

Inquiry and Belief

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Abstract

In this paper I look at belief and degrees of belief through the lens of inquiry. I argue that belief and degrees of belief play different roles in inquiry. In particular I argue that belief is a “settling” attitude in a way that degrees of belief are not. Along the way I say more about what inquiring amounts to, argue for a central norm of inquiry connecting inquiry and belief and say more about just what it means to have an inquiry or question settled.

1. Introduction

Inquiring is an entirely familiar activity, one most of us engage in every day. In at least some of those cases our inquiries are successful – we figure out where we put our keys, or which country uses ‘86’ as its country code, or whether the restaurant takes credits cards or is cash only. When our inquiries are successful we settle some matter that previously was or felt unsettled to us and we do it in some epistemically happy way. Sometimes we think we’ve hit our target, but unfortunately we’ve missed. In these sorts of cases we settle the issue for ourselves as well, but in a less-than-epistemically-happy way. In other cases we fail to settle at all. When we do settle some matter of inquiry – whether well or badly – we shift out of an inquiring mode and into a settled one. In this paper I want to explore both of these modes. I’ll argue for a particular account of inquiry and inquiring and then use that to argue that belief – the traditionalist’s “full”, “flat-out” or “outright” belief – should be thought of as playing a key role in our settling our inquiries. After that I’ll go on to argue that partial or degreed belief cannot play that same role. The upshot then is an account of inquiry and a story about the different roles belief and degrees of belief play there.

Some others have claimed that full belief has a stability that degreed belief lacks. Their thought has been that it is part of the nature of belief (or perhaps of rational belief) for it to be resistant to change. My claim about belief’s settledness is not a claim about belief’s receptivity to change, but, as we’ll see, a claim about its relationship to ongoing inquiry. Near the end of the paper, once the view is out, I’ll discuss how we should think about the relationship between stability and settledness.

2. Inquiry

Despite its utter familiarity, I think that it's not all that clear how to conceive of inquiry and inquiring. Getting somewhat clearer on these phenomena is the task of this first section. Inquiring is often associated with certain kinds of actions, and this can naturally lead one to the thought that inquiring is just itself an action or a series of actions. But I don't think that this is right. At the centre of any genuine inquiry is a certain kind of mental state or attitude. Mere action is not sufficient for inquiry; or so I'll argue.

A few (hopefully) straightforward assumptions to start. First, we can think of inquiring as an activity. This isn't saying much – all I mean is that it's something that we do. Just how we do it or what it takes to be doing it is largely open at this point. Some of the questions I want to pursue in this first section are about the nature of this activity and what it takes to be engaged in it. Second, an inquiry takes place across some interval of time, $[t_0, t_n]$. The inquiry starts at t_0 proceeds across that interval and then ends at some later time t_n . Third, an inquiry has a distinguished subject at its centre – the inquirer. This distinguished subject need not be a single subject – the FDA and police force can be inquirers too. Although I think all sorts of interesting questions open up in thinking about group inquiry, in this discussion I'll stay focused on the case in which the inquirer is a single individual.

Even these very basic assumptions give us access to some helpful questions about inquiry though. What needs to happen at t_0 for an inquiry to start? What about t_n and inquiry's end? And in virtue of what does an inquirer count as inquiring across the relevant interval of time? I hope to make progress on at least some of these questions in this section.

A natural thought is that some of those questions are to be answered with reference to the sorts of actions the subject performs. Could doing certain kinds of actions guarantee that one was inquiring? The claim that performing certain kinds of actions is sufficient to make it the case that one is inquiring is the claim that a subject's performing an action of the relevant kind at a time (or across some interval of time) is sufficient for its being the case that that subject is inquiring at that time (or across that interval of time). I don't think that mere action at a time is sufficient to count as inquiring at that time.¹ Let's think about some inquirers. For instance, the detective inquiring into the bank robbery or the reporter inquiring into the company's business practices. Imagine the detective moving from ignorance about who robbed the bank to knowing that it was Rountree, and the reporter moving from ignorance about whether workers are being treated fairly to knowing that they are not. There are many ways of fleshing out these inquiries. In particular, we can imagine easy versions and hard ones. Let's focus on the latter. In the hard versions, these inquiries take a long time and require serious effort; plenty of evidence is gathered, and work is done.² In these cases, our inquirers do a great deal – they perform all sorts of bodily and mental actions.³ They move from place to place, they make calls, look online, knock on doors, search their memories, draw inferences and more. But acting in those ways is not sufficient to count as inquiring into the things they're inquiring into.

Focus on any one of those actions, call it *a*. Just doing *a* is not sufficient to count as inquiring into the things these inquirers are inquiring into, or inquiring into anything at all for that matter. Say the detective needs to talk to a suspect and drives to his home and knocks on his door. Driving over to that person's home and knocking at his door are not sufficient to make it that one is inquiring into who robbed the bank across the relevant interval of time (or inquiring at all – sometimes we're just visiting friends). I take it that this generalizes to most any specific action that our inquirers perform, bodily or mental. Performing some string of these actions is also not sufficient. At the extreme we can imagine an actor preparing for a role and shadowing our inquirers, doing whatever they do, but without any concern for who robbed the bank or anyone's working conditions.

What divides true inquirers from those doing many of the same things as them? Our true inquirers are aiming to figure something out, but those others need not be. The detective is trying to figure out who robbed the bank and the reporter whether the working conditions are good. Their actions seem to count as part of their inquiries exactly because they are done in the service of their cognitive or epistemic aims or goals. A true inquirer then is someone with a certain kind of goal or aim, and so at the bottom of any true inquiry is a certain kind of aim- or goal-directed state of mind or attitude. This should come as no surprise – inquiry seems clearly to be an aim- or goal-directed activity.

A few key conclusions so far. First, we should not straightforwardly identify inquiring with acting: inquiring over some interval of time is not just a matter of performing some sequence of actions over that interval. Second, we should say that genuine inquirers always have some sort of goal-directed attitude – they must have the aim of resolving some issue or matter, of trying to figure something out. So we can say that one is inquiring into some matter only if one has this sort of “inquiring attitude”. This tells us something about the interval of time over which an inquiry takes place: throughout that entire interval an inquiring subject has an attitude like this. What more can be said about this central inquiring attitude?

As we've just seen, it's a goal-directed state or attitude and it looks as though the goal is something cognitive or epistemic.⁴ Perhaps the most straightforward way to think of this goal-directed “inquiring attitude” at the heart of any inquiry is as a desire with epistemic content. Inquiring subjects want to know. I think it's often fine to describe inquiring subjects as wanting to know, but I don't think that those descriptions are always true in virtue of those subjects literally having some metacognitive desires. At least some reservations here are largely familiar – very simple creatures inquire and so we should worry about a view that makes the attitudes that are essential to the activity too sophisticated. I also worry about whether we really could think of these as desires in every case – perhaps sometimes we inquire even when we don't strictly speaking want to know (like the detective investigating how much money her partner stole).

