaches into general process approaches and relata-focused approaches (and hybrids of them) is meant rather to show how two salient alternative approaches face problems with common underlying causes – causes we can and should free ourselves from.

\(^7\)We return to a diagnosis of this problem in §2.1.
least prima facie – like this kind of “cognitive trait” codicil would ensure the right kind of first-personal sensitivity to content relations distinctive of basing.

However, it does not; just consider that Turri’s causal-manifestation condition could be satisfied in a “widget-like” way such that genuine basing is not present when the condition is met. Just suppose, for example, that the relevant reason $r$ causing your belief in $p$ manifests (at least some of) your cognitive traits, but only through (e.g., due to a drug, hypnosis, or a TrueTemp-like device) some kind of cognitive compulsion.

For instance, suppose in the future that you can take a drug that will make you believe that running is the most important pastime for your health and also focuses your effective psychological traits on regularly running. In this case your belief that the drug will make you a committed runner causes you to take the drug, thereby causing you to believe that running is the most important pastime for your health and manifesting your focus and determination to run. In such a case you have not based $p$ on $r$ – the psychological transitions between your mental states don’t exhibit first-person sensitivity to content relations.

In short, a-rational psychological transitions that fall short of genuine basing can nonetheless manifest cognitive traits. Adding additional caveats to general process accounts that don’t explicitly ensure first-person sensitivity to content relations will accordingly come up short.

By now it should be clearer that – even setting aside entirely issues to do with causal deviance – general process accounts just don’t (in short), simply by referencing properties of relata or general properties of one’s psychology, ensure that a thinker appreciates the reasons for which she believes in the way apposite to basing. This much would seem to suggest the views that embrace a “taking condition” will be better positioned. Before moving on to see how such views face their own distinctive problem, let us briefly consider Kevin McCain’s (2012) sophisticated version of the general process account. Like many others in this literature, he is mainly concerned with providing an account of

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8This is applicable as well to causal accounts of basing that include a normative component – such as the proposal defended by Wedgwood (2006). Key to Wedgwood’s project is the thought that the normative can be causally efficacious in reasoning. While Wedgwood accepts that basing is a causal relation (2006, 661), he maintains that a subject S bases their belief B on a reason R only when R causes B in virtue of rationalising B for S (2006, §4), where R rationalises B for S only when S’s being in the state of believing R makes it rational for S to believe B. This kind of view faces the expected dilemma. Either when S bases her belief on R, R’s rationalising S’s believing B – which on this view will be that in virtue of which S’s believing R causes S to believe B – ensures that S exhibit first-person sensitivity to content relations or it does not. If it does not, then the view is open to widget-like processes; if it does, then an explanation for how this so that avoids overintellectualisation is needed. We discuss this latter kind of worry in more depth in §1.2.

9What goes for general process accounts that appeal to a causal condition also applies to counterfactual accounts, such as Swain’s (1981) ‘pseudo-overdetermination’ account, on which S’s belief that p is based on reason R if R is not an actual cause of S’s belief that p, but in the close worlds where the actual cause of S’s belief that p is absent, and where S believes that p and S possesses R, R is a cause of S’s belief that p. While such an account was designed with extensional adequacy in mind – as an attempt to respond to superstitious lawyer-style cases (Lehrer, 1971) – notice that the account is in the same position as simple causal accounts when it comes to allowing, in principle, a-rational psychological transitions to count as bona fide basing.
doxastic justification in terms of propositional justification and so specifying the basing relation in a way that avoids the problem of deviant causal chains. McCain uses an interventionist account of causation to define the basing relation as a causal relation between belief and other attitudes (one’s reasons) such that they that are direct, actual, individually necessary and jointly sufficient causes of one’s belief (p. 364). This view rules out deviant causal chain cases by fiat, because they are constructed by intervening some unusual variables between the rational bases and the belief in question. If the reasons for which one believes that \( p \) must be direct causes, then there can be no such intervening variables. McCain’s account thus rules out deviant causation.

However, his account fails to provide an adequate characterization of the basing relation. First, it rules out too much. As Korcz (2015) points out, a belief can plausibly be based on reasons that are upstream in a chain of reasoning, so that the causal connections between a belief and its bases are not direct. Indeed, for complicated reasoning it is often the case that the reasons for which we believe that \( p \) are mediated by substantial reasoning as to how they support \( p \).

Second and more importantly this account fails to exclude all a-rational psychological transitions. As noted above, it is possible that some of our a-rational psychological transitions are between mental states that, if we were aware of the connection between \( p \) and the contents of those states, could be reasons for which we believed that \( p \). However, because we do not have the requisite perspective on the relationship between our reasons and \( p \), or because our perspective fails to be significant in explaining why we form or sustain our belief that \( p \), we do not believe for those reasons. (Note that the Lewis Carroll problem, to be discussed further in the next subsection, is not solved by merely introducing a purely causal mechanism that causes the Tortoise to believe \( q \) any time he believes \( p \) and \( \text{If } p \text{ then } q \).) That is, McCain’s account does not distinguish between the psychological transitions that result in beliefs held for reasons and those we’ll henceforth affectionately call “widget” type processes.\(^{10}\)

That McCain’s account is in certain cases too strong, and in other cases too weak, suggests that deviant causal chains are not the root of the problem, and that no adequate account of the basing relation can be developed by closing the space, so to speak, between one’s belief and the reasons for which one holds it. Rather, we must more specifically characterize the nature of this epistemically significant psychological transition.

Note that on McCain’s account, the attitudes that cause the belief must have contents that propositionally justify the resulting belief, but those contents need not play any specific role in how that belief is caused, apart from being a direct cause. However, intuitively this is precisely the issue, both for basing and proper basing. For example, in cases of wishful thinking, a desire

\(^{10}\)McCain considers this sort of objection and so builds in as another relatum the rule one follows as an extra content (p. 367), turning it into a kind of hybrid account between general process views and relata-focused views. But as we are about to see below this won’t solve the problem.
that $p$ causes one to believe that $p$. However, a desire that $p$ might in some cases actually be good evidence for $p$, perhaps enough to propositionally justify $p$. Whether the subject is justified in believing $p$ thus depends on whether she believes $p$ just because she wants it to be true, or because she appreciates the evidential connection. Indeed, wishful thinking proper plausibly doesn’t count as basing at all in the sense we are concerned with, because subjects do not take their desires that $p$ to be good reasons for thinking that $p$. How the subject treats her reasons – even in the direct causation case – is important for whether or not those reasons can properly be said to be the reasons for which she believes what she does.

Hopefully the reader can see that this is not an issue with McCain’s account in particular, but with the kind of strategy general process accounts adopt for characterizing the basing relation. When one bases a belief on some reasons, such that thereby those are the reasons for which one believes as one does, one must appreciate those reasons, and that appreciation must be an important factor in explaining why one believes as one does. No degree of reasonableness of one’s reasons plus some general causal relation suffices for the right quality of process, because there will always be a difference between mere production and a case of a subject believing that $p$ because that is what the contents of her reasons make it reasonable to believe.

1.2 Relata-Focused Accounts

We’ve seen now why general process accounts face a structural sort of problem type, one not specific to particular accounts, but rather one facing any account that tries to explain basing by appeal to general causal or counterfactual features of the basing process. Let’s now consider another familiar strategy, what we will call – perhaps imperfectly, but for simplicity and ease of reference – relata-focused accounts. These include rule-following accounts (Boghossian, 2008), meta-belief accounts (Longino, 1978; Leite, 2008; Audi, 1993; Thomson, 1965), and reasons accounts (Broome, 2013; Lord, 2018a; Pettit, 2007).

