Into Question: An Account of Inquiry

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Into Question: An Account of Inquiry

A dissertation presented
by
Lauren Davidson
to
The Department of Philosophy
in partial fulfillment of the requirements
for the degree of
Doctor of Philosophy
in the subject of
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Into Question: An Account of Inquiry

Abstract

Inquiry is central to our lives as knowers. From the quotidian ‘where did I leave my keys’ to the most momentous of research questions, we update our beliefs via inquiries large and small every day. Plausibly then, we achieve a much more complete picture of agents’ epistemic lives when we take into account not just what they believe or know but also the questions they have open for inquiry. Such is the approach to epistemology that motivates my dissertation. The enclosed papers present an account of inquiry from the perspective of philosophy of mind. The account provides sufficient conditions on being in inquiry and also has much to say about the attitudes of inquiring and questioning agents, like doubt and suspension of judgment. The account thus provides a framework for determining which questions an agent has open for inquiry and is a starting place for an inquiry-based epistemology.

In “Is Suspension an Inquiring State of Mind?,” I put pressure on Jane Friedman’s claim that suspending judgment is sufficient for being in inquiry. While the main force of the argument is critical, the paper unfolds the terrain of the mental states of inquirers and sets the terms in which my own view is framed. “Committing to Inquiry” then is the heart of my account. The project of the paper is to lay out sufficient conditions on an agent’s being in inquiry. I argue that inquiry begins with a commitment to a focal question, this commitment takes the form of an intention, and only such an intention is sufficient for inquiring. Finally, in “Room for Doubt” I explore an application of the picture defended in the previous chapters. I argue that, in my framework, doubt is best understood not as a doxastic attitude but as the process of considering whether to revise one’s belief-commitments.
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Introduction

For the majority of my summers in graduate school, I’ve taught a critical thinking course for high school juniors and seniors. The focus of the course is analyzing arguments. We use visualization methods to make explicit and transparent how all the claims in an argument support or undermine its conclusion. Students often begin the course thinking the material we’re covering is nothing new, and in a sense they’re right. Of course, they make arguments and weigh reasons all the time. But one of my favorite moments is when students discover just how much complexity they take for granted. Most often, this moment is signaled by a quizzical look and an exclamation — “What do we do with this one?!?”

When this recognition in turn motivates a student, I know they are going to be successful in the course. There’s something about peeling back the layers of something you took for granted, something you maybe even thought you were good at, and discovering a level you didn’t know existed that’s a recipe for learning. Beyond success in the course, students who make this discovery begin to subject thinking they do every day and discussions they have with their friends to a new level of critical scrutiny. And the new perspective is, if the feedback students give me isn’t just flattery, transformative for many.

I tell this story because the project this thesis represents has taken me down a parallel path. The enclosed papers present an account of inquiry from the perspective of philosophy of mind. The account provides sufficient conditions on being in inquiry and also has much to say about the attitudes of inquiring and questioning agents, like doubt and suspension of judgment. But the phenomena that inspired the view are not grand. While the view applies equally to large-scale investigations, my motivation for pursuing this project was to understand the ordinary inquiries we engage in every day. From ‘where did I leave my keys’
when headed out the door in the morning, to ‘what are today’s priorities’ when starting to
work, to ‘what’s the best way to get there’ when headed someplace not on our usual itinerary,
we constantly update our beliefs by answering questions. Just as we regularly engage in
deliberations large and small about what to do, so too we regularly engage in inquiries large
and small about what to believe. My account of inquiry has grown out of reflection on these
commonplace phenomena of question-answering, and my view has been shaped most by
cases where the questions are quotidian rather than momentous.

This is where I see myself in the shoes of my students. I’ve come to view an everyday
phenomenon through a new critical lens. Through this project, I’ve come to see an activity
that I engage in regularly as an essential part of our lives as knowers, as epistemic agents.
Which questions we pursue and how well we pursue them has deep impacts on both our
epistemic states and our epistemic standing.

In brief, my account claims that inquiry is centered around a commitment to a focal
question. While an agent may contemplate or wonder about a question at various stages of
pre-inquiry, she counts as being in inquiry with respect to that question only when she has
made a commitment to settle it. This commitment is not a matter of setting up a mechanism
for accountability, but rather, a taking on of the question as an aim or end. Such a
commitment, I argue, is best understood as an intention to settle the relevant question. That
inquiry begins with an intention explains why we have the sort of voluntary control over
inquiry that we do. And the fact that we can, in typical cases, choose when to open or close
inquiry positions inquiry as one of the central ways in which we can exercise control over our
beliefs. Belief itself may not be voluntary, but if we want to be more certain of something, we
can open an inquiry into the matter.
Thus, I think we achieve a much more complete picture of agents’ epistemic lives when we take into account not just what they believe or know but also which questions they have open for inquiry. An account of inquiry is important philosophically not only because it explains a mechanism by which we maintain and modify our beliefs but because it broadens our understanding of what it is to do well as an epistemic agent. The exemplary epistemic agent, we might think, not only has justified beliefs but is conducting inquiries into the right questions and conducting those inquiries well. My work provides criteria based on which we can say an agent has a question open in inquiry and also an account of the attitudes involved in opening and closing questions. It thus provides a framework from which we can ask what norms govern inquiry processes and how those processes – how the questions we ask and answer every day – redound on our epistemic standing.

My path to this perspective, however, was less than direct. My interest in teaching reasoning led me to look first at inference rather than inquiry. If inquiry is an activity of answering questions by gathering evidence, inference is a mental transition. I infer from the clatter in the other room that the book I left perched precariously on the edge of my desk fell or from the barista’s smile that she’s a kind person, but I wasn’t inquiring into the questions ‘what fell’ or ‘what kind of person is the barista’. These inferences are simply transitions from one state – in both of these cases a perceptual one – to another – a conscious thought and corresponding new belief.

Inference has received recent attention in epistemology. The literature on inference has focused on questions such as: What sort of transition between mental states is inference? What distinguishes it from merely associative transitions? Is inferring an act, or does it take place on a sub-personal level? However, as I reflected on inference phenomena, I found my attention captured by another sort of distinction between cases: Only some inferences seem to
be part of a larger activity we’d want to call reasoning. Many inferences are instead habitual or occasioned by an environmental trigger. An example I played with and that comes up here in Chapters 1 and 2 was the contrast between a tourist and a crew member on a cruise ship. We can imagine these two individuals both hear the ship’s horn blast. Further, when they hear the horn, both infer that they’ll be docking soon. But here’s the difference — Only the tourist has been trying to figure out when they’ll be docking. He’s been checking schedules and asking other passengers. The crew member simply notes that they’ll be docking soon and goes about her business.

What I noticed about pairs of cases like this is that only in one case — the tourist — does the inference fulfill a certain function in the agent’s cognitive economy. For the tourist, the inference settles an open issue. He moves from a state of being uncertain and of trying to figure the matter out to having a decisive opinion. We might say he goes from pursuing an epistemic goal to having achieved it; he goes from aiming to know something to knowing it.

In contrast, the crew member who makes (a token of) the same inference does not thereby achieve an epistemic goal. Sure, we can say that she too goes from not knowing to knowing, if it was indeed the case that she didn’t know when they’d be docking prior to making the inference, but she was not aiming to know. While both agents came to have new knowledge, only the tourist moved from a state of aiming to know to having settled the matter.

Inspired by Dewey’s *How We Think*, I came to characterize this distinction between inferences in terms of questions: Some inferences are in the service of settling a question; others are not.1 Dewey distinguished thinking in a general sense — the mental dialogue we have with ourselves — from reflective thinking that aims at an end. This end, for Dewey, is a

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problem or question. We recognize that there’s a mismatch between what we believe and the situation. We can’t explain something; a happening seems impossible, etc. This end occasions and directs the process Dewey calls reflective thinking. This process is none other than the mental component of inquiry, and in Dewey’s view, it begins and ends with a question.

While at first I pursued the idea that settling a question might be what distinguishes inferences, or at least inferences that are steps in a process we’d want to call reasoning, from associative mental transitions, reading Dewey I realized that this was a false start. The phenomenon I wanted to account for was not inference but rather the larger activity of inquiry in which inferences are often imbedded. Only some inferences settle questions, in the sense of fulfilling an aim to know, because only some inferences are steps in an inquiry. And the locus of the role of questions in our epistemic lives is our inquiries not our inferences.

Inquiry has been somewhat neglected in mainstream epistemology. There is work in philosophy of science, but it tends to focus on issues surrounding induction. And Robert Stalnaker’s Inquiry tackles questions in metaphysics – among other things, what we’re doing when we make valid deductions, if propositions are best understood as sets of possible worlds. But relatively little attention has been given to the attitudes of inquirers and norms of inquiry. Because epistemological work on inquiry tends to focus on the states that result from inquiry, whether their justification as in accounts of induction or how they differ from the states with which inquiry began as in Stalnaker, these accounts do not provide a framework in which to think about what it is to inquire well. That is, they do not provide an account of what it is to inquire in the first place. Since an understanding of what it is to inquire well, to my thinking,

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represents the biggest potential payoff for a philosophical account of inquiry, these accounts leave an important gap unfilled.

Likewise, questions, while much discussed in semantics and featuring prominently in pragmatics, have only recently become a focus of epistemologists. Seth Yalcin argues that understanding beliefs as sensitive to questions can help us solve the problem of logical omniscience. 4 Sylvain Bromberger argues that scientific explanations are best understood as answers to a certain kind of question, but Jane Friedman, whose work in many ways sets the terms in which my project is framed, is the first to suggest that there are question-directed attitudes and that these question-directed attitudes interact in norm-governed ways with our propositional, doxastic attitudes. 5, 6

My account of inquiry and the attitudes of inquirers is therefore a contribution to both of these areas. To appeal to norms of inquiry in our evaluations of epistemic agents, we first need an account of what inquiry is. To reinforce the importance of question-directed attitudes in epistemology, we need a framework in which an agent’s open questions figure essentially in her epistemic state.

Let me say then a bit about the picture of questioning attitudes that lies behind my arguments in the papers to follow. In my view, an agent might be in one of four positions with respect to a question. She might (1) have no cognitive contact with that question, (2) have cognitive contact pre-inquiry, (3) be in inquiry with respect to that question, or (4) have settled the question, which involves having doxastic attitudes toward one or more of the question’s

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5 See Sylvain Bromberger, On What We Know We Don't Know, (Chicago: The University of Chicago Press, 1992).

possible answers. Here my work can be seen as bringing together two threads in the literature — Friedman's view that there are question-directed attitudes and that it is in virtue of possessing such an attitude that an agent counts as genuinely inquiring, and Richard Holton's view that belief can be modeled on intention as a practical attitude. In particular, Friedman's work informs my account of (2) and (3), while Holton's work provides a framework for (4).

I think the clearest way to illustrate each of these positions and so the overall structure of the view is to walk through a schematic case. So, here's the simplest one: It consists of an agent, a proposition $p$, and the corresponding binary question ‘whether $p$’. As a starting point, we might say that the agent has no attitudes at all toward $p$. She has never entertained $p$. This is (1). The agent has no cognitive contact with the question ‘whether $p$’. But then $p$ becomes relevant to her. She takes an interest in the matter. Here it doesn't so much matter how or why, but the agent has come into cognitive contact with $p$. However, she's not sure whether $p$ is true or false. This is (2). Our agent is in a stage of pre-inquiry. She may wonder about ‘whether $p$’, and she has certainly entertained the question, but she has not yet made it her goal to settle the matter.

If her motivation is strong enough, however, the agent will take on ‘whether $p$’ as an epistemic goal and initiate inquiry into that question. This is (3). At this point, ‘whether $p$’ is an open question for our agent in a technical sense. It is an object or goal of inquiry; she is aiming to settle the question ‘whether $p$’ just as the tourist in the example above was aiming to settle the question ‘when are we docking’. As discussed, what marks the transition from pre-inquiry to being in inquiry, in my view, is a commitment. In making settling ‘whether $p$’ an aim of hers, our agent makes a commitment to that question. She forms an intention to settle ‘whether $p$’.