But I also think that there's another option in the air that's fairly straightforward as well. If we did try to think of this inquiring attitude as a desire to know, what exactly does the inquiring subject desire to know? The answer, I think, is right on the surface. The detective desires to know *who robbed the bank* and the reporter *whether*

the working conditions are good. We can say that the inquirer then wants to know Q , where ‘ Q ’ here should be replaced with an indirect interrogative sentence.⁵ Inquirers want to know the answers to the questions expressed by those interrogatives.

So, an inquirer’s “desires” are question focused in this sense. But this opens up a nice way of thinking about the inquiring attitude we’re interested in and one that skirts some of the earlier concerns with the “metacognitive desire” suggestion. Rather than think of this attitude as a desire directed at being in certain kinds of mental states with respect to a question we can just take the attitude to itself be a questioning attitude. In asking questions we are trying to get certain kinds of information and asking is a goal-directed activity whose aim is epistemic. My suggestion now is to think of the attitude at the centre of inquiry as much like this – as a questioning or “asking” attitude, one directed at the question itself. Inquirers have questions open in thought.

I think many familiar folk-psychological attitudes are questioning attitudes like this: curiosity, wondering, contemplation, deliberation, and more. Some of these are states and some are processes – I’m just going to call them all ‘attitudes’.⁶ Notice, these are exactly the sorts of attitudes we expect inquirers to have. They describe the sorts of attitudes that our detective and reporter will plausibly have. The detective is curious about who robbed the bank and wondering about that; she’s contemplating that question and deliberating. These are all goal-directed attitudes and in each case we can, at least in some sense, truly describe the subject with these attitudes as “wanting to know”.⁷ The reason the description is apt is because these attitudes all have satisfaction conditions in the same way that desires do – in this case though those satisfaction conditions are distinctively epistemic or cognitive. In what’s to come I’ll call these attitudes *Interrogative Attitudes* (IAs). I’ve given just a partial list so far, but we can think of the class as a class of inquiring attitudes – goal-directed, questioning, with epistemic satisfaction conditions.

My claim then is that someone inquiring at t has an IA at t . The IAs I’ve listed – being curious, wondering, contemplating, deliberating – are central members of this class of attitudes. I don’t think that list is exhaustive though. What can we say about the class in general? As we’ve seen, this sort of attitude is the attitude that accounts for an inquirer’s aim to close their question. Every IA is a questioning attitude and we might think of the generic IA in exactly these terms: one has an IA towards Q if one is asking Q . Every inquirer is asking some question. In many cases this will be by way of the familiar IAs on the list, in other cases not. Some will be curious, but others might not be; some might be deliberating, but others will not be. What they all have in common is that they have some questioning attitude, that they aim to resolve their question. My claim then is that if one is to count as inquiring over some interval of time one must have an IA throughout that interval of time.

My thought about the necessity of the IAs for inquiry is that it captures the sense in which a genuine inquirer has to be in a particular kind of goal-directed state. Perhaps this is another way to think about the force of the claim: every inquirer is trying to figure something out. If some subject is not genuinely trying to figure out Q , then she’s not genuinely inquiring into Q . The IAs can be thought of as ways of trying to figure something out, they are manifestations of that sort of effortful state.

Having some IA at t is necessary to count as an inquirer at t . This tells us something about what it takes to be inquiring at a time, but it doesn't tell us everything. There are a number of questions now about what more is required, and in particular to what extent action is required at a time to count as inquiring at that time. These are good questions, but for now I'm going to leave them aside. All we need for what's to come is the claim that anyone inquiring at a time has some IA at a time – they have the aim of resolving some question at that time.

3. Inquiry and Belief

I want to now use the main upshot of the previous section to get some insight into a role that belief – the “traditionalist's” full belief, plays in inquiry. There are a number of ways of trying to characterize full belief, e.g., in terms of its relation to action or assertion. I want to try to stay neutral on these sorts of characterizations. Part of what I'll be offering here is a different way of characterizing the state – in terms of its role in inquiry. Which attitude am I characterizing then? The one traditional epistemology has been focused on all along; the one necessary for knowing; and hopefully the one we pick out in ordinary talk with ‘believe’ and ‘think’.

I argued that every true inquiry involves a certain kind of inquiring attitude. I called these interrogative attitudes and pointed out that a number of familiar folk-psychological attitudes fall into the class. My thought now is that we can get some guidance as to some of what belief does in inquiry by looking to how belief interacts with those attitudes. My plan is to focus on the IAs named, thinking of them as representatives of the class. Since attitudes like curiosity and wondering are so familiar, I want to start by looking at some (hopefully) intuitive cases. The focus of these cases will be the quintessential inquirer, British detective Inspector Morse. We'll go through three Morse cases and then use the partial theory of inquiry from the last section to draw some conclusions about them. The main upshot of our Morse cases will be a norm on belief and inquiry. After the cases I will offer some additional evidence for our norm as well. In the next section I'll use the norm to say more about a role belief plays in inquiry, which will mark a distinction between belief and degrees of belief.

On to Inspector Morse. The first Morse case is the normal or typical one. Morse is woken up by his telephone ringing in the early hours of the morning – a doctor in Oxford has been shot through her window while having dinner last night. Morse pulls himself together and heads to the scene of the crime. This is a normal case for Morse and he engages in a perfectly normal inquiry into who killed the doctor. He searches the scene, talks to potential witnesses, and so on. Then he discovers that the doctor was having an affair with the master of Lonsdale College, so he takes his investigation over to the college. And things go as expected there as well: he talks to more people, does more looking around, draws a few inferences, stops at the pub and eventually solves the crime.

I submit: all of the IAs discussed can be used to describe typical-Morse's mental life. Perhaps not all apply in every version of this typical-Morse case, but it's very

easy to see typical-Morse as wondering about who killed the doctor, curious about who killed her, contemplating it and deliberating about who could have done it, and so on. The IAs are exactly the sorts of attitudes that typical-Morse will have.

The second Morse case is slightly different. Here again, the phone rings in the early hours of the morning, but this time it doesn't wake Morse up since he's been up all night. He's been up washing the blood out of his (beloved) car, scrubbing his flat, washing his clothes and burning or otherwise disposing of any evidence he can since last night he shot the doctor through her window while she was having dinner. Not wanting to be discovered, Morse must carry on as normal. He heads to the scene of the crime. What happens once he's there? Well, he tries to appear as normal as can be and so effectively does the things that he would do in the normal case: he goes from place to place, asks questions, writes things down, heads to the college and so on.