11For example, you might be outside on a cold day and desire to get warm. You believe, on that basis, that you will find some way to get warm. If your believing on the basis of your desire is sensitive to the fact that you normally can satisfy desires of that kind, then your belief may very well be epistemically rational. (We try to prescind in the paper from the question of exactly which reasons can immediately justify which beliefs.) The point of bringing up this possibility is to show that whether a belief is the result of proper basing or wishful thinking is not settled by what reasons directly cause one’s beliefs, but depends on how one treats those reasons. McCain’s account does not provide us with the tools we need to understand this connection, and as a result his account is compatible with mere brute causation (a widget process) and other relationships incompatible with epistemic basing, such as wishful thinking. One could try to respond to such an example by restricting the epistemic basing relata to beliefs or presentational states such as perceptual experiences. In our view, this would eliminate important direct sources of knowledge such as intentions, discussed below. Moreover, it would not deal with the concern that there could be direct, a-rational psychological transitions (“widget” type processes) that would fail to count as basing because the subject lacks the necessary first-personal perspective.

12For this reason, we disagree with Neta (2019) that the kind of dispositionalist account he describes gives an adequate response to the question of which reasons why are reasons for which. Such an account will fall prey to the same problem.
They aim to capture basing as an intelligent, agential process, but in fleshing out the nature of that process they characteristically move from characterizing the first-order process to appealing to second-order states, opening themselves up regress or to the same kinds of concerns general process accounts face. They tend to focus on elucidating what we can call the **Taking Condition**:

**Taking Condition:** When \( A \) bases \( B(p) \) on \( B(r_1) \) ... \( B(r_n) \), \( A \) takes \( r_1 \) ... \( r_n \) to be sufficient reason for believing that \( p \).\(^{13}\)

The Taking Condition is intended to reflect the idea that basing is a first-personal phenomenon; it is something an agent does, where she believes in ways that are sensitive to what else she believes and to the fact that in believing that \( p \) she is committing to \( p \)'s truth. And something along these lines seems quite plausible. For, as we saw above, the difference between basing and other, a-rational, psychological transitions seems to consist in the kind of perspective the agent has on her reasons. We can evaluate transitions from premises to conclusion as rational or irrational just depending on contents of the attitudes involved, but if the agent does not in some sense regard these as sufficient reason for belief it is hard to say in what sense they are the reasons *for which* she believes what she does.

However, without further clarification of what it is to take some reasons to be sufficient for believing \( p \), we may reasonably worry that we have merely substituted one way of talking about the phenomenon under study for another. And, when we try to elucidate this Taking Condition, a problem quickly arises.

If *taking* is to be understood as *believing*\(^ {14}\), then the Taking Condition merely introduces another belief, and we can ask what it is to base one's belief \( B(p) \) on \( B(r_1) \) ... \( B(r_n) \), and the belief *that* \( r_1 \) ... \( r_n \) *is sufficient reason for believing* \( p \). But of course then we are off to the races, as Lewis Carroll (1895) amusingly demonstrated. Although in that paper he is concerned with what is sufficient to rationally compel an interlocutor to believe a claim that logically follows from some of her other beliefs, the root of the issue is the same. If having beliefs \( B(r_1) \) ... \( B(r_n) \) is insufficient to make the agent believe \( B(p) \) for those reasons, and so base her belief on \( r_1 \) ... \( r_n \), how could adding an extra belief make the difference?

These views aim to capture basing as an intelligent, agential process. But in fleshing out the nature of that process they make a slip from characterizing the first-order process to appealing to second-order states as explanatory. Consider this passage from Adam Leite (2008):

\(^{13}\)Compare Boghossian (2014): (Taking Condition): Inferring necessarily involves the thinker *taking* his premises to support his conclusion and drawing his conclusion *because* of that fact. For an extended criticism of this kind of Taking Condition, construed specifically as a condition on inference, see McHugh (2016). Their critical target, is, specifically, the thesis that ‘Inferring necessarily involves the thinker taking his premises to support his conclusion and drawing his conclusion because of that fact’ (2016, 314).

\(^{14}\)For a parallel kind of criticism of a taking condition on inference, construed such that ‘taking’ involves a kind of belief, see McHugh and Way (2016, 317-319).
E.g. “How can they be my reasons, if I don’t even regard them as reasons? Such considerations strongly suggest that at least part of Inferential Internalism is something like a conceptual truth: In order for one to have any positive epistemic status in virtue of believing that $p$ on the basis of $R$, one must believe that $R$ supports $P$—because otherwise, one wouldn’t count as basing one’s belief that $p$ upon $R.” Leite (2008), p. 423.

Here Leite makes what seems like an appropriate move: to interpret regarding as believing. After all, regarding seems to be a propositional attitude, one that commits the subject to the truth of what is regarded. However, independently of whether for beings like us the kind of regarding that is involved in the Taking Condition entails that one have such meta-beliefs (and we think it doesn’t; see below), such a construal of the Taking Condition cannot suffice to give us an account of the basing relation.

To try to illuminate the basing relation by requiring that the subject hold an appropriate meta-belief merely strengthens the relata; it does not sufficiently illuminate the process. Ex hypothesi, our reasons were already sufficient to justify our belief, but were insufficient to make any transition from reasons to belief a basing transition. If this is so, then how could merely adding in another belief make the difference?

Leite argues that his view is not subject to regress because he doesn’t treat these meta-beliefs as premises. Rather, he claims, they are background conditions. He claims that the distinction is intuitive enough, so that he does not need to give an account of it. With this distinction in place, Leite can claim the meta-belief does not serve as a premise in the argument, and so the traditional Lewis Carroll regress worries do not surface.

However, we still face a problem. Even though the meta-belief does not serve as a premise in the argument, in order to distinguish between the kind of psychological transition that is basing and other psychological transitions, we must say something about the role the background meta-belief plays. Does it causally influence or sustain the inference as a mere “widget,” or does it involve a certain kind of perspective the agent has on the relation between the meta-belief and the inference, i.e. a kind of regarding the meta-belief as supporting the appropriateness of the inference? If so, then how is this kind of regarding to be understood? If in terms of another meta-belief, we are again off to the races.

This is why we have called these accounts “relata-focused” accounts. Even if the attitudes they posit are not supposed to be premises in the inference process, but rather background beliefs, or rules, or other kinds of attitudes, the same issue arises. Appealing to an attitude to illuminate the basing relation will not work: at some point the perspective must be a feature of the process of the belief-formation itself.

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15 It is in this sense we take views like Boghossian's to fall within the wide heading of 'relata-focused' accounts, even if such accounts wouldn't colloquially be described as such.
Although we lack the space here to discuss all of the views we’ve described as relata-focused, let’s briefly consider two further, due to Boghossian (2014) and Neta (2019). Boghossian, like Leite, is sympathetic to the idea that basing a belief on a reason requires satisfying the Taking Condition. For Boghossian, the best way to preserve a taking condition is to advert to rule following as central to the kind of reasoning that would be required for basing. In basing a belief on a reason, as well as, more generally, when inferring any belief from any other belief, we follow or are guided by rules, the following of which implicates that we “take” the relevant reason to be a reason for believing the target proposition.

Boghossian is aware of over-intellectualization worries that face various anticipated ways to unpack a taking condition; if any of his own characterisations of rule-following of the sort implicated by basing goes so far to analyse (e.g., in terms of beliefs or other attitudes) the kind of taking implicit in rule following, then he appreciates his own view incurs such objections. Boghossian accordingly opts to take the notion of following of a rule as an “unanalyzable primitive” (2014, 17), seeing no other good option. Boghossian is of course right that a view that embraces a Taking Condition while analysing taking in terms of other attitudes invites Carroll-style overintellectualisation worries. The price he’s paid to avoid this, though, is that the view doesn’t illuminate the basing process in the manner initially sought. What we’re trying to get a footing on, after all, is how to distinguish the kinds of psychological processes that are basing processes – that result in or sustain beliefs held for reasons; rule-following that is both an unanalysable theoretical primitive and ‘Taking-entailing’ falls short on this score: it either leaves that psychological process that is the sought explanandum largely mysterious; or, it leaves us in a position to de-mystify it only by finding ourselves back where we started when hoping to make good on the idea that basing involves (something like) ‘taking’ as opposed to simply being such that it is characterisable along general process lines.