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Only when an agent forms this sort of intention is she in inquiry with respect to a question; only such an intention is sufficient to unify an agent's various acts in service of a question into an activity we'd rightly call an inquiry.

So, suppose our agent does form the intention to settle ‘whether \( p \)', and further suppose that her intention is specifically to settle in belief. She aims to settle ‘whether \( p \)' by coming to believe either \( p \) or not-\( p \). She proceeds with her inquiry, until, at some point she resolves the matter. When she forms the relevant belief, her intention to settle is fulfilled and so discharged. At this point, our agent closes inquiry. This is (4). ‘Whether \( p \)' is no longer an open question for our agent, and the matter is settled by her doxastic attitudes. In particular, it is settled by her newly formed belief.

I follow Holton in thinking that the doxastic attitudes that settle inquiry are stable. That is, they have a tendency to persist even in the face of new information relevant to the questions they settle. This resistance is not total, of course. We often reopen matters on which we hold beliefs, but the tendency of beliefs to persist does make it the case that the threshold for new information being sufficient to reopen an inquiry is higher than the threshold for that information counting as evidence if an inquiry is already ongoing. This stability enables beliefs to serve as fixed points in our reasoning, and these fixed points allow creatures like us – creatures with limited cognitive resources – to cope with the complexity of our intellectual projects. Thus, (4) is a landing place, but it is also a starting point for future inquiries. Matters that are settled are taken as given unless and until evidence that crosses stability thresholds is uncovered.

While Dewey hardly figures in my account in its current form, I think the resulting picture of inquiry is pragmatist in spirit. It takes seriously the idea that inquiry is a process of moving from uncertainty, understood as an open question, to a settled state, one that can serve
as a given in future inquiries. It takes seriously the pragmatist thought that inquiry begins in doubt and ends, as Peirce would say, when doubt is destroyed.\textsuperscript{8} The papers that follow expand on and defend elements of this overall picture.

I begin in Chapter 1 “Is Suspension an Inquiring State of Mind?” with a discussion of the role of suspension in inquiry. In a series of papers on suspension, Friedman argues that suspension is a question-directed attitude and that it plays a particular role in our intellectual lives. Namely, we suspend judgment to open inquiry. Indeed, Friedman’s claim about the centrality of suspension in inquiry takes the form of a biconditional: One is suspended about a question if and only if one is in an inquiring state of mind with respect to that question. I unpack this biconditional into two component claims: (1) Suspension is the core interrogative attitude. (2) What it is to be in an inquiring state of mind is to have an interrogative attitude. And I argue that the second claim is problematic. When we explore the dynamics of inquiry, it becomes clear that any state which plays the functional role that Friedman ascribes to inquiring states of mind must be a different sort of state than an interrogative attitude. This conclusion leads to a rethinking of the link between suspension and inquiry. While the main force of the argument is critical, this chapter unfolds the terrain of the mental states of inquirers and sets the terms in which my positive proposal is framed in Chapter 2.

Chapter 2 “Committing to Inquiry” then is the heart of my account. The project of the paper is to lay out an account of sufficient conditions on an agent’s being in inquiry. After identifying some features that distinguish genuine inquiries from other question-guided processes in the vicinity, I argue that goal-directed states, the type of mental state most commonly cited as sufficient for opening or being in inquiry, cannot do the job. When we look

at why goal-directed states like doubt, curiosity, and suspension aren't sufficient for inquiring, it becomes clear that the missing element is a commitment. Just as an individual who is searching the cupboard is not only hungry but actively aiming to satisfy her hunger, so genuine inquirers don't just have attitudes that motivate them to inquire. They are also, in some sense, aiming to settle the focal questions of their inquiries. Here is where I argue that we should think of this aiming in terms of a commitment to a question, and that inquiry begins with this commitment, which takes the form of an intention. Thus the crux of my account is this: An agent is in inquiry with respect to a question when she intends to settle that question in the right way.

Further consideration both of the features of genuine inquiries and of constraints on any adequate account of inquiring, such as that the account not put inquiry out of reach of young children, allows me to fill out the “in the right way” clause. It turns out that the right way involves both the agent’s means of settling and the kind of state she intends to settle in. Fittingly then, I conclude with brief remarks about the implications of my account for the kinds of states that settle inquiry.

Finally, Chapter 3 “Room for Doubt” is an application of the picture defended in Chapters 1 and 2. In the paper, I put forward an account of doubt on which doubting is not a matter of having some doxastic attitude or other toward a proposition, but rather a pre-inquiry process, a process of considering whether to reopen a matter currently settled by one’s beliefs. A brief tour of the literature on doubt suggests there’s a split in doubt phenomena. On the one hand, doubt is an attitude one has, as when one doubts a proposition. On the other, doubt is something one experiences; one can be “in doubt”. Acknowledging this split in the phenomena leads me to frame my account as an account of the latter sort of phenomenon, of doubt as an occurrent process. My claim is that, when we understand the doxastic attitudes as
stable attitudes, as my account of inquiry suggests we should, a new candidate emerges for what sort of process doubt could be. On my preferred understanding, having a stable belief involves a commitment to not reopen the matter until some threshold for new evidence is reached. Since this commitment closes off inquiry into a subject matter – whether or not inquiry has previously taken place – we might call these commitments the inquiry-related commitments involved in belief.

Against this backdrop, we can think about what happens when we uncover new evidence relevant to one of our beliefs. Sometimes know for certain that the new evidence meets or fails to meet the relevant threshold for reopening inquiry, but other times we are unsure. In these latter cases, we have to deliberate about whether to reopen the matter, although this may feel less like a rational deliberation and more like hesitation and wavering to us. This deliberation, I claim, is doubt. Doubt is the process of considering whether to revise one’s belief-commitments.

My work thus unfolds a wide-ranging picture of the mental states of questioning and inquiring agents, from those with nagging doubts to those actively investigating. But as I’ve emphasized, my account also provides a framework for future research in epistemology. So, let me conclude these introductory remarks by highlighting a few the questions to be answered next.

While my account has much to say about opening inquiry, at this stage, key questions about closing inquiry are left open. In particular, while I provide an account of the kinds of states that settle inquiry – the full doxastic attitudes understood on the model of intention – I don’t provide a detailed account of how such attitudes interact with closing inquiry. What I mean is this: While a tenant of my account is that opening and closing inquiry are, at least in typical cases, under our direct voluntary control, it doesn’t look like settling states are like this.
Belief, after all, is the paradigm settling state. Thus, you might think there’s a tension here. How can it be that when we end inquiry is under our direct control if what settles inquiry is forming a belief, which isn’t voluntary?

Part of the answer, of course, is that settling and closing must come apart. Some inquiries are closed because they are forgotten; others are closed because we realize they are no longer of importance. Suppose an agent is inquiring into Q* because she thinks doing so will help her answer Q, but in the meanwhile she is able to answer Q via another route. If she does not independently care about Q*, she might simply drop that inquiry after settling Q. So there are certainly times when one is justified in closing inquiry without having settled the relevant question. But can closing and settling ever come apart in the opposite direction? That is, can one have a full belief, a settling state that includes stability, and yet still (justifiably) keep inquiry open?

Given the nature of settling states, I’m inclined to think the answer to this last question is no. One can have a partial belief or a high degree of belief while actively inquiring but not an all out belief that’s a settling state. But if this is right, then the tension you might have worried about here is real. Either closing inquiry is not as voluntary as my account has it in some cases, or there’s a real sense in which belief is voluntary in these cases. Thus, an expanded account of settling states and the stability thresholds they encode is called for.

Likewise, work toward specifying the norms of inquiry is a natural next step. My framework suggests that norms of inquiry are responsive to two distinct questions: (1) Which questions ought an agent inquire into? (2) Given that an agent is inquiring into a question, what counts as inquiring into that question well? (1) is a question about how, given her preferences and interests, an agent ought to select among possible ends or prioritize the ends she has taken on. (2) might be seen as a question about which means an agent ought to take to
her end, where that end is a specified epistemic goal. This way of approaching (1) and (2) naturally raises the question of whether norms of inquiry are practical or epistemic norms. Perhaps work on the norms of inquiry will shed new light on the value or limits of the practical-theoretical distinction.

Apart from the question of whether norms of inquiry are epistemic norms, my account also seems to make room for complex interactions between norms of inquiry and evidence-based norms of belief. This because, on my account, closing and opening inquiry need not track believing or failing to believe. With regard to opening, might there be cases where one’s total evidence decisively supports belief that p, but a norm of inquiry nevertheless demands that one open inquiry into ‘whether p’? If there are such cases, we might find them in situations where the stakes of being right about ‘whether p’ suddenly rise or where an agent uncovers new information, which by itself does not shift the balance of her total evidence but that somehow bears on the status of her prior evidence. Perhaps odds overwhelmingly favor the new information being fraudulent, but if it weren’t, it would overturn much of the agent’s current data.

With regard to closing, might there be cases where norms of inquiry demand that one close inquiry in the absence of decisive evidence? Such norms would be answers to (1) above – i.e. they would say that an agent ought not be inquiring into Q now – and they would be grounded in the limits on our cognitive capacities. Indeed, when we bring inquiry into view as a part of the complete picture of epistemic agency, we might think that a major component of what it is to do well as an epistemic agent is to manage one’s cognitive resources effectively, in part by allocating them to the right inquiries. If a picture along these lines is worth taking seriously, then we have a further reason why an account of inquiry is important philosophically. Perhaps there is a place for an inquiry-based epistemology.
Is Suspension an Inquiring State of Mind?

Ask enough people about suspension of judgment and you’re likely to unearth a tangle of divergent intuitions. To count as suspended, is it enough to simply consider a proposition and after consideration fail to believe that proposition and its negation? Or is suspension a more demanding attitude, perhaps something like agnosticism? In a different vein, might suspending require some meta-beliefs, a belief that one does not know whether the proposition is true or that one’s evidence is inadequate to decide the matter? This diversity of intuitions is reflected in our linguistic practice. We refer to suspended agents as, among other things, “neutral”, “undecided”, “agnostic”, and “making up their minds”. While it’s unlikely that any one theoretical notion of suspension will be able to account for every case where we colloquially describe the agent as suspended, there is a growing current literature that attempts to provide an account of a core notion of suspension as a genuine attitude, not merely a catchall for agents who both fail to believe and to disbelieve.

Prominent within that literature is Jane Friedman’s account of suspension as a question-directed attitude. Friedman’s account distinguishes itself from its competitors by characterizing suspension as a non-propositional attitude. On Friedman’s view, suspension has a question rather than a proposition as content. One suspends judgment about a question $Q$ rather than a proposition $p$. One of the major appeals of Friedman’s account is that it yields an attractive story about the role of suspension in our intellectual lives: We suspend judgment in order to open inquiry.

Indeed, Friedman claims that suspension is the attitude in virtue of which an agent counts as inquiring. She frames and defends this claim about the centrality of suspension in inquiry as a biconditional: “[O]ne is inquiring into some matter if and only if one is suspended
When we get into the details of Friedman’s account, it turns out this biconditional is a conjunction of two claims. One, suspension is the most general or core interrogative attitude. And, two, what it is to be in an inquiring state of mind is to have an interrogative attitude. Inquiring state of mind is the sense of inquiry Friedman invokes in the biconditional. The claim is not that every suspended agent is actively out gathering evidence, but rather that to suspend on a question is to be in the kind of state in virtue of which one counts as inquiring into that question. Thus for Friedman, an agent is suspended if and only if she has an interrogative attitude, and an agent has an interrogative attitude if and only if she is in an inquiring state of mind.