When it comes to the IAs, this case – let's call it the knowing-Morse case – is very different from the first. None of the IAs seem to comfortably apply to knowing-Morse. It seems to me extremely difficult to get an interpretation of this Morse's mental life according to which he's curious about who murdered the doctor or wondering about who killed her or contemplating that question and so on. Knowing-Morse is not curious about who killed the doctor – he did it and he knows that full well. This is not a question he's wondering about or contemplating or deliberating.

Now one more Morse case. In this last case, the phone rings in the early hours of the morning, again waking Morse up. As he wakes up he thinks with horror, "oh no, what have I done...", as thoughts of his killing the doctor last night flood his mind. But let's say that these thoughts aren't true memories at all, but only pseudo-memories implanted in his mind by a crafty old nemesis who wants to frame him. Morse's flat has been set up to confirm his "memories", with evidence that he did it in plain view. He's convinced that he killed the doctor, even though in fact his nemesis did.

Again though, Morse wants to cover up his "crimes". In this case – we can think of it as the believing-Morse case – we should expect Morse to act exactly as he does in the knowing-Morse case. And again, it seems very difficult to think of believing-Morse as wondering about who committed the crime or curious about who did it, deliberating about that, and so on. He's convinced that he did it, and so none of those descriptions of his mental life comfortably apply.

What should we conclude from these Morses? As we've just seen neither believing-Morse nor knowing-Morse can be comfortably thought of as curious or wondering or deliberating about who killed the doctor. Interestingly, I find no difference in my own intuitions about how strange it is to think of knowing-Morse as curious about who killed the doctor as compared to how strange it is to think of believing-Morse as curious about who killed her. In both cases their conviction that they themselves are the murderer seems to make it that the IAs don't apply. If the arguments from the last section stand and having an IA is necessary for inquiring, then this means that these Morses also aren't genuinely inquiring. Is this the right result?

Obviously I think that it is, but I also think the result has some intuitive force in these cases. In both cases we seem to have Morse pretending or “going through the motions”. He’s trying not to raise any suspicions, and so he’s acting as if he’s trying to figure out who killed the doctor. But that’s to say that he’s not genuinely trying to figure that out. And with that there seems to be an important sense in which Morse’s inquiry is mere ersatz inquiry and not genuine. Of course Morse is acting as an inquirer into who killed the doctor would. And there’s an inquiry underway into who killed the doctor. And there may even be a clear sense in which Morse is participating in that inquiry – the Thames Valley Police are investigating the murder and Morse is part of that police force. But even with all of this the case, I hope it’s clear enough that there is a key sense in which believing-Morse and knowing-Morse are not genuinely inquiring into who killed the doctor – they simply don’t have the central epistemic aim or goal that we find in inquiry. If one isn’t trying to figure out Q then one isn’t genuinely inquiring into Q .⁸

It’s not entirely clear what the upshot of these last two Morse cases should be though. Given the focus of the paper, let’s stay focused on believing-Morse. I’ve said that it’s very hard to see believing-Morse as having any of the IAs I’ve talked about so far. In general he’s not trying to figure out who killed the doctor, or anything like this – he’s just pretending. That said, I don’t think we want to say that there is no possible case in which someone who believed that Morse killed the doctor also wondered or was curious (etc.) about who killed the doctor (even if that someone is another possible Morse). For instance, someone who believed that Joe murdered the doctor, but momentarily forgot that they had that belief might wonder or be curious about who killed her. In general I think it’s fairly easy to get cases in which one knows or believes the answer to some question at a time and has an IA towards that question at that same time. Specifically, when the known or believed answer is hidden from conscious awareness it’s easy to imagine subjects wondering or curious about or contemplating the questions those beliefs answer. Even if I know where my keys are, if that knowledge momentarily escapes my view so that I don’t realize that I have it, I might wonder or be curious about where they are.

When we encounter knowing-Morse and believing-Morse though it’s very hard to think of them as having the familiar IAs. If the combination is possible, why should that be? One important difference is that in these cases Morse doesn’t just believe that he committed the crime, but his conviction is clear to him and so it feels as though it makes no sense to see him as curious or wondering about that question – at best that would make him seem badly confused. So it’s easy enough to find cases in which one believes the answer to Q and is wondering or curious about Q when one’s belief is somehow hidden from view or one is unaware that one has the belief, but trying to imagine a subject fully aware of what she thinks and wondering or curious seems much harder.

But this is a familiar pattern. When we have some set of attitudes S and find that we have trouble making sense of any subject holding all of the attitudes in S at the same time in full awareness, this is typically evidence that holding those attitudes at the same time is a form of incoherence. It’s difficult to imagine subjects believing both of p and $\neg p$ in full awareness or preferring A to B and B to C and

C to A in full awareness. It's much easier though to imagine subjects having these combinations of attitudes without being fully aware that they do. We find this sort of pattern of intuitions when the attitudes in question fail to cohere.⁹ Given this, I think this is just what we should say about the relevant combination of attitudes in both the knowing-Morse and the believing-Morse cases – these Morses are in incoherent states.

Notice, in the standard cases of incoherence we don't merely say that there's an incoherence in having the attitudes in full awareness, but in having them, full stop. Believing both p and $\neg p$ at the same time is a form of incoherence, whether or not the subject is aware that she has that combination of attitudes. So the fact that it's hard to imagine subjects having some set of attitudes at the same time in full awareness seems to be evidence that having those attitudes at once is a form of incoherence, even when awareness is absent. Moreover, although there may be slightly more debate about the normative status of being in an incoherence state, the presumption is that this is some sort of normative failing – a state, other things equal, that one ought not to be in. I'm going to take this presumption at face value.¹⁰ I'm happy to say that being in this combination of states is irrational or unreasonable, although some people mean very specific things by these terms that I don't mean to evoke (that said, incoherence and irrationality are often tied quite closely together). Either way, we can say that the state is defective or suboptimal or inappropriate. Following the lead of standard forms of incoherence, I think this too is what we should say about the relevant combination of attitudes in the knowing-Morse and believing-Morse cases.

With respect to believing-Morse then: while there is a possible Morse who is just like believing-Morse but is curious about who killed the doctor, this is somehow an unreasonable or irrational Morse or at least a Morse in an inappropriate or suboptimal state – one he ought not to be in. Given this, I think that one lesson we learn from these various Morses, and believing-Morse in particular, is that one ought not believe an answer to a question while having an IA towards that question, and so, by extension, while genuinely inquiring into that question.¹¹

More specifically, I want to suggest that the Morse cases make a case for the following norm of inquiry:

Don't Believe and Inquire (DBI) One ought not inquire into/have an interrogative attitude towards Q at t and believe p^Q at t .