Ram Neta (2019) defends a hybrid dispositionalist-representationalist view on which (epistemic) basing is an exercise of a disposition to believe that \( p \) when the agent has reasons \( R \) that inherently involves a representation of that very exercise as justifying the belief. He takes the tokening of such a repre-

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16See, e.g., Boghossian (2014, 7-8).
17It’s worth noting that de-mystifying rule-following by leaning on the notion of “guidance” to explain the way basing is an active process of a thinker quickly faces its own problem. Consider here, for example, Broome’s (2014) position that in following a rule, one is not caused to do certain things, as with a programme and a computer, but rather one is guided by the rule. But, it can then be asked whether the guidance here should be understood as intentional guidance. If not, then a widget-style problem surfaces; it is no longer clear what the gap is between such rule following and a computer following (i.e., widget-like) a programme’s rules; but if so, then circularity threatens; after all, one would presumably need to then base one’s thinking on the rule itself that specifies the conditions under which to base the target belief. For discussion of this kind of circularity objection in the context of rule following accounts of inference, see Sylvan (2016).
18For some other lines of critique of Boghossian’s appeal to rule-following, see, e.g., Wright (2014) and Hlobil (2014).
19On my account, the basing relation just is that disposition-exercise that is individuated by
sentation in forming the belief that $p$ caused by $R$ to be necessary and sufficient for the psychological transition to be a case of basing. Regardless of whether he has given a necessary condition, we can see that the condition is not sufficient, for the reasons we have been discussing. We are trying to understand what it is to treat a reason as justifying one's belief: i.e. what it is to exhibit that kind of content-sensitivity in psychologically transitioning from a total state with attitudes $R$ to one also with the belief $B(p)$ based on $R$. Adding in a representation as constitutive of this process neither sufficiently illuminates our perspective in performing basing, nor guarantees that it will obtain.

For all Neta says, the disposition in play may be a “widget” disposition to infer $B(p)$ when one tokens $R$ and the supposedly requisite representation. The representation would then lack the appropriate perspectival connection to the production of belief, and we would need to invoke a further attitude to account for the difference between representations that are involved when our reasons are the ones for which we believe as opposed to merely why we believe. The problem re-arises because no attitude, even as a constitutive component of the process, can ensure that the transition from antecedent attitudes to based belief has the the requisite first-personal perspective and content-sensitivity for basing. For any representation or attitude that is invoked, we must ask how this representation is involved in the belief-forming process to make it the case that the belief is formed for reasons. And once again we are off to the races.

Let us take stock. We began by characterizing our explanandum as a kind of psychological transition with certain characteristic mental and normative properties. But instead of that process itself being further elucidated, we either get an attempt to shore up the space between the relata to eliminate cases of psychological transitions that aren’t basing, or we get attempts to further elucidate the relata themselves. Without characterizing the first-order process correctly, appealing to other relata to secure higher-order states merely over-intellectualizes and threatens regress.

We can summarize the dilemma for accounts of the basing relation as follows:

**Basing Dilemma**

(i) Either one appeals to some kind of neutral process that does not adequately reflect the way basing is a content-sensitive first-personal activity;

(ii) Or one appeals to linking or bridge principles that over-intellectualize and threaten regress.

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20We use ‘treating’ and ‘taking’ synonymously here and elsewhere, as we take to be common, and for ease of presentation. However, it is worth noting that some such as McHugh and Way (2016) distinguish between them.

21Neta doesn’t consider this concern because he thinks the dispositionalist account gives an adequate account of what makes certain reasons why reasons for which. But we can see that it does not, for exactly the same reasons other general process accounts do not.
This dilemma is due to both parties failing to specify the special features of basing as a mental, first-personal, content-sensitive transition or process. With different emphasis, they rely on features of the relata to secure the mental and normative properties of the transition, leaving the description of the process itself to be characterizable generally. In the next section, we diagnose some root assumptions that we think are responsible for the problem, and show how they can be rejected.

2 Rooting out the Difficulty

2.1 Rejecting Causal Neutrality

Why should it seem necessary to characterize the basing process neutrally, i.e. in a way that doesn't involve distinctively mental properties? While it is beyond the scope of this paper to provide historical explanations, in order to understand what a more satisfactory approach might be we must take a closer look at some background assumptions that may be playing a role. First, it is very common not only in this debate but in other philosophical discussions to invoke causation only in the most general way, and not to discuss particular kinds of causal processes that may be involved. This may be a hold-over from a more ontologically austere period of philosophy, but regardless of origin the practice has largely gone unexamined.

In any case, this is a mistake. Generally in the special sciences specifying the processes specific to a domain are as explanatorily important as specifying entities, properties, and other relevant kinds (e.g. Machamer et al. (2000); Barrett et al. (2007)). Throughout the special sciences, many processes can only be understood as involving specific properties of specific kinds. Processes in chemistry such as the forming of covalent bonds, or in biology such as fertilization, inherently involve in their specification certain kinds of relata. Moreover, the specifying of those relata is not sufficient to characterize the nature of the process of interest. The way the causes produce their effects is something that must be characterized.  

Note that we do not intend to suggest, in this diagnostic section, that all theorists in the literature have all of the commitments that we argue should be rejected all the time, only that the influence of these commitments on the literature serves to perpetuate the dilemma. For some additional work we lack sufficient space to discuss here, but which may be of interest to readers, see, e.g., McHugh and Way (2018), Lord (2018b), Sylvan and Lord (2019).

Appreciating this point does not require rejecting popular general theories of causation such as interventionism. Interventionism is a general theory of when to attribute causal relations. It does not aim to distinguish between different kinds of causal processes. (Interventionist accounts do provide very abstract mathematical description of causal processes using structural equation models, but since there are many interpretations of mathematical functions such specifications are too general to answer the kinds of questions we are asking here about the basing relation.) For this reason, an interventionist account of the basing relation will not tell us about the nature of this specific kind of process, and so won't tell us why it among other psychological transitions has the characteristic first-personal and epistemic features it does.

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2.2 Distinguishing Nature and Generative Projects

Another, related, possible source of resistance to charactering the basing process as inherently mental has to do with a widespread conflation of two different kinds of projects that one might be interested in, both in pursuing philosophical analysis and empirical discovery:

(i) **Nature Projects** aim to illuminate the nature of the explanandum.

(ii) **Generative Projects** aim to explain *in virtue of what* the explanandum obtains.

While in some cases the nature of a kind may be illuminated by understanding what gives rise to it, often it is better elucidated in other ways, for example by characterizing it in relation to kinds that are well understood (say, crimson as a determinate of red). Understanding *the kind of thing something is* is different from understanding in virtue of what it obtains. This is familiar from discussions of functional kinds, but is not restricted to them. For example, what it is to be a thermostat is to be a device that regulates temperature, e.g. of a room. It typically has two functional components, a thermometer (heat detector) and a heat-production source, whose operations are functionally coordinated to keep the temperature of the room within a certain range. Each of these components and the architecture of their interaction must be concretely implemented, e.g. with an electronic thermometer and a gas heat source. Understanding of the features of electricity or gas heaters may help us with the generative question but they play no role in helping us better understand what *it is* to be a thermostat.

Similarly, one might claim that what it is to be conscious is for there to be something it’s like to be you. One can accept the view that consciousness obtains in virtue of, e.g., neural, computational, or other functional processes and hold that a specification of these features is neither required nor helpful in illuminating the nature of consciousness. Reductionist projects in philosophy of mind obscure this distinction, aiming to analyze the natures of mental kinds in more fundamental non-mental terms.