I think claim number two is problematic. When we take a close look at the dynamics of inquiry, it becomes clear that any attitude which has the functional role in inquiry that Friedman ascribes to inquiring state of mind must be a distinct kind of state from the interrogative attitudes. There are inquirers who lack interrogative attitudes and interrogative attitude possessors who fail to inquire. So, an agent doesn’t count as inquiring in virtue of having an interrogative attitude alone, and therefore, if we suspend judgment in order to open inquiry, this can’t be because suspension is the core interrogative attitude.

My task in this paper is thus two-fold: The primary objective is to argue that inquiring state of mind and the interrogative attitudes come apart. I begin by introducing each of the three components of Friedman’s picture of the mental state of inquirers. Section I takes a look at question-directed suspension, while Sections II and III treat the interrogative attitudes and inquiring states of mind, respectively. Section IV completes Friedman’s picture by presenting her arguments for the suspension-inquiry biconditional. Section V then comprises my main

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2 Ibid.
argument for rejecting the equation of inquiring states of mind with the interrogative attitudes. Secondarily, I’ll explore the consequences of this conclusion for Friedman’s account of suspension. Section VI takes up briefly the options for modifying the account of question-directed suspension and considers whether we should still opt for a non-propositional account, even if suspension doesn’t play the role Friedman lays out for it in inquiry. Let me begin then with a brief look at question-directed suspension.

I Suspension

Friedman’s account of suspension belongs to a recent literature that attempts to account for suspension as a contentful attitude in its own right — not merely the failure to both believe and disbelieve a proposition. The challenge, as I noted in opening however, is that intuitions on suspension are likely to diverge, and this divergence is reflected in our ordinary talk about attitudes of indecision, so ordinary language provides suspect guidance at best. We say that agents who are in some way neutral on a subject are “undecided”, “neutral”, “making up their minds”, “agnostic”, “uncommitted”, “unresolved”, “suspended”, and so forth. It seems improbable that all these terms pick out a single, unified attitude. Thus, the current literature attempts to provide an account of a central attitude in the vicinity of these ordinary language terms, while acknowledging that such an account might not make room for the attitude of every agent we’d be happy to describe with the family of terms associated with suspension. The goal is a theoretically useful notion that accounts for the attitudes of a broad subset of such agents.
In pursuit of this aim, current views divide into three broad categories. According to belief accounts, suspension of judgment is a type of (meta)belief — typically, lack of belief in \( p \) and not-\( p \) plus beliefs about the status of one’s evidence or inquiry. According to credal accounts, suspension of judgment is a type of credence — usually, middling or imprecise credence. Finally, according to \textit{sui generis} accounts, suspension of judgment is a unique attitude which does not fully reduce to the other doxastic attitudes.

Friedman’s account is the leading \textit{sui generis} view. According to Friedman, to suspend is to take a neutral or open stance on the relevant subject matter. To take such a stance requires that one has a genuine attitude — neutrality — toward the matter; lacking an attitude is not enough. Thus, suspension requires both that one has cognitive contact with the relevant subject matter and that one has a determinate, if neutral, opinion on the issue. Friedman therefore understands suspension as a genuine doxastic attitude, and suspension joins belief and disbelief as the third full doxastic state on her view. Considered from this perspective of non-degreed or full belief, an agent either believes \( p \), disbelieves \( p \), or suspends judgment on ‘whether \( p \)’.

Most importantly for Friedman, suspension, as the construction whether \( p \) in the previous sentence indicates, is question-directed. That is, suspension has a question \( Q \) rather than a proposition \( p \) as content. It is worth pausing here over the notion of a question-directed

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3 I owe this way of conceptualizing the project of the literature and of categorizing the views to David Thorstad.
7 See Friedman 2013a, p. 167-171 for the argument for this claim.
8 See 2013a and 2017, p. 303-304 for Friedman on suspension.
attitude, since it will reappear several times throughout this paper. ‘Question-directed’ for Friedman is a technical term. An attitude is question-directed when it has a question, as opposed to a proposition or an individual, as content. The attitude relates its bearer to a question. It is common to identify the semantic value of questions with sets of answers. So a question can be thought of as something like a set of propositions or a partition on possible worlds. The key thought here is that if questions are identified with sets of answers, there’s something that it is to be related to the set itself that is different from bearing that relation to any particular contents of the set. Thus, the term question-directed for Friedman refers specifically to mental contents, to the contents of attitudes, and I will use ‘question-directed’ and ‘has a question as content’ interchangeably in the discussion to follow.

Specifying this technical use of question-directed is important in order to distinguish it from other ways in which mental processes or activities might be question-oriented. For example, suppose you ask me a question and I have to do some calculating to figure out how to answer. We might say my reasoning is question-oriented; it’s aimed at figuring out a response to your question. But this is not to say that my reasoning is a question-directed attitude in Friedman’s sense. Of particular relevance to the arguments to come, we might say that inquiry is a question-driven activity. After all, it’s fairly standard to think of inquiry as a process of settling questions, and I argue elsewhere that this is the right way to think of it. But just because that’s the aim of the activity, and so inquiry is question-oriented in some sense, it doesn’t mean that there’s a question-directed attitude at the heart of inquiry. This is

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9 Accounts differ with regard to exactly which answers are included in the set — possible or true and partial or complete. See Hambin 1973, Karttunen 1977, and Groenendijk and Stokhof 1997 for discussion.

10 See Friedman 2013b, p. 167-168 for more on this issue.

11 See Chapter 2.
Friedman’s claim, and I ultimately think she’s right here, but I want to flag that someone might disagree with Friedman on this point while maintaining that inquiry is an activity that aims to settle questions. We could imagine, for example, that the attitude that encapsulates the inquirer’s aim is some sort of desire to know. This desire might be a propositional attitude even if what the inquirer is doing while attempting to satisfy this desire is answering questions. In this paper, I’ll reserve question-directed for Friedman’s technical notion. I’ll describe inquiries as ‘question-driven’ or ‘aiming to settle questions’ and reserve question-directed for attitudes.

Returning to suspension, Friedman suggests we accept what’s right on the surface in our ascriptions of suspension: “Hayden suspended judgment about who ate the last slice of cake.” “Amari is agnostic about whether it will rain today.” The content of suspension is a question. This is the reason why suspension on Friedman’s account is not reducible to belief or credence. No set of propositional attitudes is equivalent to a question-directed attitude.

In sum, for Friedman, suspension is a genuine attitude not reducible to beliefs or credences and distinct from mere lack of belief. It encodes a real, if undecided opinion on a subject matter. That subject matter is a question, and that question is the content of the attitude itself. But in Friedman’s view, suspension is not the only question-directed attitude. Rather, suspension is the core of a class of such attitudes, which Friedman calls the interrogative attitudes. I turn to those next.

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12 See 2013b, p. 145-149 for Friedman’s discussion of this linguistic evidence and its persuasiveness. While it’s not her main argument, Friedman suggests that the linguistic evidence at least gives us an initial push toward the question-directed view. Note that the argument in 2013b is general covering many of the interrogative attitudes. See Friedman 2017, p. 304-305 for a discussion specific to suspension.
II Interrogative Attitudes

Along with suspension, the interrogative attitudes are the second major component of Friedman’s picture of the mental state of inquirers. Inquirers are suspended and have interrogative attitudes. As Friedman characterizes them, the interrogative attitudes are a unified class of question-directed states and processes, which are normatively incompatible with belief and knowledge.\(^\text{13}\) While not an exhaustive list, Friedman explicitly includes curiosity, wondering, being agnostic, deliberating, contemplating, inquiring, and investigating in this family of attitudes. In addition, the interrogative attitudes have epistemic satisfaction conditions and are goal-directed states.

Let me unpack each of these four features: (1) are question-directed, (2) have epistemic satisfaction conditions, (3) are goal-directed, and (4) are normatively incompatible with belief. For clarity, I’ll focus my discussion on the interrogative attitudes that are states — curiosity, wondering, and being agnostic — and leave aside the processes.\(^\text{14}\)

Beginning with (1), Friedman’s technical notion of a question-directed attitude is again the relevant category here. Curiosity, wondering, and being agnostic all seem to be prime candidates for attitudes with questions as contents. For starters, the relevant verbs embed interrogatives and not declaratives:

Amari is curious about whether it will rain today.

Amari is wondering whether it will rain today.

Amari is agnostic about whether it will rain today.

The above all sound fine, but their declarative counterparts are ungrammatical:

Amari is curious that it will rain today.

\(^{13}\) See Friedman 2013b for the account of the interrogative attitudes.

\(^{14}\) This is a move Friedman herself makes. See 2017, p. 310.
Amari is wondering that it will rain today.

Amari is agnostic that it will rain today.

As with suspension, the surface grammar of these ascriptions gives us a first push toward the thought the interrogative attitudes are question-directed.\(^{15}\)

Stronger evidence, Friedman thinks, comes from the wide range of agents, both in terms of cognitive sophistication and grades of ignorance, who seem capable of interrogative attitudes.\(^{16}\) If being curious or wondering involved having meta-beliefs about one’s lack of knowledge or evidence, these attitudes would be out of reach of unsophisticated subjects. But young children are surely exemplars of the curious, and we tend to think that some nonhuman animals can be curious as well.

If we instead turn to propositional first-order contents, Friedman thinks we run into trouble here as well. It’s implausible to think that the curious agent has an attitude toward the question’s true answer in the way that we might analyze an ascription of knowledge-\(wh\). Likewise, it’s problematic to say that her curiosity is an attitude toward some set of the question’s possible answers. We want to allow for agents who wonder or are curious prior to having conceived of any of the relevant question’s possible answers. In addition, we think agents continue to be curious even when they can think of no answers to their questions that their current evidence doesn’t rule out.\(^{17}\) In these cases, it can’t be that the agent is curious about the answers she can think of. Her curiosity must instead be directed toward those answers of which she’s ignorant. Indeed, Friedman thinks the interrogative attitudes are

\(^{15}\) Again see Friedman 2013b, p. 145-149 for discussion of the linguistic evidence.

\(^{16}\) See Friedman 2013b, p. 153-165 for the sophistication and ignorance arguments. Whitcomb 2010 offers similar reasons and comes to similar conclusions with regard to the conceptual content of attitudes of curiosity specifically.

\(^{17}\) For discussion of such cases, see Bromberger 1992, especially ch. 1.
compatible with what she calls “radical ignorance”, where the agent lacks the conceptual resources to grasp any of her question’s possible answers. Therefore, propositional accounts struggle to capture the full range of interrogative attitude possessors. Understanding the interrogative attitudes as question-directed, on the other hand, yields a unified account of the full range of these agents.

Next, (2) interrogative attitudes have epistemic satisfaction conditions. That is, interrogative attitudes are resolved or satisfied when the agent achieves a target doxastic state, likely belief in most cases. There are two pieces to this claim. First is the idea that the interrogative attitudes are the kinds of states we want to satisfy and thereby no longer possess. In this way, interrogative attitudes are like desires rather than beliefs.\(^\text{18}\) Second is the idea that what resolves or satisfies these attitudes is a doxastic state. I take it the thought here is that to be curious or to wonder presupposes that one is ignorant or lacks understanding. Once the relevant matter becomes the subject of belief or knowledge or understanding, it is no longer unknown or not understood and so the relevant questioning attitude is resolved or satisfied. Thus, interrogative attitudes have specifically epistemic satisfaction conditions because what resolves them is a change in epistemic state.

Closely related, is feature (3) goal-directedness. That the interrogative attitudes are goal-directed states seems to follow from their having satisfaction conditions. Like hunger and thirst, which are satisfied by food and drink respectively,\(^\text{19}\) interrogative attitudes push their possessors to fulfill their satisfaction conditions. Hunger and thirst motivate in part because

\(^{18}\) As with desires, there are sometimes exceptions where we want to be free of the attitude but don’t want to satisfy it. I have in mind circumstances where one might say, “I can’t help being curious, but I really don’t need/want to know.” But these aren’t the central cases Friedman has in mind, and the explanation for why the motivational force of the interrogative attitudes is blocked in these cases seems likely to follow a pattern similar to that for non-dominant desires.