The expression ' p^Q ' says that the proposition p is a complete answer to the question Q , rather than a merely partial one. For instance, the question, *Who in this cafe is drinking tea?* may be partially answered by the proposition, *The person sitting at the corner table*, but that answer doesn't fully settle the question – it doesn't say of everyone in the cafe whether they are drinking tea or not. There are all sorts of questions we can ask about how to distinguish complete from merely partial answers, but rather than drifting too far afield here, I hope that leaving the matter at this intuitive level will suffice. Answers that fully settle the question are complete answers, and ones that don't completely settle the question but do make some progress towards settling, are merely partial ones.¹²

Crucially, DBI makes a claim about inquiring while believing complete answers to focal questions; it makes no similar claim about incomplete or merely partial answers. I take it that much of what is going wrong with a subject who believes a complete answer while having the relevant IA is not happening with a subject who believes a merely partial answer. A rough, but intuitive thought: if we believe a complete answer, then there's nothing further to inquire about, but this is not the case if the only answer we believe is merely partial.

DBI is a "wide-scope" norm. As such, DBI doesn't allow us to say that a subject shouldn't believe at a time or shouldn't inquire at a time full stop, but only issues an injunction against that combination. Moreover, DBI says nothing about how a subject should resolve her state when she does fail to conform. And even more importantly, it says nothing about whether someone who believes p^Q at t_1 should or may inquire into Q at t_2 – it says only that one shouldn't combine interrogative attitudes with particular sorts of answer-beliefs at a single time, and not that one cannot or should not inquire into a question when one previously believed a complete answer to that question.

One might feel as though a norm like DBI restricts a rational subject's ability to improve her epistemic standing. It might appear as though it instructs a believer not to inquire further into the questions whose complete answers she believes. But DBI does no such thing. A subject who believes some complete answer to Q , p^Q , at t_1 may come to have excellent reason to inquire and do so without irrationality at t_2 . All DBI says is that this subject should drop her belief in p^Q by t_2 for her inquiry into Q at that time to count as completely rational.¹³ DBI does not say that double-checking and the like are irrational, but only that a fully rational double-checker drops her answer belief before she re-opens the relevant question.¹⁴

Moreover, DBI does not say that one cannot collect or receive more evidence relevant to Q while believing p^Q . It only says that one ought not collect evidence with the aim of resolving or figuring out Q while one believes p^Q . It's inquiry while believing that DBI instructs against. One might want more evidence relevant to some question even once one has resolved it for oneself, e.g., one wants to convince some obstinate friends. DBI does not prohibit such a thing. Nor does it demand that believers refuse evidence. DBI rules out inquiring while believing. One ought not both believe an answer to Q and be aiming to figure out Q . This doesn't bar getting or even looking for more information relevant to a question when one already believes an answer to that question.¹⁵

The idea that the ideal inquirer comes to her investigation without opinion has an impressive lineage. Sextus argued that only the sceptic could genuinely inquire, and Descartes' first step in his most famous inquiry was to suspend judgment. This idea is not one that legislates when we should or shouldn't engage in inquiry or attempt to improve our epistemic standing, rather it tells us something about how the rest of our mental lives should be arranged if we want to be the best sorts of inquirers.¹⁶

The Morse cases make a case for DBI then. What more can be said in its defence? Let me briefly point to a couple of additional promising lines of support. First, I think DBI gives us access to a tidy explanation of some troubling assertions.

Assertions of the form, ‘ p^Q , but I ϕ Q ’ where ‘ ϕ ’ is replaced with a present-tense interrogative attitude verb or verb phrase, sound dreadful and that fact deserves some explanation. For instance, asserting, ‘Morse killed the doctor, but I wonder who killed the doctor (/whether Morse killed the doctor/...)’ or ‘All four Beatles went to the party, but I’m curious about which Beatles went to the party (/whether all four Beatles went/...)’ or ‘We should turn right here, but I’m deliberating about which way we should turn (/whether we should turn right here/...),’ all sound very bad.¹⁷

Explaining why these assertions sound as bad as they do is of course no easy task. First-person, present-tense assertions about one’s doxastic or epistemic states are notoriously tricky and can go wrong for a great number of reasons.¹⁸ That said, DBI gives us access to one straightforward explanation: in asserting p^Q we express a belief we have, and then in reporting our IA towards Q we make clear that we have that sort of attitude as well, but DBI tells us that we ought not to have that combination of attitudes. In making these sorts of utterances we seem to make explicit that we are in an incoherent or conflicted state then which is exactly why they sound so bad – minimally rational subjects resolve these sorts of states when they are aware that they are in them (and uttering seems to be evidence of awareness).¹⁹

Second, I think we can get even more support for DBI by thinking about our intuitive responses to “high stakes” cases in epistemology. We typically have the intuition that subjects in high stakes cases should double-check – they should inquire further. The doctor should inquire further into the exact details of the operation she’s about to perform, Hannah should inquire further into the bank hours when failing to deposit her check on time will have dire consequences, and we should check what the train schedule is again if we desperately need to make it to our destination on time. Many of us also have the intuition that subjects in these sorts of high stakes situations are in somewhat weak epistemic circumstances – e.g., they don’t know and even don’t or at least shouldn’t believe that the bank will be open, that the train goes at 7, or that it’s the right arm being removed.²⁰

Why should all of this be? Why should high stakes come with poor epistemic standing? With a couple of assumptions, DBI can give us a nice explanation. First, let’s say that the subjects in these high stakes cases shouldn’t believe the answers to the relevant questions; this is what we want explained. Second, let’s assume the following principle: if one ought not both inquire into Q at t and believe p^Q at t (this is just DBI) and one ought to inquire into Q at t , then one ought not believe p^Q at t . Let’s call this principle OIA. I’m assuming OIA here without argument, but I hope it has some intuitive plausibility. Roughly: if subjects ought not both believe and inquire at some time, but they ought to inquire at that time, then we can say outright that they ought not believe at that time.

But now DBI can tell us exactly why subjects in high stakes cases shouldn’t believe answers to the relevant questions. In these cases the relevant subjects ought to inquire. But now if we assume OIA, DBI tells us that these high stakes subjects ought not believe those answers. Given that these subjects ought not both believe

and inquire, but ought to inquire, they ought not believe. DBI helps to tell us why the epistemic standing of subjects in high stakes cases suffers.²¹

Those are a couple of further considerations in favour of DBI, both fairly preliminary, but I hope with some initial plausibility. This gives DBI a few different sources of support: the Morse cases, that it explains some troubling assertions, and that it can explain our intuitions about subjects in high stakes cases.²²

4. Settledness: Belief vs. Degrees of Belief

In the last section I argued that there's a rational (or similar) conflict in believing p^Q and having an IA towards Q at the same time. In this section I want to say more about what I think we should take away from the conclusion that there is such a conflict and then use the result to draw an important distinction between belief and degrees of belief. To preview: the thought that there's an incoherence in both believing a complete answer to a question and inquiring into that question gives us some insight into a key role that belief plays at the end of inquiry, but as we'll see it doesn't look as though credence can play that same role. Making this distinction between belief and degrees of belief will make trouble for those hoping to reduce one of these to the other. But first, more about belief.