One of us has argued elsewhere that these questions should be kept distinct (Miracchi, 2017). While some theorists (authors included) are committed to the view that the mental ultimately obtains in virtue of the fundamental physical facts, that does not mean that an account of the natures of higher-level kinds can be given in the vocabulary of lower-level terms, or even that a specification of their lower-level grounds yields significant insight into their natures. Such grounds may have no more in common than being the sort of things that can give rise to the higher-level kinds in question, in which case a priori, independent understanding of their nature is necessary even for understanding in virtue of what the higher-level kind obtains.

Here we are interested in understanding the nature of the basing relation, not in virtue of what it obtains. As such, although *we also* may be interested in this latter question, and an answer to it will need a non-mental explanans,
there is no reason why we should restrict ourselves here to non-mental terminology in specifying the basing process. As such, it is open to us to aim to illuminate basing in ways that (i) make specific claims about the kind of relation at issue, and that (ii) characterize this relation in inherently mental terms, such as involving a cognitive agent who is doing the basing.

2.3 Against Mental Descriptiveness

A further widespread commitment that is contributing to the difficulty here is what we will call Mental Descriptiveness:

Mental Descriptiveness. The natures of mental kinds are characterizable independently of their normative properties.

Now, if one has not sufficiently distinguished Nature from Generative projects, one might think that a commitment to physicalism (or any other form of naturalism) requires this view. For we are not careful, a commitment to the idea that we can explain how the mental obtains in virtue of the natural requires us to hold that the mental (and so its nature) can be explained in non-mental terms. Although a notion of naturalistic representation involves the attribution of contents to mental states, if one is committed to characterizing the nature of mental processes in, e.g., neural or computational terms, that plausibly rules out any ineliminable normativity. Computational processes, for example, are by definition formal processes, and so can be fully characterized in non-semantic terms.24

However, once we accept the idea that the mental domain can be considered, just like other domains that are part of the natural world, to have kinds and processes that can only be specified in terms proprietary to that domain, it is no longer obvious that characterizations of the natures of mental kinds should be non-normative. After all, the distinction between the mental and the non-mental plausibly has as much to do with having interests and disinterests as it does with mere feelings and seemings, and so at least with the kind of normativity involved in pursuing our aims.25 Our conscious lives involve aims and desires: even our most basic emotions and sensations such as fear and comfort motivate us to action. Plausibly, our fundamental interests and disinterests are not just bodily; they are social and environmental, and so readily involve cognitive endeavors. So, if we are looking for the distinction between the mental and the non-mental, the distinctively psychological rather than the sorts of systems with respect to which we can choose whether to take the intentional stance, normative characterizations of mental kinds and processes might not be a bad place to start.

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24 Reductionistic views that do invoke evolutionary normativity, or the normativity of content-relations, in specifying mental processes must promise that these normative notions ultimately be explicated in non-normative terms.

25 This relevant kind of normativity here is, on our view, telic normativity rather than substantive normativity — a distinction that is important to virtue epistemology. This is, roughly, the distinction that tracks the sense in which the assassin’s shot can be good qua shot, even when the shot should not have been taken. For discussion see Sosa (2021, Ch. 2) and Carter (2021).
Of course, approaching the topic this way blurs the boundaries between philosophy of mind and epistemology. If we allow that the natures of (some) mental kinds must be normatively characterized\textsuperscript{26}, epistemology can no longer take itself to be operating on the pre-given deliverances from philosophy of mind, science, or intuition in developing epistemic theories. Instead, there may be substantial overlap between the two fields, so that often understanding what certain mental kinds are is a matter of understanding what normative properties it essentially has.

All of this will be amenable to some philosophers, but seem quite old-fashioned to others. After all, didn’t the scientific turn in philosophy of mind rid us of this sort of attitude towards mental kinds? Wasn’t it progress that we moved away from an a prioristic, armchair conception of philosophy of mind and towards a more scientifically rooted one?

We hope to have made the point above that a defense of characterizing mental kinds in distinctively mental, and distinctively normative vocabulary, need not commit one to reject anything but the most stalwart forms of reductionism. Philosophy of mind, perhaps, turned over too many of its duties to a cognitive science that shared its reductionistic metaphysical commitments, and epistemology, perhaps, in an effort to save genuine realism and interest in normative features of the mental largely recused itself from debates about the nature of the mental, instead reframing its project as analyzing the normative properties of pre-specified mental kinds. At any rate, Mental Descriptiveness is too tendentious to deserve a place as a background commitment in either philosophy of mind or epistemology. We can reasonably reject it, and see whether in doing so we can make some progress.\textsuperscript{27}

With space made for rejecting Mental Descriptiveness, let’s look at why it might have created difficulty in giving an account of the basing relation. Even if one tries to characterize basing as a distinctively mental process, a commitment to Mental Descriptiveness can make it hard to see how one could do so. When we first start asking about the basing relation, the subject matter is typically introduced with cases of deductive inference or other kinds of knowledge or justified belief formation. For example, one wonders, along with Achilles and the Tortoise, what more is required for a person to grasp the need to infer $q$ from $p$ and If $p$ then $q$ than a grasp of Modus Ponens. This involves appreciation of the truth-preserving relationship between premises and conclusion, which is itself an achievement. Or, in line with much of the literature on the topic, one primarily concerns oneself with proper basing, which is required for making use of one’s propositional justification in acquiring or sustaining doxastic justification. Proper basing also plausibly requires some grasp of how

\textsuperscript{26}This idea will be developed in §4, where we will further distinguish telic normativity (of the sort that will be pertinent to our positive proposal) from substantive normativity.

\textsuperscript{27}Our bet is that a more normative view of the mind can actually facilitate scientific inquiry by providing a more robust conception of the mental kinds under study and guarding against deflationary, overly reductionistic accounts. Motivating that view, however, is a task for another paper.
The further we move from these cases of knowledgeable or proper basing, the more questionable it is that what is occurring is basing at all, rather than an a-rational or irrational transition. Is believing that there’s a pink elephant down the hall as a result of seeing that it’s sunny outside a case of basing or not?

It may be then, that the kind of taking that is distinctive of basing cannot be characterized, even in cases where one bases irrationally, in non-normative terms. An account of its nature that explicitly locates it as a content-sensitive, normatively valenced process may fare better than other accounts, and we see no compelling reason why this strategy should be avoided. In the remainder of this paper, we will provide such an account.

3 A Process-Focused Account of Epistemic Justification

One attractive way to develop the ideas we have been considering is to build on existing views in epistemology that reject Mental Descriptiveness. There are two main extant approaches that do this. Knowledge-first views claim that knowledge is a mental state, thus denying the view that the nature of some mental states can be non-normatively characterized. Moreover, many knowledge-firsters are interested in explaining other epistemic states and processes in terms of their relation to knowledge. Such accounts are inherently normative, and intuitively in the kind of way we seem to need: if the paradigm cases of basing are the ones responsible for the production or sustaining of knowledge, then maybe an account that explicitly makes this commitment will be able to satisfactorily illuminate what basing is.

Secondly, virtue epistemological views provide an inherently normative, agential characterization of belief formation and sustaining. They claim that belief is a performance in which the agent aims at an epistemic good (e.g. true belief or knowledge). Beliefs are inherently epistemically assessable because

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28A commitment to mental descriptiveness finds its attractiveness augmented by many of the independent assumptions made by the literature on basing, for example that doxastic justification is to be understood in terms of propositional justification.