\(^{19}\) Or perhaps better the sensations of fullness or quenched-ness that result from eating and drinking.
they are uncomfortable. Friedman suggests that the interrogative attitudes too are like this. They motivate us, at least in part, because they are states we want to get out of. Uncertainty is uncomfortable.²⁰

Finally, (4) the interrogative attitudes are normatively, though not descriptively, incompatible with knowledge and full belief.²¹ An agent who knows the answer to a question and is curious about that question is in an epistemic state that is inappropriate in at least some sense. This last feature of the interrogative attitudes is central to Friedman’s arguments for the biconditional, so I will return to it at greater length in Section IV. For now, I think Friedman’s thought is best brought out by a case where both knowledge and interrogative attitude are fully transparent. If I know where my keys are, suppose I’m staring at them on the desk in front of me, and I’m at the same time wondering where my keys are, something’s going wrong. To even make sense of the case, we have to imagine that I’m lost in thought and don’t recognize that it’s my keys that I’m seeing on the desk. So Friedman’s claim here is that, while it’s possible to have this combination of attitudes, it’s not a happy state to be in. Something’s going wrong when an agent both knows Q and has interrogative attitudes towards Q.

That’s the interrogative attitudes. They’re a class of question-directed and goal-directed states and processes that are important to an agent’s overall epistemic state because of their patterns of normative incompatibility with belief and knowledge. And because the interrogative attitudes are attitudes we have when we are in some sense asking questions, they are a hallmark of inquirers.

²⁰ Accounts of curiosity in psychology often include a motivation component either because curiosity is understood as a psychological drive or because curiosity is understood as a feeling of deprivation arising from a recognition of a gap in one’s knowledge. So this thought that interrogative attitudes are goal-directed is in keeping with empirical work, at least in the case of curiosity. See for example Loewenstein 1999 and Berlyne 1954. For Friedman on this point, see 2017, p. 316-317.

Let me turn now to the final component of Friedman’s picture of the mental state of inquirers, inquiring state of mind itself.

II Inquiring State of Mind

For Friedman, an agent counts as inquiring in virtue of being in an inquiring state of mind. She’ll of course need to do other things — formulate some hypotheses, gather some evidence — to further the inquiry, but what distinguishes a genuine inquirer from a non-inquirer or someone merely going through the motions of evidence gathering is that only the first is aiming to answer a question. And she has that aim in virtue of being in an inquiring state of mind. Since it turns out on Friedman’s view that what it is to be in an inquiring state of mind is to have an interrogative attitude, inquiring state of mind is not itself an attitude. Rather, it’s a functional role. Any attitude that fulfills that function in an agent’s cognitive economy is an inquiring state of mind. But every genuine inquirer has some attitude that fits the bill.

Friedman’s case that every inquirer is in an inquiring state of mind begins with the observation that no mere action alone is sufficient for inquiry:

[A]nyone genuinely inquiring is in this sort of inquiring state of mind. Picking up items at a crime scene doesn’t make it that one is inquiring into who committed the crime. Whether those actions count as part of an inquiry into who committed the crime depends in part upon the state of mind of the relevant subject. When the detective does these things in the relevant sorts of cases they count as part of her inquiry because they are done with the aim of figuring out who committed the crime. The trash collector who has no such aim or goal, is not inquiring into who committed the crime, even if he picks up all of the same items as the detective. Being in an inquiring state or frame of mind is a matter of being in this sort of aim- or goal-directed state. Whenever one is genuinely inquiring, one is in a state of mind like this.  

To count as part of an inquiry, an agent’s actions must be guided in the right sort of way or performed in pursuit of the right sort aim. Not every action, which in the right circumstances
could count as evidence gathering, in fact does count. I take it Friedman’s thought here is that, to get the account of aiming right, we’re going to have to look to the agent’s mental state. There’s a state of mind, an inquiring state of mind, in virtue of which an agent counts as inquiring and in virtue of which her actions count as part of her inquiry.

According to Friedman, there are three criteria an attitude must meet if it is to function as an inquiring state of mind: (1) It must be question-directed. (2) It must have epistemic satisfaction conditions. And (3) it must be goal-directed. Taking these in order:

With regard to (1) being question-directed, Friedman thinks that what unifies an inquiry over time is the agent’s relation to the focal question. Since the agent’s inquiring state of mind is that in virtue of which she counts as inquiring, it only makes sense that to be in an inquiring state of mind is to bear the required relation to a question, and only question-directed states relate agents straightforwardly to questions. In addition, Friedman thinks we can appeal to some of the considerations that applied to the interrogative attitudes here: We describe the aim of an inquirer by saying she is inquiring into who committed the crime or who ate the last slice of cake. The verb ‘inquire’ embeds interrogatives not declaratives. Likewise, inquiries can begin from places of radical ignorance. As long as the agent has the conceptual resources to ask a question, she can take some first steps in inquiring into it. So being in an inquiring state of mind can’t place additional conceptual burdens on agents beyond those required to grasp the question. For these reasons, the best candidate for the content of an inquiring state of mind is the question itself.

Next, (2) inquiring states of mind have epistemic satisfaction conditions for the same reason that the interrogative attitudes do — because they are resolved or satisfied when the agent comes to be in a target doxastic state. Inquiry aims at some epistemic goal — knowledge, justified belief, understanding, etc. Thus, if an agent’s inquiry is successful and
she comes to know or believe an answer to her question, her inquiring state of mind is satisfactorily resolved. She is no longer in an inquiring state of mind because her inquiry is settled. So, inquiring states of mind have epistemic satisfaction conditions because they are satisfactorily resolved just when the agent comes to be in the requisite epistemic state.

Finally, (3) inquiring states of mind are goal-directed states. Again, as was the case with the interrogative attitudes, this seems to follow from inquiring states of mind having satisfaction conditions. Friedman goes so far as to say that anyone in an inquiring state of mind with respect to a question is aiming to resolve that question.23 So, not only is an inquiring state of mind the kind of state that can motivate its possessor to fulfill the goal it encodes, its functional role in inquiry is to do so. Thus, inquiring states of mind are goal-directed in a strong sense. They are action-guiding. This point will loom large in the arguments to come.

Inquiring states of mind complete Friedman’s picture of the mindset of inquirers. Every genuine inquirer is in an inquiring state of mind. She counts as inquiring in virtue of being in some state that plays the functional role that is inquiring state of mind; it unifies her inquiry across time; and it makes it the case that she is aiming to settle the inquiry’s focal question. I hope it’s becoming clear from the criteria above why Friedman thinks the interrogative attitudes are just the sort of attitudes we’re looking for to fill the role of inquiring state of mind. The final step then is to show how the three components of Friedman’s picture — suspension, the interrogative attitudes, and inquiring states of mind — come together in her arguments for the biconditional.

23 See 2017, p. 308.
IV Arguing for the Biconditional

Recall that Friedman’s suspension-inquiry claim is the biconditional that one is inquiring into, i.e. one is in an inquiring state of mind with respect to, a question if and only if one is suspended on that question. As I said at the outset, this claim unpacks into two sub-claims: One is suspended on a question if and only if one has an interrogative attitude toward that question, and what it is to be in an inquiring state of mind with respect to a question is to have an interrogative attitude toward it.

Friedman’s argument for the biconditional begins with an epistemic norm on the interrogative attitudes, the Ignorance Norm for the IAs:\(^{24}\)

**Ignorance Norm for the IAs:** \textit{Necessarily, if one knows Q at t, then one ought not have an IA towards Q at t.}\(^{25}\)

Friedman offers two kinds of evidence for this norm, linguistic evidence from interrogative attitude ascriptions and our assessments of agents who have both knowledge and interrogative attitudes on the same subject. For the linguistic evidence, consider the following ascriptions:

“Logan is wondering where she left her wallet, but she knows where she left it.”

“The detective is curious about how the perpetrator entered the building, but he knows how they did.”

These sound confused at best. On their face, these ascriptions seem to attribute a state that is descriptively impossible, like the case of me looking at my keys on the desk and at the same time wondering where they are. What is it to be curious about something one transparently

\(^{24}\) Friedman refers to the interrogative attitudes as ‘IAs’. While I haven’t followed her in this generally, I’ve preserved her usage in the name and formulation of the Ignorance Norm.

\(^{25}\) 2017, p. 311.
knows? We can only make sense of these ascriptions if we take the claim to imply that Logan’s and the detective’s knowledge is somehow inaccessible. Indeed, I think we automatically hear them this way. Perhaps both have temporarily forgotten or haven’t yet made the required inferences, as when we say of a student that “she knows but she hasn’t realized it yet”.

And this seems to hold generally for concurrent interrogative attitude-knowledge ascriptions. All of the following schemas are problematic:

A is curious about \( Q \), but she knows \( Q \).

A is wondering \( Q \), but she knows \( Q \).

A is agnostic about \( Q \), but she knows \( Q \).

These ascriptions seem to attribute to an agent a state that is in some sense incoherent or inappropriate.\(^{26}\) Perhaps the agent transparently has a normatively incompatible combination of attitudes on the matter. Perhaps her knowledge isn’t fully accessible, and so her incompatible attitudes are excusable, maybe even rational, but nevertheless she possesses incompatible attitudes.\(^{27}\) Thus, interrogative attitude ascriptions reveal a pattern of normative and possibly descriptive incompatibility that supports the Ignorance Norm.

To confirm the linguistic evidence, Friedman looks to our assessments of agents whose behavior manifests interrogative attitudes but who at the same time know the answers to the relevant questions. For example, searching my backpack for my keys only to realize that I’ve

\(^{26}\) Friedman is not committed to a particular understanding of this inappropriateness or of the force of the “ought not” in the Ignorance Norm: “There is something epistemically inappropriate about having that sort of combination of attitudes. There is discussion to be had about just what sort of inappropriateness this is. For instance, do we want to use axiological normative concepts here or deontological ones? Is this a rational conflict? It is not my intention to adjudicate here.” See 2017, p. 310.

\(^{27}\) See 2017, p. 312-313 for Friedman’s discussion of a proposed weakening of the Ignorance Norm. It’s tempting to say that the combination of interrogative attitude and knowledge is problematic only if the knowledge is transparent or otherwise meets some criterion of accessibility. However, Friedman argues, it’s hard to point to the source of the inappropriateness of the awareness that one both knows and has an interrogative attitude if the underlying combination of attitudes is not itself inappropriate, at least in some sense. How, by simply becoming more aware of one’s attitudes, has one come to violate a norm one wasn’t previously in violation of?
been staring at them on my desk the whole time. In such cases, Friedman thinks not only that the search itself was a waste of time, but that there’s a sense in which I shouldn’t have been searching in the first place:

These are not epistemically happy cases. Once I recall that [my colleague] is on leave or where I’ve put my keys I don’t feel good about having wondered about each of the relevant questions — I realize that I was confused. Since I knew all along, I shouldn’t have been or didn’t need to be wondering.²⁸

Our self-assessments and our judgments about agents who manifest interrogative attitudes while knowing reveal the same pattern of incompatibility evidenced in the attitude ascriptions. Seeking, searching, and pondering are not things we want to be doing when we already know. Since having interrogative attitudes disposes us to these behaviors, this is a further reason for thinking that we ought not to have interrogative attitudes toward the subjects of our knowledge. Thus, our judgments about agents who have interrogative attitudes while knowing further support the Ignorance Norm.

Ignorance Norm in hand, the move to suspension as the most general interrogative attitude follows quickly.²⁹ If the patterns revealed in our linguistic usage and our judgments support the Ignorance Norm, what explains it is an epistemic conflict. The reason why having an interrogative attitude toward Q while knowing Q is inappropriate is because to have both attitudes is to hold conflicting epistemic stances toward the same subject matter at a time. It is important to key in on a claim Friedman is making here: Friedman claims that the incoherent state that is ascribed by concurrent interrogative attitude and knowledge ascriptions or that plagues investigations when the agent already knows is a doxastic one.³⁰ Agents described by

²⁸ Ibid., p. 310.