It is often claimed that belief represents a sort of settled opinion, but it's hard to know just what's intended with this sort of talk of "settledness". I don't think we want to associate belief with anything like an immovable or unchangeable view on some matter – we change our minds often, shifting from belief to belief. I think that the arguments from the last section give us a way to understand one key sense in which belief is a settled opinion.

The interrogative attitudes are inquiring attitudes. Having any such attitude is a way of being in an inquiring or deliberative mode. When one is in such a mode the relevant questions are open or unresolved or unanswered for one – one is, in a sense, asking the questions. Presumably some attitudes will count as "closing" attitudes as well – taking up an attitude like this will count as a way of answering or resolving a question or inquiry. Which attitudes are the closing ones? Here is some guidance: the closing or answering attitudes should fail to cohere with the open ones, i.e., they should fail to cohere with the IAs. The thought here is that one shouldn't be both open and closed with respect to Q at once. This gives us a sort of test to determine whether some kind of attitude might be a question-settling or question-answering attitude. We can ask: *for some (type of) attitude A towards a complete answer p^Q to Q , must a subject who has A towards p^Q at t and an IA towards Q at t be in a conflicted or incoherent state?*²³ Let's call this question ($A?$).

Let's say that the answer to ($A?$) is 'no' for some type of attitude A . This will mean that there are possible cases in which a subject has A towards p^Q and an IA towards Q but is not in a conflicted or incoherent state. But if A was an answering attitude, there should be no such case. What if the answer to ($A?$) is 'yes' for some type of attitude A ? Well then we have at least some evidence that A is an answering or settling attitude. How good this evidence is depends in part upon what other plausible explanations of the conflict or incoherence are available. In the cases at

issue here I don't know quite what those competing explanations would look like and so I'll take the evidence that a yes answer to (*A?*) gives us in these cases to be sufficient to justify our thinking that the relevant *A* is an answering attitude.

So far though I've tried to argue when *A* is belief, the answer to (*A?*) is a yes. The thought then is that this gives us reason to think that believing a complete answer to *Q* is a way of answering *Q*.²⁴ Notice, other attitudes towards complete answers don't at all conflict in the relevant way with being in an inquiring mode/having an IA. For instance, there is no conflict in desiring that all of the Beatles go to the party and wondering if they will all go or hoping that they all went and being curious about whether they all went. These don't look like answering attitudes then in the way that believing a complete answer does.²⁵

This gives us a way of understanding the idea that believing is a sort of settled opinion – it's a settled opinion in virtue of its being a way of settling a question, in virtue of being an answering attitude. And I think that the line of thought so far allows us to say even more about what this amounts to. What is it for some attitude to be a settling or answering attitude in this way? One relevant property – as we've just seen – is its failure to cohere with some other attitudes. So we can say more about the sense in which believing means having a settled opinion: a rational believer doesn't also deliberate; she's not curious about some relevant range of questions or wondering about them or contemplating them, and so on. And if we think that rational behaviour is the norm then we can say that normally or typically someone with a settled opinion about *p* at *t* in the sense at issue here is someone who is not inquiring into questions that have *p* as a complete possible answer at *t*, where this (at least in part) means something straightforward and familiar now: they are not curious about those questions, they are not wondering about those questions, they are not contemplating those question or deliberating about them, and so on.²⁶ Having a belief means having a settled opinion since (normally) a *p*-believer isn't also inquiring into questions that have *p* as a complete answer.

What about credence and settledness? What does our test say there? I don't think that credence (even very high and maybe even maximally high) interacts in the same sorts of ways with the IAs as belief does, and so I don't think that having even high credence is a way of having a settled opinion. This result makes some trouble for those hoping to reduce belief to high credence. My claim is that belief has some inquiry-theoretic properties that even very high and maybe even maximally high credence don't have. In particular, believing while inquiring is a form of incoherence but having even very high credence while inquiring is not.

When I talk about degrees of belief or credences here I mean subjective probabilities: doxastic attitudes whose strengths can be measured with real numbers in the unit interval, and which are normatively bound by the axioms of the probability calculus. Some of what I say here may well apply to other ways of conceiving of or modelling degrees of confidence (I use 'confidence' here more neutrally to track a degree doxastic attitude), but I won't discuss them here.

Merely having some credence in complete answers to a question can be perfectly rationally compatible with being in a deliberative mode with respect to that question. I can – and without irrationality – wonder or be curious or deliberate or more

actively investigate whether the coin has landed heads if my credence is evenly split across the two possible complete answers to that question, for instance. In general, middling credence in the answers to some question doesn't need to rationally conflict with continued inquiry into that question. But I think that there's reason to think that nearly any (probabilistically coherent) credence distribution over the answers to some question can be rationally compatible with continued deliberation or investigation into that question.

Say that instead of one coin toss there were four. I know the coins were fair and the tosses normal, but I have no evidence as to how the coins landed or which total configuration of heads and tails came up. Call that question C . We can also stipulate that I know the chances of each possible outcome or each possible complete answer to C – 0.0625 – and my credence in each answer matches those known chances. But let's also say that I care about the outcome (maybe I made a bet). All of the IAs seem to be perfectly appropriate attitudes for me to have towards C in this case. I have no further information about how the coins landed, and wondering about which outcome was actual, being curious about how they all landed, inquiring further into the matter, and so on all seem perfectly rationally compatible with having the relevant credences in each of those outcomes.