In this context, it is assumed that all of the normative features relevant to propositional justification are determined by the relationship between the contents that are basis for belief (i.e. the evidence) and the based proposition, except for the distinction between being justified to believe a claim and justifiably believing it. One might, then, try to do with as sparse a conception of the nature of the basing relation as possible, to preserve the idea that it is relations between contents that do the normative heavy lifting.

29This is by no means the only way of giving an account of the nature of the basing relation in mental or normative terms, but it is the most plausible route we have found.

30We do not claim that what follows is the only way one might develop a positive view that rejects Causal Neutrality and Mental Descriptiveness, only that it seems to us an elegant and well-motivated approach.

of their constitutive epistemic aims. This sort of approach may help us understand the kind of agency and perspective involved in taking reasons to support one’s belief as a first-order phenomenon, thereby threading the needle between “widget” style views and over-intellectualization.

Recently, some theorists have combined a knowledge-first approach and a virtue-epistemological approach (Miracchi (2015); Kelp (2017)). In this section, we develop this combination of approaches into an account of the basing relation that avoids the dilemma stated above.

3.1 Knowledge-First Virtue Epistemology

According to knowledge-first virtue epistemology, knowledge is a manifestation of a competence to know. While this view does positively characterize knowledge as a species of the general kind manifestation of competence, knowledge and competence to know are metaphysically and explanatorily fundamental to the epistemic and mental domains. (This claim is compatible with a commitment to providing an account of how these kinds obtain in virtue of more fundamental – e.g. neural or computational – kinds, but such an account will not appeal to more fundamental epistemic or mental kinds.)

Belief and justification are both explained in terms of their relationship to knowledge. Belief is just that performance which constitutively aims at knowledge—or, more precisely, in believing that p, constitutively, an agent A aims at knowing that p. On this kind of approach, not only is the formation of a belief a process, but the very having of a belief is too.

Consider the following case. You decide to bake a cake. You mix the ingredients, pre-heat the oven, pour them into the pan, and pop it in. You then set a timer for 30 minutes and go into the living room to take a nap. The whole time you are baking the cake, even though for part of the time you are unconscious, and doing no work that “keeps” you baking the cake. At this stage nothing is required of you and you have the right dispositions to do what would be required to successfully bake the cake when conditions change: e.g., your alarm is set to make sure the cake doesn’t burn. In this sense, you are engaged in the process of baking the cake the whole time. (The dispositionalist had this much right—what prevented them from providing an adequate account was an attempt to characterize the manifestations of dispositions in non-mental, non-normative terms.)

On this analogy, one can aim at knowledge even if one is not consciously doing so, and there is no work one is doing at the moment to keep aiming at knowledge. What is required is that one have dispositions to try to keep knowing that p should any issues arise (e.g. to respond to counter evidence). In this sense, believing just is the sustaining of belief, and is properly considered a psychological process.

Justification, according to virtue epistemology, is a property exercises of epistemic competence have as such. In exercising one’s competence, the agent
Aims competently: either at knowledge or true belief, depending on the view. A knowledge-first virtue epistemology claims that exercises of competence typically aim at – and issue directly in – cases of knowledge. This view has intuitive appeal: a competence to swim manifests in swimming, a competence to understand Spanish manifests in understanding something said in Spanish, etc. According to a knowledge-first virtue approach one need not understand epistemic competences or their paradigmatic exercises in terms of any doxastic state that falls short of knowledge. (Henceforth we’ll omit explicit discussion of belief-first virtue epistemology.)

On the plausible assumption that one can competently aim at knowledge but fail (e.g. Gettier cases or merely unlucky false beliefs), we can suppose that competences issue in two kinds of exercises: cases of knowledge that are constitutively achievements, and cases of merely unlucky but competent belief that are constitutively failures. These are cases of “botched” knowledge, deviations from the paradigmatic case, failures to know, where one isn’t responsible for the botching, deviation, failure. That’s just how it goes sometimes in a complex, uncertain world.

Although these are two different kinds of performance, they both have properties in virtue of being cases of the general kind exercise of competence. For example, because competences are reliable, a belief that is an exercise of competence will, as such, be likely to be a case of knowledge. In this way, we can use the tools of virtue epistemology to derive a knowledge-first account of epistemic justification.

### 3.2 Proper Practical Respect for What It Takes to Know

We can use the tools of knowledge-first virtue epistemology to understand a kind of perspectival, normative property that exercises of competence have as such: they manifest what we can call proper practical respect for knowledge as the aim of one’s endeavor. This is a matter of proceeding, in aiming as one

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32 Here we ignore subtleties about how some virtue epistemologists, e.g. Sosa (2010) adopt a further specification of competences in terms of SSS structure: seat (stable features of the competence), shape (being appropriately alert, healthy, etc.), and situation (being situated in conditions the competence is well-suited for). We will suppose here that in cases where one exercises one’s competence in the sense relevant to justification, one is in full SSS form.

33 Williamson, 2000, 47. See also Miracchi and Carter (2022) for an expansion on the idea of mere attempts as botched instances of their realisations.

34 See also Miracchi (2015).

35 Sylvan (2018) develops a related account, albeit, importantly, Sylvan does not derive any such respect-thesis from competence theoretic tools; our proposal, by contrast, does. In this way, the notion of proper practical respect (and its theoretical cognates) are not theoretically independent from, or more fundamental than, the competence-theoretic tools we introduce. Rather, the concept of proper practical respect as we use it here is elucidated by appeal to performance normativity. To see why this is important, consider Sylvan’s view more carefully. Sylvan is concerned principally with the value of rational belief, as opposed to the nature of the basing relation per se, but suppose one tried to apply his account to this end. On Sylvan’s view, one manifests “strong respect in believing P if one manifests a disposition to believe P only if, conditional on the factively apparent reasons, P is objectively likely” (2018, 401). Were a theorist to adopt this account of proper practical respect in order to illuminate the nature of the basing relation, they would – at
does, in a way that properly respects what it takes to achieve one's aim. Proper practical respect is a first-personal, agential, perspectival feature of one's comportment: people who are careless or reckless fail to manifest proper practical respect. Two clarifications are in order. First, we are using 'proper practical respect' in a technical, stipulative sense rather than in a robust substantive sense that would import additional theses (familiar in discussions of respect elsewhere in ethics and epistemology), e.g., about the relationship between respect and aims. Second, note that having reflective attitudes that manifest respect for the aim of one's endeavor is neither necessary nor sufficient for having proper practical respect. For example, Simone Biles, by deftly shifting her balance on a beam as she walks across it, manifests proper practical respect for what it takes to make it to the other side of the beam. This need not involve any extra attitude that represents what is required. Conversely, one may have such a reflective attitude and not manifest proper practical respect: e.g., because one is either unable to do what it takes or because one is not sufficiently careful or attentive.

Proper practical respect is a feature of one's first-order performance, and it is elucidated by appeal to the achievement case: in walking across the balance beam in the paradigmatically successful way, Simone Biles manifests a kind of perspectival sensitivity to what it takes to do so. For example, she pays attention to what she needs to (and not what she doesn't), and responds to the way the bar feels under her feet and the way her center of gravity changes as she moves. Although reflection is not required for these corrections, they are not properly understood on the "widget" model: she is keenly alert and sensitive to what it takes to deftly get across the beam. Biles, in moving across the beam, manifests proper practical respect for what it takes to do so well.

Plausibly, exercises of competence always involve this kind of proper practical respect. Either one aptly achieves one's aim, as in the sort of case just described, or one competently fails. Competent failure rules out the recklessness or negligence that is incompatible with proper practical respect, so although in cases of competent failure one cannot be wholly practically appreciative of

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This merits emphasis because there are some well-known theses about respect in recent epistemology that are more robust here. For instance, a full-blown Kantian theory of respect is not something we are importing here. See, for example, Sylvan's (2020b) 'Epistemic Kantiaism', advanced as an alternative to epistemic consequentialism, and the sense in which this involves respect for the truth.
all the requisite factors for achieving one’s aim (otherwise one would manifest one’s competence), one must be practically appreciative of enough of them, to a high enough degree, to be competently aiming.