²⁹ See 2017, p. 308-314 for Friedman’s argument that suspension is the core interrogative attitude.

³⁰ See 2017, p. 311-312 for Friedman’s discussion of these sorts of states.
these ascriptions and cases are in a problematic doxastic state, again at least in some sense. It’s not merely that the knowing investigator is going practically wrong because she is wasting time or that the curious knower has an affective state that doesn’t seem possible given her knowledge. These things might be true, but what explains them is an underlying doxastic conflict.

Thus, the Ignorance Norm holds because an agent who has an interrogative attitude toward Q and knows Q at the same time is in a state of doxastic incoherence. Her interrogative attitude is normatively incompatible with her knowledge. For this to be the case, her interrogative attitude must be or entail a doxastic state that conflicts with knowledge. For example, an agent who knows that p and disbelieves that p at a time is in a state of doxastic incoherence because she has conflicting doxastic attitudes toward p. She is treating p as both true and false. Of course, this can’t be the kind of doxastic incoherence implicated by a case of being curious while knowing. An agent who is curious isn’t a disbeliever. Rather, the curious agent takes a neutral stance; she neither believes nor disbelieves. The kind of doxastic incoherence implicated when an agent both knows and has interrogative attitudes is that of being both neutral and decided about p at a time. And, on Friedman’s view, the knower with interrogative attitudes is not only in such a conflicted state with respect to a single proposition but with respect to a subject matter, with respect to a question. She is treating a question as both open and closed, as both settled and unsettled.

The agent with knowledge and interrogative attitudes then has a conflicting combination of attitudes on a question — one attitude manifests decision or closure; the other manifests neutrality or openness. The first attitude is of course her knowledge. The clear candidate for the second attitude, Friedman thinks, is suspension. Suspension is the neutral doxastic attitude. Thus, an agent who both knows and has interrogative attitudes is in a
normatively problematic state because she both knows $Q$ and suspends on $Q$. The neutral stance involved in having an interrogative attitude just is suspension of judgment. Therefore, if an agent has an interrogative attitude toward $Q$ then she’s suspended about $Q$.

We might lay this argument out as follows:

1. One ought not have an interrogative toward $Q$ at $t$ if one knows $Q$ at $t$. (Ignorance Norm)

2. If one ought not be in a state $X$ at $t$ if one knows $Q$ at $t$, this must be because $X$ entails or involves a doxastic state that conflicts with knowledge.

3. An interrogative attitude toward $Q$ entails or involves a doxastic state that conflicts with knowledge, namely a kind of doxastic openness or neutrality.

4. The doxastic neutrality involved in having an interrogative attitude must be suspension of judgment.

5. $\therefore$ If an agent has an interrogative attitude toward $Q$, then she is suspended about $Q$.

It is in this sense that Friedman takes suspension to be the core or most general interrogative attitude. If an agent has any interrogative attitude at all toward a subject matter, then she is suspended on that subject.

The claim that being in an inquiring state of mind entails suspension then follows from the fact that what it is to be in an inquiring state of mind with respect to a question is to have an interrogative attitude toward that question. I gestured at the argument for this claim in the previous section, but we can say a bit more.

Recall that, for Friedman, inquiring state of mind is really a functional role. To be in an inquiring state of mind is to be in a state in virtue of which one counts as inquiring, and this is so because states fulfilling this role push their possessors to resolve their questions. There were three features that marked the attitudes which fill this functional role on Friedman’s account: Inquiring states of mind are question-directed and goal-directed attitudes, and they
have epistemic satisfaction conditions. Thus, Friedman argues, the interrogative attitudes seem to be just the sort of states required here. Agents with interrogative attitudes are in goal-directed states that have epistemic satisfaction conditions and are question-directed; they have attitudes that push them to settle questions. So, to have an interrogative attitude toward Q is what it is to be in an inquiring state of mind with respect to that question. And therefore, the addition of one final premise takes us to the first direction of Friedman’s biconditional:

6. An agent in an inquiring state of mind with respect to Q has an interrogative attitude toward Q.

7. · · · If an agent is inquiring into Q, in the sense of being in an inquiring state of mind, then she is suspended about Q.

There is a sense in which the other direction of the biconditional follows trivially, if we accept, as Friedman does, not only that the other interrogative attitudes entail suspension but that suspension itself is an interrogative attitude. Notice that in this case, if an agent is suspended about Q then she has an interrogative attitude toward Q. Since what it is to be in an inquiring state of mind with respect to Q is to have an interrogative attitude toward Q, any agent who is suspended about Q is in an inquiring state of mind with respect to that question as well. Hence, if an agent is suspended about Q, then she’s inquiring into Q, in the sense of being in an inquiring state of mind with respect to Q. However, this is a bit quick. Friedman also offers the following considerations in favor of thinking that suspending entails inquiring:

1. Suspension becomes inappropriate just when further inquiry does, for example when a subject comes to recognize that her question has a false presupposition. The inappropriateness of suspension is explained by the inappropriateness of further inquiry if suspending entails inquiring.

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2. Suspension is a state that “pushes toward its own demise”. Suspending judgment is a way of moving from general ignorance to specified uncertainty. This sort of recognized uncertainty is experienced as aversive, and so we are motivated to resolve it. The way to resolve the uncertainty involved in suspension is to close the relevant question. So, any subject suspended about Q is motivated to close Q. Someone motivated to close Q is in a state with the functional role of inquiring state of mind and therefore is in inquiring state of mind.\textsuperscript{32}

3. Suspending about Q is a commitment to keeping Q open in thought, to putting off judgment. Anyone putting off judgment seems to be “aiming to judge” at some later point; anyone aiming to judge, even in the future, is plausibly in an inquiring state of mind.\textsuperscript{33}

That concludes Friedman’s account of the mental state of inquirers. Every genuine inquirer is in an inquiring state of mind with respect to the focal question of her inquiry. That inquiring state of mind consists in the agent’s interrogative attitude(s) toward her question. Having any interrogative attitude at all toward a question entails suspending on that question. Therefore, every genuine inquirer is suspended on the focal question of her inquiry. This conclusion yields the attractive story about the role of suspension in our intellectual lives: “We suspend judgment in order to get to the truth or to know . . .”\textsuperscript{34} We suspend judgment in order to inquire.

V Inquiry and the Interrogative Attitudes

I think, however, that Friedman is too quick to identify being in an inquiring state of mind with having an interrogative attitude. If being in an inquiring state of mind with respect to the relevant question is supposed to distinguish genuine inquirers into that question, it

\textsuperscript{32} I’m not sure we should accept this final claim. I discuss it in more detail in the next section.

\textsuperscript{33} I’m unsure how to understand this final consideration. The idea that suspension involves a commitment seems to introduce a new element to the characterization of suspension that might push it apart from the interrogative attitudes. Why should we think that being curious or wondering entails having an attitude that involves a commitment to neutrality or keeping a question open?

\textsuperscript{34} 2017, p. 321-322.
doesn’t look like interrogative attitudes can do the job adequately. There are inquirers who lack interrogative attitudes and interrogative attitude possessors who fail to inquire. Thus, when we explore the dynamics of inquiry, it becomes clear that any attitude, which has the functional role in inquiry that Friedman ascribes to inquiring state of mind, must be a distinct kind of state from the interrogative attitudes.

Two sorts of cases form the backbone of my case for this claim: (1) cases in which an agent has interrogative attitudes but is committed to resisting further inquiry, and (2) cases in which an agent has interrogative attitudes but isn’t pursuing the question. Examining these cases makes clear that possessing an interrogative attitude is not sufficient for inquiring, and so, that there are interrogative attitude possessors who fail to inquire.

Let’s look at some agents who fall into the first category: Consider a detective filing away a cold case. The case is unsolved. The detective has resigned herself to not knowing who pulled off the heist because she needs to turn her attention to other matters. This is not to say that the detective doesn’t still wonder about who committed the crime or isn’t still curious about how they got away undetected, but it would be wrong to call her an inquirer. Quite the contrary — We can imagine the bank manager calls the detective angrily asking why she has stopped investigating. And when the detective finds herself wondering following the phone call if there were any possible escape paths that she missed, she reminds herself that she can’t dwell on those thoughts. The case is closed, albeit unsatisfactorily.

Cases where an inquiry is closed but not resolved are common in intellectual pursuits as well. A mathematician has resigned herself to believing that a certain conjecture is unsolvable for contemporary mathematics. She may have arrived at this judgment because she’s tried every available strategy for solving the conjecture to no avail and can think of no other method to pursue. But whether the judgment has been made because inquiry has been
exhausted or from a combination of some unsuccessful inquiry and some reasoning about the state of the field, the mathematician believes that settling the conjecture must be left to a future generation of mathematicians. She’s committed to not investing any more intellectual energy into the matter, and absent a mathematical breakthrough, she won’t revisit the question. But, like the detective, she still catches herself wondering. If and when that breakthrough comes along, she will re-open her search for a proof.

Both the detective and the mathematician are no longer inquiring. Indeed, they have reasons to resist continued inquiry. But nevertheless, both agents have a continued interest in their respective questions. This interest manifests in their interrogative attitudes. While the detective and the mathematician have ended inquiry, they continue to wonder and have an information sensitivity that agents who have never considered the case or the conjecture lack. The detective will react to a new anonymous tip differently than a colleague who has never heard of the case, for example. In contrast, we sometimes react to frustrated inquiry by giving up the question as no longer worth pursuing. Consider a search for some small item around your house. When you can’t find it, you conclude you must have tossed it and replace the item. Here inquiry was frustrated, but shortly after, you lost interest in the question. You no longer wonder. The item has been replaced and the old one forgotten.

Thus, it looks like whether we have interrogative attitudes toward a question is independent of whether we are inquiring, at least on the backend of inquiry. We can close inquiry and continue to wonder about the relevant question, or we can close inquiry and reject the question as not worth further pursuing. This is one set of cases where the class of interrogative attitude possessors is distinct from the class of inquirers.

Next consider some cases that fall into the second category — cases where, rather than outliving a closed inquiry, interrogative attitudes never occasion inquiry to begin with. These
are cases we colloquially refer to as moments of “idle curiosity” or “mere curiosity”, although I want to be cautious with such terms here. Suppose you are hiking in the mountains and come upon a lookout. You gaze down into the valley below. There are trees as far as you can see. You wonder what all is down there. You might imagine the vegetation or paths along a creek bed. But you don’t pursue the matter any further; after a couple minutes, you continue down the trail. So you have interrogative attitudes toward the question ‘what is down there’, but like the detective and the mathematician, you don’t seem to be an inquirer. Again we can imagine that you get home and tell your partner about this beautiful view, and they respond to your description of the scene in a way that parallels the angry bank manager — “You mean you didn’t try to find a way down there to get a closer look? Surely there had to be another trail close by!” You were curious about the landscape, but you weren’t aiming to find out about it in the way that a genuine inquirer aims to figure out the answer to her question.

We can push even harder on this need for an aim if we consider a case that extends over time. An apartment dweller notices a dripping noise in his kitchen one day. He wonders about the source of the drip, but everything in the kitchen seems to be working and there are no obvious signs of damage. So he’s not interested enough to bring the drip to the attention of his landlord or to attempt to figure out the source of the noise himself. We can even imagine that this process repeats day after day. The apartment dweller hears the dripping noise in his kitchen again the next morning and again wonders about its source but again isn’t interested enough to do anything about it. He might even think to himself, “I bet it’s coming from under the sink.” But like your curiosity about the landscape, his wondering about the noise doesn’t
constitute aiming to answer the question. His interrogative attitudes haven’t prompted inquiry.