Two things worth noting now. First, if that's right then this is a case in which having IAs with respect to Q (and inquiring into Q generally) is rationally compatible with having very low credence in answers to Q . Second, take the question of whether all the coins landed heads (C_H), and again say that my degrees of belief in the two answers to that question match the chances of each possible outcome. As before, I don't have the sort of evidence that could settle this question for me, and again wondering or being curious (etc.) about C_H seems perfectly acceptable even if my credences in the answers to C_H match the known chances. But this means that my credence in one answer is 0.9375. And so if all of this is right then having IAs about or inquiring into Q when one has very high credence in some complete answer to Q needn't result in any sort of rational conflict either. And if we keep changing the case by adding to the number of tosses, it looks as though we can get rational inquiry with even higher and even lower credence.²⁷

By thinking about these sorts of coin toss cases I think that we can get all the way to the conclusion that inquiry into Q can be rationally compatible with credences in Q 's answers anywhere in $(0, 1)$.²⁸ Can we get further than that? I think that if we allow that it's coherent to inquire into (say) the result of infinitely many coin tosses, then we can. And I think we should think such inquiry coherent. Certainly we can contemplate what the result of those tosses will be. And I can imagine a case in which more active investigation is fine as well. Say a machine is set to toss a fair coin infinitely many times. It seems perfectly reasonable to check the results of the machine. But if there are infinitely many tosses, then the chance of an infinite sequence of heads (h^*) is 0: for any natural number n the probability of an infinite sequence of heads must be no greater than the probability of a sequence of n tosses, $1/2^n$.²⁹ This means that the chance of the negation of h^* is 1. But isn't it still appropriate to be curious about the outcome or wonder about whether the infinite sequence of heads will obtain and even check the results of the tossing machine? The outcome in which

all the tosses come up heads is not only a possible outcome, but an extremely interesting one and it seems to be permissible to contemplate and investigate whether that's the one that will obtain even if one has the credences in h^* and its negation that match the known chances. If this is right then there are cases in which the IAs (and inquiry in general) are rationally compatible with even maximal credence.

Here's a thought about part of what is happening in these cases. When one has little or no evidence with respect to a question (evidence that bears on that question's answers), then the IAs and continued inquiry generally seem permissible. But there are cases in which very and even maximally high credence are also permissible in the absence of evidence – when the possibility space is vast enough one's credence will have to be distributed in ways that leaves one with very low credence in some of those possibilities and so very high credence in some others. My argument here shows that those two kinds of cases are not mutually exclusive. That is, there are possible cases in which absent (the right kind of) evidence, both high credence and continued inquiry will be permissible.

I haven't argued that any case in which one has very high or very low credence in p^Q is a case in which one can also inquire into Q without irrationality, but that some cases are like this. But if we look back to (*A?*) this tells us that very high and very low credences are not settling or answering attitudes.

This makes for a distinction between belief and degrees of belief: these attitudes – even the ones that seem fairly closely related – have different roles to play in inquiry. One is in rational conflict with continued inquiry, while the other is not and so having one is a way of settling or answering a question, while having the other is not. This gives us a sense in which belief is a settled opinion but mere credence – no matter how high or how low – is not.³⁰

There has been quite a bit of discussion lately about these two pictures of our doxastic lives – the coarse-grained one from which belief emerges and the more fine-grained credence-theoretic one. One thought has been that the coarse-grained picture can be reduced to the fine-grained one. Various difficulties have been thought to afflict reductionist accounts and various fixes proposed.³¹ My thought is that the arguments in this last section make some additional trouble for the reductionist program by showing that belief has some inquiry-theoretic properties that high credence does not. Belief is a settling attitude, it's a way of closing inquiry and more generally it's normatively incompatible with the IAs and inquiring; mere high credence lacks these properties.

4.1 Settledness vs. stability

One of the central claims in this section is that believing is a way of having a settled opinion. Some have made similar-sounding claims about belief, and so I think it's worth making the differences between these claims clearer. Some have claimed that belief (or at least a rational belief) is a particularly “stable” sort of attitude, and perhaps more stable than mere credence. We can find versions of a view like this in Lawlor (2013), Holton (2014) and Leitgeb (2014). The claim that some attitude is highly stable is a claim about that attitude's being unlikely to change in the near future or in some relevant nearby possible worlds (or both). I'm going to try to stay

neutral about which of these – modal, temporal – notions of stability is typically intended. The general thought articulated in these discussions is that it is somehow part of the nature of believing or rationally believing that one's belief “stay put”.

But my claim that belief is a settled opinion (and credence is not), is not a claim about stability in this sense – it's not a claim about how likely one is to change one's mind – but a claim about how belief interacts normatively with central inquiring attitudes and the extent to which rational subjects are inquiring while believing. To bring the contrasting views into relief: Holton (2014) claims that a belief in p is highly stable in virtue of the fact that the believer is resistant to reconsidering the matter of p , or better, questions that have p as a possible answer. This is an interesting suggestion, and, like the view I've argued for here, seems to look at belief through the lens of inquiry. That said, it is importantly distinct from the view I've argued for here. My claim that belief is a settled opinion is neutral on whether the believer will or should inquire in the future, it's just the claim that normally someone who believes p^Q at t isn't inquiring into Q at t ; believers aren't also wondering or curious. For all I've said here settledness may be temporally and modally fragile; it needn't stay put.

5. Concluding Remarks

I've tried to illuminate some central aspects of inquiring here: some of its nature and normative profile, and in particular its relation to our central doxastic attitudes, belief and degrees of belief. I argued that at the centre of any inquiry is a kind of inquiring or interrogative attitude, many of which are familiar folk-psychological characters. I then argued that belief and degrees of belief seem to interact differently with these inquiring attitudes – believing while having them (and so while inquiring) is normatively problematic while merely combining them with high credence need not be. This seems to indicate that the two kinds of attitudes play different roles in inquiry – I argued that believing is a way of settling a question while merely having high credence is not. That marks an important distinction between the two kinds of attitudes and as a result makes trouble for those hoping to reduce one of these to the other. It also gives us a way of understanding a sense in which belief is a kind of settled opinion. This last thing gives believing a sort of pride of place in inquiry as a way of closing or resolving or answering the questions we're investigating.³²

Of course this hardly tells us everything we might want to know about the various roles that belief plays in even just our cognitive lives. In particular a looming question now: why settle a question at all? Believing is just one way of ending inquiry. Why should we want to end it that way rather than by just dropping the question? Dropping a question in the right circumstances can leave us with some spread of credences over answers, but in a fairly stable state with respect to the relevant question. This is the state in which one hasn't answered a question Q but one is no longer, or simply not, inquiring into Q . Let's say that one is 'at rest' with respect to Q when one is in a state like this. Why should we prefer settling a question to just having some answer-credences and being at rest? Part of the answer to this question might come with thoughts about the various functional roles that

belief plays – perhaps we need to settle in order to act and talk in particular ways. Nothing I’ve said here commits us one way or another on belief’s various other possible functional roles and many have explored some roles it might play for creatures like us in action, assertion and more.³³ But fundamentally our drive to settle is simply part of the activity of inquiring itself: in opening a question we already commit to wanting more than being at rest with respect that question. In opening a question for inquiry we (often deliberately) move ourselves out of a state of rest with the aim of getting somewhere better. We open questions in inquiry with the aim of answering or resolving those questions – with the aim of coming to know or understand something new. This is just part of the nature of the endeavour. *Qua* inquirers we want to answer the questions we ask, and as such we want to settle those questions. And as I’ve tried to argue, believing is central to this aim.³⁴

Notes

¹ Although I’m not going to be able to say as much as I’d like about the claim that performing certain kinds of actions somewhere in the relevant inquiring interval is necessary to count as inquiring over that interval, I think the idea that inquirers need to perform some bodily action in the service of their inquiries should be dismissed right away. That would leave Descartes’ journey to the *cogito* as something other than an inquiry and perhaps leaves most of us not inquiring into our various philosophical questions. Armchair inquiry – pure mental inquiry – is genuine inquiry.