As knowledge-first virtue epistemologists, we can, then, consider the kind of perspective one has in exercising one’s epistemic competence to be a species of this more general phenomenon. We understand this kind of proper practical respect as a species of the first-personal sensitivity to what it takes to know as one forms and sustains one’s belief. This often involves conscious awareness – on analogy with Simone Biles walking across the balance beam – but need not at every moment – on analogy with taking a nap while baking a cake. The important thing is that one is aware of what one needs to be in order to achieve one’s aim, and responds appreciatively.

To summarize, having proper practical respect for what it takes to know in believing as one does is a positive normative property that is first-personal, appropriately agential, and a feature of the first-order performance itself. It neither requires nor necessarily involves a further attitude. Moreover, it plausibly has good claim to be a more “internalist” conception of epistemic justification that a subject enjoys as a matter of exercising her epistemic competence: whether one is justified is not just a matter of whether one proceeds reliably, but whether the way one believes involves the appropriate respect for what it takes to know.37

Moreover, it can involve basing but need not. For example, it is not implausible that one can have innate knowledge and that this knowledge is, at least initially, not based at all. Or, perhaps, one forms beliefs as a result of a-rational psychological transitions, but instead of these having having distinctive or unusual contents, or the phenomenology of popping into one’s head as is imagined in the Truetemp and Clairvoyant cases, one just has certain a-rational psychological processes that give one a grip on facts that one has not and need not reflect on, but that can be can be exploited for action. In all cases, one still counts as having proper practical respect for knowledge in believing as one does because one has the right dispositions to keep knowing in the face of challenges.

We can suppose, then, that the kind of proper practical respect for knowledge one has when one properly bases one’s beliefs on one’s reasons is a species of epistemic proper practical respect more generally. This itself provides a non-circular illumination the kind of perspective involved in proper basing (at least). We can go further by clarifying the kind of species of epistemic competence that proper basing is, and generalize it to the case of irrational, or unjustified, basing.

Before moving on to this project, however, it is important to address a potential concern. What right do we really have, besides motivation on analogy, to suppose that proper practical respect is appropriately perspectival but nevertheless neither requires nor involves an additional attitude to explain that

37As Williamson (2000), ch. 2 discusses, the traditional internalist-externalist distinction breaks down on a knowledge-first picture, because mental states are no longer considered in the head.
perspective? There is much more to say about the issue than can be said here. However, we have good reason to think that proper practical respect is an inherent feature of exercises of competence as such, and need not be understood in terms of contentful attitudes of the sort that figure only as relata of psychological processes.

First, if we are to avoid the dilemma facing other accounts, we must characterize the perspective involved in the very process of basing itself. Since we do in fact base our beliefs, it must be that we can have a perspective in the way we form and sustain our beliefs on the first order.

Second, the idea that any mental perspectival features must ultimately be cashed out as the relata of processes (or constitutive representations in them (Neta, 2019)) rather than features of processes themselves needs positive argument, because it is highly intuitive that we do have a perspective in performing many activities and undergoing many processes. Of course there are theories that aim to reduce intentionality to static representational states and mental processes to operations over them (e.g. Field (1978); Fodor (1980); Millikan (1989)). But the view developed in this paper already rejects key presuppositions of such accounts. If we reject Causal Neutrality and keep Nature and Generative Projects separate, then an account of the nature of certain mental processes may inherently involve intentionality and consciousness.

Now there is a minimal sense of “representation” for a mental state or process, according to which any time a mental state or process has accuracy or success conditions the subject represents those conditions (cf. Siegel (2010).) On this minimal sense of representation, when a person bases her belief on reasons, she represents that those reasons are epistemically sufficient for knowing that \( p \) on such a basis. However, this way of thinking about perspectives is distorting and misleading. First, this conception of representation is not itself explanatory. What explains the fact that the state or process has accuracy conditions? Unless we make more commitments about what representation involves, appeal to such accuracy conditions is a mere re-statement of the claim that the subject has a perspective in performing basing.

Additionally, re-framing the issue in representational terms has connotations that threaten to distort and over-intellectualize: it’s not obvious that any propositional structure is involved, or that the agent has any sort of second-order perspective in basing. The kind of perspective inherent in a process need not be a perspective on that very process. The representational approach threatens to conflate success conditions for a perspective-involving process with the nature of the perspective the subject has in performing or undergoing that process. As is widely accepted, the successful exercise of mental capacities does not entail even the ability to represent the conditions of success of those capacities (cf. Burge (2010)).

We will therefore suppose that proper practical respect is an inherent feature of justified belief formation and sustaining. This conception of epistemic justification as manifesting proper practical respect clearly makes justification a mental feature of the agent’s doxastic life, but it does not depend on evidence, evidential relations, or any particular conceptions of these notions. Instead, we
have used the kind of perspective one has when one knows—and more generally when one achieves—in order to illuminate this perspectival, normative, necessary but insufficient condition on knowledge. Let us now see if we can use this account to better understand the kind of perspective one has when one bases a belief on reasons.

4 The Basing Relation

Let us start with the case of acquiring knowledge based on other knowledge. One seeming platitude— but as we shall see we can get quite a bit of mileage out of it—is that in such a case we use what we know in order to come to know other propositions.

On the kind of knowledge-first virtue-theoretic account we have been exploring, this is a species of performance of an epistemic agent in which she aims at knowledge. When one feels and follows the draw to believe q because one believes p and if p then q in the paradigm way, one is aiming to know q in a way that properly respects what it takes to know. The Tortoise fails to do this; he (supposedly) grasps p and if p then q, but is not moved to use this knowledge in order to come to know q. When in contrast one is so moved, one's being so moved is one's coming to believe q for the reasons that p and if p then q. In such a case, one manifests proper practical respect for what it takes to know q in basing one's belief that q on p and if p then q.

This is the beginning of our account. At least one case of basing is the case of using what you know (p and if p then q) in coming to know something new (q). More generally:

**First pass basing knowledge that p on R:** Using what one knows R in coming to know that p.

This account must immediately be generalized in two ways, even just for cases of knowledge based on reasons. First, beliefs are held for reasons after they are formed. The account should include sustaining and retaining knowledge as well as knowledge formation. (Recall from above that in a virtue-theoretic framework believing just is sustaining one's beliefs, even during periods of sleep and attention to other matters.) We'll use the locutions “knowing that p” and “believing that p” to cover all these cases.

38Note that from the fact that the Tortoise fails to properly respect what it takes to know in this case, nothing follows about what the Tortoise all things considered should do. His failure is, in this respect, *aim relative*—that is, relative to the aim of knowing in this case, he has not properly respected what it takes to know. That failure in this case does not imply any further failure any time he fails to draw, e.g., uninteresting consequences from whatever else he knows. The kind of normativity with reference to which the Tortoise fails here is only telic normativity; a separate kind of normativity—in virtue epistemology, this will be the normativity of intellectual ethics—governs (substantively so) which inquiries to take up, or which aims to have in the first place (i.e., which attempts to make). For discussion of the difference between telic normativity in the theory of knowledge (i.e., gnoseology) and intellectual ethics, see, e.g., Sosa (2021, Ch. 2).
Secondly, we can broaden possible bases for knowledge to include not just other knowledge, but beliefs more generally. This leaves open all sorts of interesting possibilities that pose trouble for other accounts. For example, we allow that sometimes one can acquire knowledge from false or unjustified beliefs. Even if, for example, one falsely and perhaps even unjustifiedly believes a certain scientific or moral theory, if it is reliable enough in a certain domain one might still acquire knowledge for that domain. For example, consider Peter Klein’s (2008) case of the Ptolemaic astronomers knowing the positions of the stars on the basis of a false theory. It seems much more certain to me that these astronomers know where the stars will be in the sky at certain times than that they are justified in believing their theory. On the account provided here, we understand proper basing as competently using what one believes in knowing. The basing beliefs may, for all we say here, not even be justified. This appropriately leaves room for debate about cases like these, rather than requiring that basing beliefs be justified in order to vindicate our intuitions about the normative statuses of beliefs based on them.