Thus, it seems there are two classes of agents who possess interrogative attitudes but aren’t inquiring — those who have closed unsuccessful inquiries but are still interested in the relevant questions and those who aren’t sufficiently interested to open inquiry in the first place. If this is right, then interrogative attitude possession isn’t what distinguishes genuine inquirers from these agents. Both inquirers and these non-inquirers have interrogative attitudes. These cases give us an initial push toward the conclusion that interrogative attitudes can’t play the role of inquiring state of mind, since part of the role of inquiring state of mind is to distinguish inquirers from non-inquirers. We might put the thought another way, if interrogative attitudes were the states in virtue of which an agent counts as inquiring into a question, as inquiring states of mind are, then the agents in the cases above would all count as inquiring. But they aren’t inquiring. So interrogative attitudes don’t seem to fulfill the role of inquiring state of mind after all.

In addition to this case-based evidence, I think some theoretical considerations push toward this conclusion as well. Friedman’s account of inquiring state of mind as interrogative attitude fails to make two key distinctions: First, there is a difference between a stance of doxastic openness toward a subject matter and treating that subject matter or question as live qua object of inquiry. Second, aiming to do something is not equivalent to being in a goal-directed state where that thing is the goal. I’ll take these distinctions in order.

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35 Thanks to Laura Pérez for this version of the dripping pipe case.
V.i Openness

Consider the cases where inquiry has been unsuccessful but nevertheless brought to a close. The agents in these cases take an open doxastic stance toward the questions driving their inquiries: The detective is uncommitted with regard to who pulled off the heist; the mathematician is undecided about whether the conjecture is true. But these agents do not treat their respective questions as live for inquiry. On the contrary, both agents are committed to not expending any additional cognitive resources on the respective matters. Thus, there seem to be two distinct things we might mean when we say that an agent treats a question as open. We might be making a claim about her doxastic attitudes toward the question, or we might be claiming that the agent is pursuing the question in inquiry.

It is worth bringing out that both of these notions of openness are suggested in Friedman’s account the mental state of inquirers, specifically in her discussion of suspension, even if they are never teased apart. Friedman cashes out the neutrality of suspension in two different ways or aspects: First, suspension is the agent’s attitude of doxastic openness. This is why suspension is normatively incompatible with knowledge. To be suspended about Q is to take the stance that that subject is unknown: “When we suspend judgment . . . we move ourselves from a state of mere ignorance, to one of explicit uncertainty—we bring some aspect of the unknown into view”.\(^\text{36}\) But this doxastic notion does not exhaust the openness Friedman thinks comes along with suspension. She also says we should cash out the neutrality of suspension in a second way as “an openness or even willingness to inquire further”.\(^\text{37}\) This seems to be an inquiry-related kind of openness rather than a doxastic one. One might be

\(^{36}\) 2017, p. 316.

\(^{37}\) Ibid., p. 307.
willing to inquire further even if one has a firm opinion on the matter, for instance, in order to resolve a disagreement.

So, on Friedman’s view, both kinds of openness go along with suspension. The subject who is suspended about Q can be said to be treating Q as open both as a description of her doxastic stance and because she treats the question as live for inquiry. In saying Friedman ascribes this second kind of openness to suspension, I do not intend any charge of circularity. This second component of suspension’s neutrality is supposed to be established by the argument in the previous section not part of the initial characterization of the attitude. However, as the unsuccessful inquiry cases make clear, it’s not obvious that we should take these two kinds of openness to be equivalent. Not all agents who have neutral doxastic stances are inquirers.

Likewise, though this is more controversial, not all inquirers take neutral doxastic stances. Suppose you ask me a question to which I know I know the answer, but after a few moments of trying to remember, I realize that reopening the question and refiguring the answer will be easier than retrieving it from memory. Here I’m treating the question as open in the second sense — as live for inquiry — but I’m not suspended. While my knowledge is inaccessible at this moment, the question is still, in the doxastic sense, closed for me."38

But in discussing suspension I’m getting a bit ahead of myself here. Whether we can maintain that both kinds of openness go along with suspension is the subject of the next section. The takeaway with regard to the interrogative attitudes generally is that these attitudes track only one of the notions of openness. Agents who have interrogative attitudes

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38 Other cases in which you might think an agent is inquiring, and so treating a question as open in the object of inquiry sense, despite having a decided doxastic view on the matter include group inquiries where conflicting beliefs are bracketed and cases of double checking where the agent brackets both the belief she has arrived at and the reasoning that led there in order to verify her conclusion by a different method.
are open in the doxastic sense; they have attitudes which conflict with knowledge.\textsuperscript{39} But they aren’t necessarily treating their questions as open in the inquiry sense. They may even be actively resisting further inquiry. In taking having an interrogative attitude to entail suspending and suspending to involve being open toward the relevant question in both of these senses, Friedman’s account elides this distinction.

Friedman does offer a response to the sort of unsuccessful inquiry cases my argument relies on. It is worth quoting at length:

\begin{quote}
Let’s say that an inquiry into Q is frustrated at t just in case the inquiring subject comes to think (or if one prefers: know) that it is unlikely that she will be able to answer Q at t or going forward for some reasonable amount of time. It seems clear enough that there are many cases in which suspension is appropriate even when inquiry is frustrated. What is less clear, I think, is that maintaining the sort of inquiring stance that I want to say comes along with suspending is not appropriate in these sorts of cases. It is not right that any case in which one thinks or even knows that an inquiry into Q is (even very badly) stalled in the relevant sorts of ways is a case in which Q should be dropped or abandoned rather than kept open in the relevant sense. In fact, I think that we should say that any case in which suspension is appropriate will also be one in which some sort of inquiring stance is just fine . . . Of course, in many of these cases, all sorts of actions designed to close the relevant open question may look inappropriate. Perhaps there will even be cases in which rational subjects take no further action aimed at closing or resolving those questions. But, and as we have already seen, it does not follow from the fact that certain courses of action designed to close a question look inappropriate in a case that keeping that question open in thought is inappropriate in that case.\textsuperscript{40}
\end{quote}

The key sentence to focus on here is that final one. I agree with Friedman that there’s nothing inappropriate about maintaining a stance of doxastic openness on a question after inquiry has stalled. This seems like the appropriate response to a (perceived) lack of evidence or

\textsuperscript{39} One might start to worry here that there is a sense in which at least some interrogative attitudes, for example wondering, don’t seem to be incompatible with believing. Suppose a theist begins to have doubts about whether god exists. When she first begins to question her belief, we might say she is still a believer and yet she wonders about whether god exists. I think Friedman’s response here would track her responses to the cases of inquiring while knowledge is inaccessible. It’s not that it is impossible to wonder about ‘whether p’ while believing \textit{p}, but this state is an epistemically unhappy one. This agent really does take both open and closed doxastic stances on the question of god’s existence at a time, and so there’s some sense in which by wondering and believing she has normatively incompatible attitudes, even if, all things considered it’s in the agent’s interests to tolerate this state for a time as she resolves her doubts.

While I don’t make any claims about the norms governing such states, my account of what’s going on in cases where an agent has interrogative attitudes that may lead her to reconsider one of her beliefs is the subject of Chapter 3.

\textsuperscript{40} 2017, p. 318.
unavailability of a strategy for resolving the question. The point of contention is whether the continued interest in a question that comes along with suspension, at least in cases like the detective's and the mathematician's, is enough to count as inquiring. Is the open stance these agents have toward their respective questions unified with the open stance of active inquirers in a way such that it's theoretically fruitful to treat the whole group of agents together, as Friedman's treatment of inquiring states of mind does?

Friedman thinks we get the required unity when we understand an inquirer's aiming in terms of a certain sort of information sensitivity:

[T]ypically [inquiring state of mind] will involve at least a sort of orientation towards or sensitivity to information that bears on the focal question, and perhaps some other related sorts of dispositions to come to know things that will help one close that question. A subject aiming to resolve a question is one aiming to get new information that will lead to this resolution, and as such she will be at least minimally sensitive to or oriented towards information that will bear on the question . . .

I take it Friedman's claim is that an agent in an inquiring state of mind with respect to a question is sensitive to information relevant to that matter in a way that a non-inquirer is not. Even if she's not investigating the heist any further, the detective will respond differently if a new witness comes forward than another officer who has never heard of the case. Likewise, consider the difference in your reactions when you overhear someone mention that they found an item you long ago forgot you had versus when the item is that thing you've been searching for unsuccessfully for days. It is this openness and receptivity to information relevant to settling the question that marks agents in inquiring states of mind, both active inquirers and those whose inquiries have stalled. Further, Friedman wants to claim, this information sensitivity is the right way to understand the second notion of openness that I laid out above. Treating a question as live for inquiry is not a matter of actively investigating but of

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41 Ibid., p. 308.
being sensitive to relevant information in the sense just outlined. If Friedman can make this move, then the two notions of openness both come along with the interrogative attitudes after all, and we get the required theoretical unity among agents in inquiring states of mind.

But I don't think she can. I don't want to deny that having interrogative attitudes shapes one's information sensitivities. Surely it does. However, it's not clear that we can specify a notion of information sensitivity that's distinctive of inquirers, one sufficient for counting as inquiring. Once we make the uniting feature of active inquirers and frustrated (post-)inquirers one of information sensitivity, we let too many other agents into the class of agents in inquiring states of mind as well.

Consider in this connection a conditioned information sensitivity. A crew member on a ship is sensitive to information relevant to the question 'when will we dock'. Suppose certain horn blasts signal proximity to a port. The crew member is sensitive to these blasts and responds by performing certain tasks. But this sensitivity doesn't mean that the crew member has been wondering when they'll dock. Perhaps she is caught up in some other task and the horn blasts catch her completely by surprise. Her sensitivity to this information is a matter of habit or conditioning rather than a result of being in inquiry. In contrast, a tourist on that same ship might be actively inquiring into the question. He's been asking fellow passengers when they are docking and searching his backpack for the schedule. Like the crew member, this tourist is sensitive to information relevant to the question 'when will we dock', and like the crew member, he responds to the horn blasts accordingly. However, unlike the crew member, the tourist's information sensitivity is a result of his being in inquiry.

In this pair of cases, information sensitivity alone doesn't do the work of distinguishing the inquirer from the non-inquirer. And in general, I don't think that the strategy of defining inquiring states of mind by specifying a notion of information sensitivity sufficient for being in
inquiry will be successful for the reason these cases bring out: For a broad range of the questions we might inquire into, we can come up with cases where an agent is sensitive to information relevant to resolving those questions but isn’t inquiring. I conclude then that appealing to information sensitivity isn’t going to bridge the divide between the openness that marks inquirers and the interrogative attitudes. The distinction between treating a question as open in a doxastic sense and in the sense of being in inquiry with respect to it drives a wedge between inquiry and the interrogative attitudes.

V.ii Aiming

As for the second distinction, consider the cases in which agents lack sufficient motivation to initiate inquiry. These agents are in goal-directed states. They are curious and wonder, but they are not aiming to resolve their focal questions, which was what distinguished genuine inquirers. It seems reasonable, as suggested in the hiking case, for someone to demand an explanation from such agents of why they failed to inquire into the relevant matter. Thus, we ought to distinguish between an agent’s being in a goal-directed state with goal X and her aiming to achieve or pursuing X.

The divide between being in a goal-directed state and aiming at what meets that state’s satisfaction condition(s) seems to follow from the nature of such states. Consider again the non-inquiry example — hunger. An agent who is hungry is in a goal-directed state, a state that has satisfaction conditions, a state that has the functional role of motivating the agent to secure the thing that meets its satisfaction conditions, namely food, or better, the bodily state that

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42 Friedman’s account does leave room for what she calls “a pre-inquiry stage of question evaluation”. She doesn’t want to deny that we can reflect on a question without opening inquiry into it. However, she is careful to insist that this pre-inquiry phase is also a pre-suspension phase. So the subjects described in my cases wouldn’t count as pre-inquiry on Friedman’s view. They have interrogative attitudes and so are suspended on their respective questions. See 2017, p. 313-314 for Friedman’s discussion of the pre-inquiry phase.
results from eating, fullness. But an agent’s being hungry does not entail that she herself is aiming to secure food. Perhaps she’s focused on a project and is ignoring the fact that she’s hungry. So it seems we shouldn’t treat being in a goal-directed state and aiming at what meets that state’s satisfaction conditions as equivalent in general.