² Perhaps in easy versions of these cases a simple phone call or Google search does the trick.

³ I am making a distinction here between mental and bodily action. It’s not essential for what’s to come but seems helpful to me nonetheless. I’m thinking of typical mental actions as episodes of reasoning, inference drawing, memory searching, and so on.

⁴ There is some debate about just what the goal of inquiry is – knowledge, justified belief, understanding, etc. I think there are plenty of interesting questions there, but I’m not going to engage with them here. I’m assuming that the goal is knowledge, but I don’t intend anything of significance to hang on that assumption (and it rarely shows itself); it’s being made mostly for expository convenience.

⁵ For the purposes of this discussion we can think of knowing *Q* at some world *w* as a matter of knowing *p* at *w* where *p* is the true answer to *Q* at *w*. I’ll say a little bit more about answers to questions in the next section.

⁶ For more on question-directed attitudes see Friedman (2013).

⁷ Some have thought that curiosity does always involve a desire to know or is even identical to such a desire. See Loewenstein (1994) for some discussion. I’ve already expressed some concerns about this sort of approach. Moreover, there seem to be cases in which subjects are deeply curious but clearly do not want to know. For example, if I present you with a box and tell you that if you find out what’s in the box you’ll die immediately, you may be deeply curious about what’s in the box but also very much not want to know.

⁸ Worry: perhaps Morse is merely “going through the motions” in these cases because he really doesn’t want to have confirmation of the terrible thing he’s done or wants to keep others away from the true answer. Here it’s not his conviction about the answer that makes it seem as though he’s not a true inquirer but these other desires. I don’t think these interests of Morse are doing the work here though. Here’s a case that lacks these features but in which we still have ersatz inquiry.

Say that Morse is working on a case and he badly wants to convict the killer. But let’s also say that Morse is crooked and so knows who committed the murder because his gangster friends told him. Morse can’t let on to his partner, Lewis, that he knows who committed the murder lest he be discovered as crooked. So he pretends that things are normal. Again, here it doesn’t seem as though Morse is genuinely inquiring into who committed the murder – he’s not curious or wondering or contemplating who did it. Moreover, he doesn’t care either way who did it and does want very much to have the case legally and otherwise properly solved.

⁹ See Worsnip (forthcoming) for an argument that something like this pattern is central to understanding incoherence. He argues that the incoherence of a set of attitudes is a matter of its being the case that for any agent that holds the attitudes jointly in full awareness, the agent is disposed to give up at least one of the attitudes.

¹⁰ One place the presumption has been debated is over the preface paradox. There, some have argued that a certain form of incoherence may well be normatively optimal. I'm not sure that's right, but either way, I'm assuming that this is one of the few places that the suggestion that incoherence is normatively inappropriate has been challenged. I don't think this does too much to make the general presumption inapt.

¹¹ I'm assuming here that given that having an IA is a necessary means to or element of inquiring, then if one ought not both have an IA and believe then one ought not both inquire and believe. I take it that if there's a general principle at work here it is closely related to the sort of "transmission principle" discussed in, e.g., Kiesewetter (2015).

¹² For a good overview of these and other issues having to do with the semantics of questions and answers, see Groenendijk and Stokhof (1994).

¹³ What does dropping a belief involve? I think typically it involves a switch from belief to suspension of judgment. In the cases at issue here subjects move to put their belief "on hold" and re-investigate the matter. For more on the connection between suspension of judgment and inquiry see Friedman (2017).

¹⁴ DBI also doesn't imply that belief involves certainty or leaves no room for doubt. I take it that belief is perfectly compatible with doubt (as is knowledge) and the claim that one shouldn't both believe and inquire doesn't imply that in believing we are absolutely sure of our answer.

¹⁵ Also important here: say you believe p^Q , but your friend won't be convinced without more evidence. You go off to gather more evidence to convince them. If you maintain your belief and are perfectly coherent then you won't be inquiring into Q . That said you may very well be inquiring into questions closely related to Q , e.g., is there more evidence for Q out there? DBI says to not to inquire into Q and believe an answer to Q at the same time. It says nothing about believing an answer to Q and inquiring into questions closely related to Q that might help you to get you more evidence relevant to Q .

¹⁶ Although 'confirmation bias' has been used in the literature to refer to a handful of related phenomena, a central sort of biased behaviour it typically picks out is one according to which subjects are prone to accept evidence that confirms their pre-existing beliefs and to ignore or re-interpret disconfirming evidence. It is well established that we are these sorts of biased subjects. For a good overview of some of the different faces of confirmation bias, see Nickerson (1998). If we are biased in this way this might generate an extra consideration in defence of DBI – inquiring while already believing an answer will plausibly make for biased inquiry in the relevant ways and this sort of biased inquiry doesn't seem to be the best we can do.

¹⁷ If one takes the relevant contents here to be sufficiently coarse-grained and allows for shifting "guises" across these assertions, then some might sound less bad, e.g., 'Superman came to the party, but I wonder whether Clark came to the party'. If possible, I want to try to avoid these complications here and so throughout we should assume either that contents are much finer-grained and/or that the relevant speakers are or at least should be aware (in some relevant sense) that p^Q answers Q . These sorts of issues are relevant in this discussion generally and to DBI in particular. Is a subject who believes p^Q and is wondering Q , but grasps each of these under different guises doing anything wrong? If Lois believes that Superman was at the party but wonders whether Clark was there is that a rational failure on her part? Again, although I think that these are good questions, I don't want to focus on them here. With respect to DBI one can also read it as restricted to cases in which subjects are (or should be) aware in the right sorts of ways about what answers what. This is not to say that I don't think that a subject with an IA towards Q who believes p^Q but isn't quite aware that p^Q completely answers Q isn't failing rationally, just that I want to leave complications that this sort of ignorance may bring aside.