We arrive at an account of basing knowledge on other beliefs:

Second pass basing knowledge that \( p \) on \( R \): Competently using what one believes \( R \) in knowing that \( p \).

In cases where you competently use what you believe \( R \) in knowing that \( p \), you are exercising your epistemic competence, and so manifesting proper practical respect for what it takes to know in believing as you do.

We have now said what it is to base knowledge on other beliefs. The idea of proper practical respect in knowing is clear in the case of knowledge based on other beliefs but plausibly extends to other cases too, for example knowledge based on intentional actions, beliefs, perceptual experiences, feelings, and emotions. Because we are analyzing basing in terms of knowledge, we needn’t analyze all kinds of basing as the subject treating the basing contents in the same way (e.g. as evidence). This is of benefit because these other cases may not be well-explained as basing on evidence. For example, the relationship between one’s intention and knowledge of what one is doing is plausibly not an evidential relationship (Anscombe, 1957; Setiya, 2008), nor is that of knowing that one believes that \( p \) on the basis of believing that \( p \) (Moran, 2001; Neta, 2019). In both cases, the relationship seems much more intimate.\(^{39}\)

We thus arrive at a more general account of basing involved in knowledge:

Refined basing knowledge that \( p \) on \( R \): Competently using what one thinks \( R \) (sensitively to attitude) in knowing that \( p \).

Note that the kind of use here is not just any kind of content-sensitivity, but is specific to knowledge. Other kinds of content-sensitivity might not count as

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\(^{39}\)One option, open to us here but not required, is to analyze knowledge of what one believes as a species of Anscombian practical knowledge. In analyzing belief as a kind of performance with an aim, we can understand the relationship between belief and knowledge of what one believes, as well as one’s reasons for belief and knowledge of them, as a kind of knowledge of what epistemic activities one performs.
epistemic basing, e.g. wishful thinking, or might be aimed at other ends, e.g. intention-formation. Moreover, the locution “using what one thinks” isolates the way in which it is indeed the contents that are used, sensitively to attitude, rather than the attitudes themselves or the fact that one holds them. One could, for example, use the fact that one has certain implicit biases in reasoning about how to mitigate their effects. Although content- and attitude- sensitive, this is not epistemic basing in the sense we are concerned with because what one implicitly believes isn’t being used directly.40

With the paradigm case of based knowledge now delineated, we can generalize the account to include properly based beliefs that fall short of knowledge. The proposal is hopefully by this point what the reader would expect: proper basing is competently using what one thinks (sensitively to attitude) in exercising a competence to know:

**Generalized properly basing a belief that p on R:** Competently using what one thinks R (sensitively to attitude) in exercising a competence to know.

Competent basing that falls short of knowledge just is the corresponding case of competent failure. Nevertheless, as a species of exercise of epistemic competence the agent inherently manifests proper practical respect for what it takes to know in believing as she does. The kind of perspective one has when one competently uses what one thinks in exercising a competence to know is a species of the notion of proper practical respect elucidated in the previous section. In competently using what the agent thinks in aiming to know, she is inherently practically appreciative of a way in which reasons of that kind can be used for the acquisition and retention of knowledge. Thus we vindicate the Taking Condition (so far for the case of properly basing) by illuminating properly basing as a first-order, agential, perspectival, process.

We must now ask our final question: Assuming that the account of basing just given is satisfactory, what is basing simpliciter? I.e., what is basing that may or may not be epistemically permissible? We can give this general characterization:

**Generalized basing p on R:** Using what one thinks (sensitively to attitude) in aiming to know p.

This includes proper basing as a sub-class of basing cases. Beliefs, on the account we are adopting here, are cases of aiming to know that p, so that our account includes all cases of based beliefs.41 What extra information does this

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40 Thanks to Mona Simion for urging us to clarify this.
41 Whereas beliefs are cases of aiming to know, it should be conceded that guesses are not cases of aiming to know, even though guesses can be based on reasons; in guessing we affirm (on whatever basis we do) in the endeavour to get it right any way, not in the endeavour to get it right knowledgeably (Sosa, 2015, Ch. 3). This observation, however, is not incompatible with our account, which aims to explain what it is to base beliefs on other attitudes. Although we think that the case of basing beliefs on other attitudes is paradigm for cognition, we can easily envisage a variation on
give us about cases of beliefs that are irrationally based? In what sense is what one thinks used by the agent in cases of irrational basing?

Here we return to one of the observations made about basing in section 2.3 on Mental Descriptiveness. The cases that are clearly cases of basing are cases of knowledgeable, or at least proper, basing. The further we deviate from these cases, the less clear it seems that we have cases of basing at all. So, for example, if the connection between the contents is too tenuous, or the attitudes are never available to consciousness, or one does not really seem to be believing in good faith, one may wonder whether there is genuine basing occurring, or whether what is happening is mere association, delusion, or some other sort of “widget” brutally causing the production or sustaining of the belief. We are reminded of Leo Tolstoy’s remark on families:

“All happy families are alike; each unhappy family is unhappy in its own way.” – Tolstoy, Anna Karenina

The same might be true of irrational basing: the ways in which what you think might be irrationally used in aiming to know that \( p \) might be varied; might admit of much indeterminacy and obscurity. It is, we think, actually a benefit of the account that it reflects this fact. To the extent that we are inclined to say that the subject is genuinely using what she thinks \( R \) in aiming to know that \( p \), we should say that she bases her belief that \( p \) on \( R \). As long as our intuitions stand and fall together on this question, this may be the most precision our subject matter admits of.

There is, however, something further we can say. On the account developed here, epistemic basing is assimilated to instrumental performances. The idea of an ‘instrumental performance’ is used centrally in performance normativity in a technical sense – which we adopt – and which should be distinguished from other epistemologically familiar uses of ‘instrumental’, e.g., from the Humean idea of practical rationality as instrumental rationality.\(^{42}\) Instrumental performance would illuminate the nature of guesses based on reasons; such basing would involve using what one thinks (sensitively to attitude) in aiming to believe \( p \) truly. It is worth registering, however, that while the idea of guessing on the basis of a reason is coherent in the case of an educated or informed guess, it becomes less coherent in the case of a blind guess – or what Sosa calls ‘sheer guessing’. Thanks to a referee for suggesting clarification on this point.

\(^{42}\)For critical discussion of this kind of instrumentalist thesis, see Sylvan (2020a). It is especially important to register the contrast between the kind of instrumental/constitutive distinction that is important to recent virtue epistemology, and which Sosa explicitly relies on, on from other species of instrumentalism that Sosa takes to be in tension with virtue epistemology. In particular, consider Sosa’s remarks – in the context of discussing the value of knowledge cum apt belief – on instrumental epistemic evaluation: ‘The distinctively epistemic evaluation of a cognitive performance can depend substantially on its source, unlike the instrumental evaluation that depends on effects rather than sources’ (Sosa, 2007, 80). Sosa here can be read as distancing himself from a commitment to a certain kind of instrumentalist axiological thesis, albeit one that is entirely orthogonal to the distinction (between instrumental and constitutive attempts) that he relies on in making sense of judgment. In this way, Sosa’s earlier remarks about how the virtue epistemologist will explain the value of knowledge as a kind of achievement are (despite being in tension with a kind of axiological instrumentalism) entirely compatible with the instrumental/constitutive distinction used in later work (Sosa, 2021, 22-5) to individuate performance types as basic/non-basic. Thanks to an anonymous referee at Nous for suggesting discussion on this point.
mental performances, or aimed attempts, have as their central contrast point constitutive performances or attempts – where the latter are basic actions (e.g., moving a finger) we do not by doing any other thing; the former, by contrast, are performances we do in the service of doing something else. We might raise our finger to hail a cab, in which case we implement (through performing a basic action of moving our finger) means by which we perform a further action.