However, Friedman seems to suggest that we should do so when it comes to the interrogative attitudes. When fleshing out the biconditional that links suspension and inquiry, Friedman says that the claim can be understood as the claim that “any case in which one is suspended about Q is a case in which one is in an inquiring state of mind with respect to Q (or rather a case . . . in which one has an attitude toward Q with the relevant sorts of epistemic satisfaction conditions, or in which one aims to close Q).”\(^{43}\) The implication here is that aiming to settle a question just is a matter of being in state with the relevant satisfaction conditions. But as the cases where having interrogative attitudes fails to occasion inquiry show, it isn’t clear that we should link these two things so closely together. As between the two ways of treating a question as open, we need a distinction between agent aims and what satisfies goal-directed states. Agents who wonder or are curious but lack sufficient motivation to open inquiry into their focal questions are in states with the relevant satisfaction conditions but are not aiming at what would fulfill those conditions. They are literally merely curious.

This distinction has implications for how we understand inquiring states of mind. On the one hand, Friedman’s explicit criteria for states filling the role put inquiring states of mind in the goal-directed state category. But despite this, I think the idea that inquiring states of mind are really states that involve aiming and not mere goal-directedness is driving Friedman’s initial characterization of the role. There Friedman distinguished inquirers and non-inquirers

\(^{43}\) 2017, p. 308.
by their aims. Inquirers are aiming to settle their questions. It is in virtue of this aim that agents count as inquiring into their questions and that the actions they take count as part of their inquiries. Recall Friedman's point that simply picking up items from a crime scene doesn't make an inquiry. Picking up those items is part of an inquiry only when it is done with the aim of figuring out who committed the crime. Inquiring states of mind were supposed to be action-guiding.

It's hard to understand how inquiring states of mind could play this action-guiding role if they are merely states with satisfaction conditions. The inquirer doesn't just wish or desire or have some motivation to resolve her question. She's aiming to resolve it in the sense of intending or trying to bring it about; she's made a kind of commitment to settling the question. This doesn't mean that she's actively gathering evidence at every moment in her inquiry, but there's some sense in which the question is a goal of hers and not merely a wish. Only when the aiming involved in being in an inquiring state of mind is understood this way, I think, does being in an inquiring state of mind distinguish all and only inquirers; only when understood this way, can it be the case that an agent counts as inquiring in virtue of being in an inquiring state of mind.

Let me flesh out that last point by way of some recap: I've argued that there's a tension in Friedman's account of inquiring states of mind. On the one hand, she wants to identify being in an inquiring state of mind with having an interrogative attitude. On this way of going, being in an inquiring state of mind is a matter of having a question-directed, goal-directed attitude. Question- and goal-directed attitudes get us some way toward inquiry. They explain how inquirers are in cognitive contact with the questions that drive inquiries. They also can

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44 My own view is that this commitment to a question is what makes it the case that an agent in inquiring into that question. I present my positive account of the sufficient conditions for being in inquiry in Chapter 2.
motivate their possessors to resolve the relevant questions. However, and this is the other hand here, Friedman wants inquiring states of mind to do more. The functional role of inquiring state of mind is to be the state in virtue of which an agent counts as inquiring into a question and the aim in virtue of which her actions toward that end are unified as an inquiry. Goal-directed states alone are not capable of this for the reasons just discussed. There’s no entailment between being in a goal-directed state and aiming at the goal identified by that state. And we see this clearly in the case of the interrogative attitudes in particular when we recognize that both inquirers and non-inquirers have interrogative attitudes.

In the previous section, I explored the possibility that this divide could be bridged by articulating a notion of information sensitivity that distinguishes inquirers. Such a notion of information sensitivity could provide an account of aiming to settle a question that would distinguish inquirers from non-inquirers that also plausibly is an aim an agent would have just in virtue of having interrogative attitudes, for surely these attitudes do shape our information sensitivities. Perhaps, for this reason, the interrogative attitudes could be unique among goal-directed states in entailing a type of aiming. But as I argued above, the prospects for such a synthesis are slim.

Thus, there’s a choice point here with regard to inquiring states of mind, one that puts pressure on Friedman’s picture of the state of mind of inquirers. The first option is to maintain with Friedman that what it is to be in an inquiring state of mind with regard to a question is to have an interrogative attitude toward it. But it’s not clear what theoretical work inquiring states of mind would be doing on this account. They would seem to collapse into the interrogative attitudes. While the term ‘inquiring state of mind’ might flag that these sorts of attitudes are typical of inquirers and can and often do motivate us to inquire, on this account, the term would no longer refer to the state in virtue of which agents count as being in inquiry. The class
of agents in inquiring states of mind on such a view is broad and diverse, including everyone with interrogative attitudes — the merely curious, paradigm inquirers like the actively investigating detective, committed agnostics, and others.

The second option, of course, is to deny that what it is to be in an inquiring state of mind is to have an interrogative attitude. To go this route is to insist that inquiring state of mind is the state in virtue of which an agent counts as inquiring, and so, only genuine inquirers are in inquiring states of mind, but to conclude, based on the distinctions above, that the interrogative attitudes don't fit the bill. The task then would be to find a different sort of state which does. It should come as no surprise that this is the route I think we ought to take. We should reject what I've called the second claim of Friedman's biconditional — that what it is to be in an inquiring state of mind is to have an interrogative attitude. Friedman's great insight is that there is a state of mind which distinguishes inquirers, a state in virtue of which one is in inquiry, but the cases and distinctions in this section together make a compelling case that we need to look elsewhere than the interrogative attitudes to complete the account of which attitude(s) play(s) this role. While possessing interrogative attitudes is a way of being sensitive to a question, not every agent with interrogative attitudes is an inquirer.

That completes my central task here, my critical argument. In the next section, I return at last to suspension and conclude with a brief look at the implications of this conclusion for the prospects for question-directed suspension.

VI Upshots for Suspension

If we take the second option at the choice point above regarding inquiring state of mind — that is, if we deny that what it is to be in an inquiring state of mind is to have an interrogative attitude — we're left with a parallel choice for suspension. Recall that, according
to Friedman, suspension is a genuine attitude not reducible to beliefs or credences and distinct from mere lack of belief. On Friedman's account, we get a richer account of what kind of attitude suspension is when we see that it is at the core of the class of interrogative attitudes. Thus, suspension too is a question- and goal-directed state with the motivational profile that comes along with such states. In addition, Friedman's account tells a compelling story about the role of suspension in our intellectual lives, since suspending judgment on a question makes it the case that we are in an inquiring state of mind with respect to that question. In sum, on Friedman's account, we get both a rich understanding of what kind of attitude suspension is and a story about its role that bolsters suspension's theoretical importance for epistemology.

The problem, of course, is that it looks like we can't maintain both of these attractions. If we deny the link between inquiring state of mind and the interrogative attitudes, Friedman's suspension-inquiry biconditional no longer holds. This raises two questions: One, should we accept with Friedman that suspension is question-directed rather than opting for a belief or credal account, even if question-directed suspension can't get us to inquiry? Two, if we answer the first question in the affirmative, what are the options for modifying the account of question-directed suspension to accommodate the divide between the interrogative attitudes and inquiring states of mind?

While I won't adjudicate the first question here, I think the following considerations tell in favor of an account of suspension as question-directed independent of suspension's role in inquiry. First, understanding suspension as question-directed allows us to treat an agent's stance on the subject matter on which she is suspended as a single, unified attitude rather than a collection of propositional attitudes. Second, Friedman's arguments that the interrogative attitudes generally and suspension in particular have question contents hold independent of
any considerations about inquiry. As discussed in Section II, Friedman makes a compelling case that no propositional account of the content of suspension can accommodate the full range of agents we think of as suspended.45

With regard to the options for modifying the account of question-directed suspension, here is where the choice parallel to that facing inquiring state of mind comes in. If we maintain with Friedman that suspension is question-directed but deny that what it is to be in an inquiring state of mind is to have an interrogative attitude, we must either maintain that suspension is the core interrogative attitude and so give up the story about suspension’s role in inquiry, or deny that suspension is the most general interrogative attitude and search for an account of suspension on which when one suspends judgment, one is in fact in an inquiring state of mind. In contrast to inquiring state of mind, for suspension the obvious choice seems to be the first option.

So, what does the account look like if we pursue that first option? Such an account would begin by maintaining that suspension is the core interrogative attitude, that is, that any agent with an interrogative attitude toward Q is suspended about Q. Thus, we could continue to rely on Friedman’s arguments that the interrogative attitudes are question-directed to make the case that suspension is question-directed as well. The account would also maintain the rich account of the sort of attitude suspension is — a goal-directed state with epistemic satisfaction conditions and the corresponding functional profile — since suspension inherits these features from the other interrogative attitudes. But because having an interrogative attitude is not sufficient for being in an inquiring state of mind, neither is suspension on this

45 David Thorstad has pointed out that understanding suspension as question-directed not only accommodates the range of suspended agents but also confers the further advantage that we can say that agents of different levels of cognitive sophistication or at different points in history are/were suspended on the same subject matter, even if they have/had very different ways of conceptualizing possible answers to the relevant question.
view. The major project for such an account would be to tell a more complex story about the relation between suspension and inquiry, a story that would likely have to apply to the interrogative attitudes as well. But that’s no objection to the account. There’s simply a clean break in the view between goal-directed states, suspension and interrogative attitudes, on the one hand and the aim of inquirers, inquiring state of mind, on the other.

While maintaining that suspension is the core interrogative attitude surely yields the neatest story about what kind of attitude suspension is and when agents are suspended, I don’t think it’s the only option here. Instead, we might try to provide an account of suspension on which suspending about \( Q \) is a way of being in an inquiring state of mind with respect to \( Q \). On this way of going, suspension would no longer be entailed by the other interrogative attitudes, since those attitudes don’t take an agent all the way to being in inquiry. Thus, on such an account, suspension would be a more demanding kind of attitude than the interrogative attitudes. And the major project would be to provide an account of what sort of attitude suspension is, since suspension would no longer inherit the features of the interrogative attitudes.

Another way to understand this option is to think of it as unpacking something Friedman said in defense of the claim that suspending entails inquiring. There Friedman suggested that to suspend judgment about \( Q \) is to commit to keeping \( Q \) open in thought, to commit to putting off judgment on the matter. The idea that suspension involves a commitment like this seems to introduce the required element that would make suspension more demanding than having an interrogative attitude.\(^4\) Simply wondering or being curious

\(^4\) If the thought that suspension is more demanding than other interrogative attitudes strikes you as unintuitive, consider the following: First, it’s tempting to think of suspending judgment as voluntary in a way that being curious or wondering is not. We describe what agents do in order to engage in discussions or activities they would otherwise resist as suspending judgment or suspending disbelief; we don’t describe people as deciding to be curious. Second, our suspension ascriptions also suggest that suspending requires a greater level of cognitive sophistication than many interrogative attitudes. Very young children are curious, but it would be strange to
doesn’t seem to involve any such commitment. But if suspension does, this might provide the bridge needed to make it the case that suspending involves the kind of aiming required for being in an inquiring state of mind.