¹⁸ Though it's worth noting that the trouble doesn't seem restricted to first-person, present-tense assertions. Say we're planning a surprise party for our colleague John and we want to make sure that he doesn't know it's scheduled. I go talk to him and report back: 'He thinks we're all going home after work, but he's wondering (/curious) about where we're going after work'. Again, it's difficult to make sense of my report (and confusion about what's going on with John should ensue upon hearing it) – we

want at most one of those conjuncts to be true. In general, a natural reading of sentences of the form ‘S thinks/believes p and S ϕ s Q ’ (where again, ϕ -ing is a matter of having an IA), is a report of a subject in some sort of confused state (at best). Something similar can be said of assertions like, ‘Yesterday I believed that Alice was in court, but I was also wondering where she was’ or ‘Imagine that I believe that Alice is in court today, but I’m also wondering where she is today’. These assertions don’t crash quite as badly as our initial ones did, but they don’t describe fully thriving epistemic subjects.

There are some belief reports and even first-person assertions that come close to the ones being discussed here that don’t come out quite as bad, e.g., ‘I believe Alice left for the day, but let me check’ or ‘He thinks he put it in the car, but he’s going to look’. These sorts of assertions have a number of interesting features, e.g., ‘think’ and ‘believe’ are naturally focused, and seem to be functioning as epistemic hedges. Also notice that the second conjuncts are actions now, and not IA reports. Some have argued that reports like these don’t genuinely report beliefs. For some discussion of these sorts of “parenthetical” uses of ‘believe’ and ‘think’ see Urmson (1952). In general, there is a lot of say about belief reports, some of which might not make for a completely natural fit with some of the discussion in this section. For some interesting discussion, see Hawthorne et al. (2016). I wish I had space to say more about all of this.

¹⁹ Notice as well: ‘I think it’s raining out but I wonder whether it’s raining out’ or ‘I believe I parked the car in lot 2, but I’m curious where I parked the car’ sound quite bad as well, perhaps just as bad as the “non-doxastic” versions of these assertions.

²⁰ For some of the relevant discussion see Hawthorne (2004), Stanley (2005), Weatherson (2005), Ganson (2008).

²¹ The discussion of “bank cases” in Nagel (2008) is particularly relevant here, I think. Nagel argues that when we read high stakes bank cases we see the central subjects in deliberating or inquiring modes. Moreover, it isn’t just that we see these sorts of subjects as deliberating, but that we also don’t see them as believing the relevant answers. Further, Nagel argues, when we fix the cases so that the subjects do believe the answers (e.g., the bank will be open), we end up with cases in which those subjects seem irrational. In order to see high stakes subjects as rational once we naturally see them as in a deliberative modes, we also need to see them as not believing the relevant answer to the relevant question. DBI fits very naturally into this story – it can help to explain why when we see rational subjects inquiring we don’t take them to be believers, i.e., fully rational subjects don’t do both of these at once.

²² I think that DBI can also explain some common intuitive responses to lottery cases. It’s not hard to get into the following frame of mind: there’s something strange about saying that a subject flat-out believes that her lottery ticket is going to lose – why did she buy it in the first place then? And why not just give it away or throw it out entirely? That she bought it and is (reasonably, we think) waiting to find out the result before throwing it out, seems to indicate that there’s an important sense in which the question of whether her ticket will lose is open for her. Curiosity about whether she’ll win seems appropriate, as does more active inquiry at times (e.g., searching for the results online). But that can give us access to another sort of explanation as to why belief doesn’t seem like quite the right attitude for the ticket holder to have – we see ticket holders as fairly reasonable and having some relevant IAs.

²³ I’m thinking of these attitude types as the folk-psychological ones.

²⁴ See Harman (1986) for a related thought about “full acceptance” and the end of inquiry. Also see Hieronymi (2009) for some discussion of the idea that believing is a matter of having settled some question for oneself.

²⁵ Knowing too! In fact reflecting on knowledge’s role as an answering attitude gives us additional reason to move away from the thought that the IAs are literally desires to know (or even necessarily involve such desires). Knowing Q and having an IA towards Q are not rationally compatible. But wanting to know Q while knowing Q need involve no rational failing. Right now I want to know what my home address is, and luckily I do; there’s a lot of knowledge that I have right now that I want to have and wouldn’t want to lose. There’s no irrationality or incoherence here.

²⁶ I should be a bit more careful here. I think that the right thing to say is this: one can have a settled opinion about p by *settling on* p or settling on $\neg p$. A rational subject who has settled on p is not also asking questions that have p as a possible complete answer, and a rational subject who has settled on $\neg p$ isn’t also asking questions that have $\neg p$ as a possible complete answer.

²⁷ Again, perhaps we can draw some support from lottery cases. Before you find out the winning numbers some curiosity about whether your ticket will win seems fine even in combination with incredibly low and incredibly high credences in the answers to the that question. So too with wondering about that or more actively investigating it – e.g., searching the internet to find the winning numbers.

²⁸ And we can run a series of Morse cases that can get us there as well. In each case we can imagine Morse inquiring into who killed the doctor without any evidence that bears on that question. In the first such case, there are two suspects, in the second three and so on. In each such case we stipulate that Morse has some degree of belief in each possible answer to the question. But despite having those credences, when Morse is without further evidence, being curious about who killed the doctor, wondering about that question, and more actively inquiring into the question while having those credences, will look normatively appropriate. But however Morse distributes his credences over the space of answers in these cases, once there are enough suspects some of those answer-credences will be extreme.

²⁹ See Williamson (2007) for some discussion of these sorts of cases.

³⁰ It may be that I have also pointed to a different but related disconnect between belief and high credence as well: the latter can be permissible in the absence of evidence, but we think that believing in the absence of evidence cannot be.

³¹ See, e.g., Foley (1992) and Sturgeon (2008) for a taste of this debate.

³² Some have argued that part of the aim of scientific inquiry is theory acceptance. In many cases this notion of acceptance is closely related to the folk-psychological notion of belief, e.g., in Maher (1993). In others it's meant to play a special role, e.g., in its relation to assertion (see Kaplan (1996), for instance). Insofar as one's account of acceptance has it lining up with our folk-psychological notion of belief then what I've said here about belief and settling applies straightforwardly to acceptance and settling. We'd have to look at the details of the other sorts of accounts of acceptance to evaluate the extent to which those are or are not settling attitudes.

³³ For instance, on the connection between belief and action guidance see Ross and Schroeder (2014) and on the connection between belief and assertion see Kaplan (1996).

³⁴ Thanks to audiences at: UCLA, Temple University, a meeting of the LPPRD at the University of Oxford, University of Pittsburgh, the Ranch Metaphysics Workshop, the Pacific APA in San Francisco, UNC-Chapel Hill, and a meeting of SWIP Analytic. I'm very grateful for comments on this paper from: Dave Chalmers, Sinan Dogramaci, Cian Dorr, Jeremy Goodman, Jim Pryor, Amia Srinivasan, Susanna Siegel, Brian Weatherson, and two anonymous referees.

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