Sometimes, we may be able to just know without reasoning from our other contentful attitudes. This is analogous to the case of basic action, where we just do what we aim to do, not by doing anything else. However, the world is a complex and uncertain place, and much knowledge cannot be formed or maintained in this basic way. We often need to use whatever else is available to us.

The treatment of basing as a kind of instrumental use is substantive and perhaps surprising. It is not a trivial claim at all, but rather follows the implications of a virtue-theoretic approach to the epistemic. If epistemic normativity is a kind of performance normativity, and beliefs are performances that aim at knowledge, then in some cases beliefs will involve the use of what else is available to one in pursuing one’s aim to know. It is literally appropriate to think of basing as a kind of believing that involves using what one thinks.

It also explains the kind of liberality, freedom, and flexibility that we often find with reason. Rarely are we compelled to reason in certain ways from our evidence; rather, we have a wide degree of freedom in attending to certain evidence, following a train of thought, and so on. If basing is the species of instrumental using that is specific to the aim of knowledge, then we can understand the kind of liberality here as the same kind that we have generally in choosing our means to action. Here we are reminded of how Anscombe (1957) argued that the Aristotelian practical syllogism should not be understood on the model of deductive inference where we are compelled to infer a logical implication from our premises. The considerations presented here suggest that one should not think of theoretical inference on that model either. After all,

43In recent virtue epistemology, the distinction between instrumental and constitutive performances is of special importance in characterising the nature of judgment, understood as a species of intentional action. The idea – developed in most detail by Sosa (2021, Ch. 2) – is that a judgment is a constitutive attempt to get it right whether p aptly by alethically affirming that p (i.e., affirming in the endeavour to get it right whether p. In this respect, judging whether something is so is something we do by doing something else (2015, 166). Sosa’s characterisation of judgment as a species of intentional action first appeared in Judgment and Agency (2015) as the centrepiece of that project, which countenanced judgment as a species of action without – it should be stressed here – committing to any crude kind of doxastic voluntarism. That is, to say that judgment is a (constitutive) attempt, with intention, to attain a given aim (viz., the aim of apt alethic affirmation, or animal knowledge) does not imply that how we judge is thereby under the sort of voluntary control whereby we could judge directly through arbitrary choice (2021, 32-3). It is worth registering this point of emphasis in the performance-theoretic epistemology of judgment because an analogous point holds for our own purposes here, in so far as we are thinking of basing as involving one performance that is being used in the service of another. The sense in which one uses what one thinks in the process of basing needn’t implicate (implausibly) that one controls such use directly by arbitrary choice.
the deductive case is rare. Usually we inductively or abductively infer, where there is significantly more freedom. Moreover, even in the deductive cases, we still have the freedom to take the appreciated implication as a reductio, rather than to infer the entailment.\footnote{On this issue we are deeply indebted to a discussion with Eugene Chislenko and Colin Chamberlain.}

5 Conclusion

Let us take stock. We argued that existing accounts of the nature of the basing relation are subject to one of two horns of a dilemma because they actually fail to characterize basing as a distinctively mental, content-sensitive process. We suggested three reasons why both sides might be implicitly excluding this option: (i) a tendency to describe processes in only the most general causal or counterfactual terms (Causal Neutrality), (ii) a conflation of Nature and Generative projects, and (iii) commitment to Mental Descriptiveness. We argued that these commitments are independently unwarranted, and that we should aim to illuminate the nature of the basing as a process in first-personal, mental, contentful, normative terms. We then provided a knowledge-first virtue-theoretic account of epistemic justification that does not depend on basing. Section 4 used this account to provide a substantive theory of the nature of the basing relation that avoids the dilemma other views face because it characterizes basing as an inherently mental, normative process on the first order. It plausibly gets the first-person perspective right: the kind of appreciation of the sufficiency of what one thinks for knowledge that is distinctive of basing is not to be understood as an extra attitude, but an aspect of the way in which one forms or sustains one’s beliefs. It is a kind of proper practical respect for knowledge inherent in the process, rather than in relata of the process. And with this we stop the regress at the first order.

We can now understand the story of Achilles and the Tortoise in a new light. The Tortoise (really, the character he plays) aims to know the logical consequences of his beliefs, and yet he does not grasp, in the way that motivates one in the paradigm case, that accepting A and B requires one to accept Z. So, given his aims, what the Tortoise should do is not merely believe Z (for that would open one up to “widget” style objections), nor merely believe that A and B entail Z (then one is off to the races), but grasp, in the motivating, proper-practical-respecting way, that accepting A and B require one to accept Z \textit{in the process of coming to know} Z. Or, equivalently on our proposal, he should use A and B in order to come to know Z. This is plausibly the point Lewis Carroll himself is making when he writes satirically in the Tortoise’s voice “Whatever Logic is good enough to tell me is worth \textit{writing down}” (280). The mistake is to interpret what one grasps when one learns logic, or any other subject matter, as mere relata in a general reasoning process. Just as important as what one learns, if not more so, is the competent practical perspective one develops in pursuing one’s epistemic aims. This is what the student of logic should aspire
to. So, even if the Tortoise does not yet have the epistemic competences needed to knowledgeably derive Z from A and B, given his aims to know the logical consequences of what he accepts, he should work to acquire and exercise the necessary epistemic competences. The title is thus meant to suggest to the reader that the solution to the Lewis Carroll paradox is to be found in investigating the process of basing and the epistemic competences it implicates.\footnote{Thanks to an anonymous referee for suggesting we clarify the meaning of the title. We also wish to add that we are remaining neutral on the matter of how epistemic blame connects with basing failures. For discussion in support of relaxing such assessments, see, e.g., Field (2021).}

We close with discussing an implication of the account provided for future elaboration and discussion. On this view there is no such thing as what the evidence supports considered generally, independently from what competent epistemic agents do with their evidence. An agent's A epistemic competence can make it reasonable for her to believe that p on certain evidence E, whereas it may not be reasonable for another agent B. In cases where, e.g. how we reason is highly shaped by social positioning, such as the sensitivity a woman has to sexism or a person of color has to racism, it may be appropriate for such a person to believe that what was said was racist or sexist, even if so believing on the same evidence would not be justified for a man or a white person (Hartsock, 1983; Toole, 2018).

This means that a common practice of requiring members of less privileged groups to provide generally compelling reasons for claims of oppression may not be in the best service of rational debate, but may in fact inhibit understanding and perpetuate epistemic oppression: in ignoring the claims of members of underrepresented groups about their own oppression unless they provide arguments that would be compelling to people with different lived experiences, we may often be failing to do justice to their epistemic competence, and the fact that they are properly practically respecting what it takes for them to know in the domains in question. Where members of relatively privileged groups could be learning from members of less privileged groups, an insistence on "rational debate" may instead keep us in ignorance.\footnote{Thanks to Maria Lasonen Aarnio, Colin Chamberlain, Eugene Chislenko, Liz Titus, Ram Neta, Jim Pryor, and to the editors and an anonymous referee at Noûs. Carter’s research is supported by the Arts and Humanities Research Council’s Expanding Autonomy (AH/W005077/1) and Digital Knowledge (AH/W008424/1) projects and the Leverhulme Trust’s A Virtue Epistemology of Trust project (RPG-2019-302).}

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