However, cases of committed agnosticism loom large for this kind of account. The mathematician who believes that settling the conjecture is beyond the reach of contemporary mathematics and the detective filing away the cold case both seem to be the kind of agents we would want to count as suspended on their respective questions. Indeed, one might think they are exemplars of the class of suspended agents. They neither believe nor disbelieve the relevant propositions, and they have thoroughly considered the matter and believe the evidence to be lacking. Thus, you might think that an account of suspension on which suspending entails being in inquiry can’t possibly be right because it inaccurately characterizes committed agnostics as not suspended. At the very least, this second sort of account faces an explanatory burden — what’s going on in cases of committed agnosticism — that a suspension as core interrogative attitude account does not face.47

Conclusion

I began with the thought that Friedman’s account of suspension as a question-directed attitude has many appealing features. On her account, we get a nice explanation of why suspension is not reducible to the other doxastic attitudes — it has interrogative rather than

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47 Thorstad and I take this route and defend an account of suspension on which suspending is a way of being in an inquiring state of mind. See Davidson and Thorstad manuscript. However, consideration of cases where suspending looks like a way of closing or settling inquiry push us to a mild pluralist view of suspension. There is a species of inquiring suspension which is a way of being in an inquiring state of mind, but there is also a species of settling suspension where suspension closes inquiry. Indeed, the latter notion is the primary one. For only when suspension is a settling attitude does it have the same profile as the other full doxastic states, at least on the view of those states that we endorse. See Chapter 3 for more on this picture of the doxastic attitudes.
propositional content — and, in contrast to belief accounts of suspension, how it is that
inquirers of different levels of sophistication can be said to suspend about the same subject
matter. In addition, on Friedman's account, there's an attractive story about the role of
suspension in our intellectual lives: We suspend judgment in order to open inquiry.

My argument, however, exposed a tension in Friedman's view. Friedman's argument for
the role of suspension in inquiry turned on the defensibility of two claims: (1) Suspension is
the core interrogative attitude. (2) What it is to be in an inquiring state of mind with respect to
a question Q is to have an interrogative attitude toward Q. A dive into the dynamics of inquiry,
however, showed that the second of these claims is problematic. Either inquiring state of mind
collapses back into the interrogative attitudes, and so, isn't really sufficient for being in inquiry,
or having an interrogative attitude alone isn't sufficient for being in an inquiring state of mind.
I further suggested that we should take the second fork at this choice point. Friedman's
key insight is that there is an inquiring state of mind that distinguishes inquirers; there is a
state of mind sufficient for being in inquiry into a question. We just need to look elsewhere
than the interrogative attitudes for the state(s) that fill this role.

Taking this latter path then yielded a similar choice-point for suspension, each fork of
which unfortunately forces us to give up one of the appealing features of Friedman's account of
suspension: We must either maintain that suspension is the core interrogative attitude, and so,
modify the story about the role of suspension in inquiry and in our intellectual lives. Or we
look for an account of suspension that makes it the case that suspending is sufficient for being
in an inquiring state of mind. Such an account must deny that suspension is the core
interrogative attitude and therefore give up the traction we get on what sort of attitude
suspension is by so identifying it. In the final section of the paper, I sketched both of these
ways of going and suggested next steps for each route.
The result, when we take into account the choice points both for inquiring state of mind and for suspension, is an unfolding of the landscape of the state of mind of inquirers. And while the main force of my argument is critical, the view from here is positive: Once we accept that inquiring states of mind and the interrogative attitudes come apart, both of the available routes with regard to suspension promise plausible accounts of questioning states, whether those questions are open pre, post, or during inquiry. While neither will maintain all of the features of Friedman's account, both routes allow for finer distinctions between the various classes of agents with question-directed attitudes — the curious, the actively inquiring, the resigned agnostic. Given the diversity of questioners, this seems fitting and potentially theoretically fruitful. Having an interrogative attitude toward a question is one way of coming into cognitive contact with that question, but it is not the only one. Suspension can start us on the path toward inquiry, but it may not take us the whole way there.
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Committing to Inquiry

Inquiry means living in the soup. Inquiry means living in that uncomfortable space where we don’t know the answer.¹

Inquiry is central to our lives as epistemic agents. It’s an activity whereby we not only satisfy our indulgent curiosities but whereby we settle pressing questions and issues. More importantly, one of the central ways in which we actively maintain and modify our beliefs is by inquiring. Since inquiry plays this important role in epistemic change, an account of inquiry has potential implications for how we think about epistemic responsibility. Even if believing is itself non-voluntary, perhaps there are times when we have obligations to open or refrain from opening inquiries into the subject matters of certain of our beliefs.

This paper contributes to that larger project of accounting for inquiry by answering a key question about the activity that is inquiry: What happens when an agent initiates an inquiry into a subject matter? In the terms of the argument, what are the sufficient conditions for an agent’s being in inquiry with respect to a question Q? I’ll argue that at the heart of inquiry is a commitment, a commitment to settle the inquiry’s focal question. This commitment takes the form of an intention, and only when an agent has such an intention to settle is she in inquiry. The argument of the paper will focus on showing that such an intention is required and on examining just what inquiring agents commit to when they commit to settle questions.

I begin in Section I with a preliminary argument for thinking that we should look only to the mental state of inquirers for the sufficient conditions on being in inquiry. Why not think an action could initiate inquiry? Section II then characterizes inquiry, distilling the activity’s essential features by comparison with cases of learning and question-answering that are not

inquiry. Based on the essential features of the activity, Section III identifies four desiderata that an account of sufficient conditions for being in inquiry ought to meet, and Section IV presents two proposals from the literature, arguing that they fail to meet the desiderata. In Section V, I present my positive proposal and in Section VI, I flesh it out through a series of questions and replies. Finally, in Section VII I conclude by considering some implications of the proposed account for closing inquiry. My claim that a commitment to a question is what opens inquiry has implications for the kinds of states we should think of as settling inquiry.

I Inquiring Minds

Let me begin then with a preliminary argument for thinking we should look to the mental state of inquirers for the sufficient conditions on being in inquiry. That argument begins with the observation that, for any action which is part of an inquiry, it is possible to perform the action and not be genuinely inquiring. Consider a classic inquiry — a detective investigating a bank heist. Now consider the contrast between a real detective investigating such a heist and an actor playing the investigating detective in a movie. The detective is a genuine inquirer while the actor is at best pseudo-inquiring, and probably not inquiring at all. What is the difference between the two agents?

It is not any physical action that the two undertake. Both the detective and the actor collect evidence; both the detective and the actor jot down notes in their notebooks; both interview witnesses. Of course, you might object that the actor isn’t really interviewing witnesses or collecting evidence. The “evidence” and “witnesses” are props and other actors respectively. We might bolster the point then by imagining an actor not on set but who has just been contracted to play a detective in an upcoming film. This actor might shadow the detective

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2 Much of the content of this argument is due to Jane Friedman. See 2017, p. 307-308.
during her workday in order to make his portrayal as authentic as possible. We might even imagine that he mimics the detective's actions. Here the actor is not just collecting the same items as the detective but intentionally trying to make his actions match the detective's as closely as he can. An observer shown only clips of the detective and the actor performing various actions throughout the day would not be able to tell which of the two was the genuine inquirer. Still, this actor — if we imagine that he keeps focused on preparing for his role and doesn't allow himself to get too interested in the crime — is no more a genuine inquirer than our actor on set.

This last thought about the actor staying focused on his role points to what distinguishes the actors from the real detective. Their respective aims are different. The detective is aiming to solve the crime. She is aiming to answer certain questions: Who is/are the perpetrator(s)? How did they pull off the heist? Which evidence is solid enough to pass on to the prosecutor? It is in virtue of this aim that the detective's actions count as part of an inquiry. The actors, on the other hand, have no such aim. They are aiming to perform well or to be well prepared to play a role, but their actions are not guided by the right sort of aim to count as part of an inquiry.

The lesson here is this: To count as part of an inquiry, an agent's actions must be directed or occasioned by an aim of the right sort — the aim of figuring something out, of solving a problem, of answering a question or questions. Thus, what distinguishes the genuine inquirer from the non-inquirer and the pseudo-inquirer is not her actions but her state of mind. This is a preliminary reason for thinking that we should look to the mental state of inquirers as the locus of the account of sufficient conditions for being in inquiry.

It should be clear that these sorts of considerations apply broadly to many activities we engage in. Swinging a bat alone doesn't make it the case that I am playing baseball; measuring
flour and sugar doesn't make it the case that I am baking a cake. Something about my aims is essential to initiating a goal-directed activity. However, for inquiry specifically, you might wonder if the same sorts of considerations apply to mental acts. While it's clear that no physical action alone is sufficient for inquiring, might there be some mental acts like asking a question to oneself or making an inference that could distinguish inquirers from non-inquirers?

Here again the answer seems to be no. It's not hard to generate cases in which two individuals make the same inference, only one of whom is inquiring. Consider one last time the case of the tourist and crew member on a cruise ship. The crew member hears the ship's horn and infers that they will be docking soon. But she hasn't been wondering about when they'll dock; she's focused on some other task. The tourist, on the other hand, has been trying to figure it out for the past hour. He's been standing at the rail looking for land and asking his companions if they know the schedule. When this tourist hears the ship's horn, he too infers that they'll be docking soon. But in his case, this inference resolves his inquiry. As with detective and the actor, the crew member and the tourist seem to perform (tokens of) the same act but only one is an inquirer.³ I leave it to the reader to generate examples for other candidate mental acts, but again the lesson is that aims, not acts are the key distinguisher between inquirers and non-inquirers. And again, the suggestion is that being in inquiry is a matter of being in the requisite state of mind.

³This talk of inference as a mental act runs roughshod over the debate about whether inference is rightly understood as an action, as something agents do, or rather as a sub-personal sort of mental transition. My own view is that inference is the latter. Thus, the account of when an inference is part of an inquiry might end up being somewhat different than the account of how an intentional action like evidence gathering connects up in the right way with the aims of the inquirer. And so, you might think that inference is ruled out as a sufficient condition for inquiry on grounds independent of those brought out in the cruise ship example. For more on the debate about what inference is see Boghosian 2014, Broome 2013 especially ch. 13, 2014a, 2014b, Hlboibl 2014, and Wright 2014.
II Inquiry

Before looking at any proposed accounts of the mental state of inquirers, we’ll need to get clear on exactly what sort of activity inquiry is. In this section, I’ll canvas a number of examples of question-answering and learning activities both that count and fail to count as inquiry to distill the essential features of the activity. Let’s begin with some paradigm cases of inquiry:

The first paradigm case is the detective investigating the heist from the previous section. As we said, the detective is aiming to solve the crime. She’s trying to answer questions: Who are the possible suspects? Which of those is/are the perpetrator(s)? How did they pull off the heist? And she’s answering these questions by gathering evidence, formulating hypotheses, making inferences, and so on. The detective’s inquiry is an active process; the detective is out there investigating, but this need not be the case. The second paradigm case is one of intellectual inquiry — a philosophy student studying personal identity. Here it might be easiest to imagine an undergraduate first encountering the question of what constitutes identity over time. Like the detective, this undergraduate is aiming to figure something out and trying to answer questions: What constitutes identity over time? Which of the classic views is most plausible? And she too answers these questions by gathering evidence, making inferences, tracing out implications, and so on, although the evidence takes a different form than that the detective gathers.

Finally, it will be useful to have an example of less sophisticated inquiry among the paradigm cases — a fourth grader conducting a science experiment. The fourth grader is trying to determine which features of a toy sailboat will increase the speed with which it
moves through the water.\textsuperscript{4} Here, while inquiry is less sophisticated both because of the types of questions the child asks and because the answers to these questions are known in advance by the teacher, the fourth grader is nonetheless inquiring. She is answering questions by gathering and analyzing evidence.

From these paradigm cases, several candidate features of inquiry already suggest themselves. First, inquiry is question-driven.\textsuperscript{5} It is aimed at answering questions or solving problems. Second, inquiry is a diachronic activity; it is an activity we engage in \textit{qua} agents. We have control, in at least some sense, over what we inquire into and how. Third, inquiry involves evidence. Inquiry processes are processes of gathering and analyzing evidence. I think these features are a good first pass characterization of inquiry, but we can refine and add to them by contrasting these paradigm cases with other learning activities that fail to count as inquiry.

I. Inquiry has a Target

The first thing to note is that not all learning is inquiry. This might be obvious in cases where learning consists of rote memorization — Memorizing your multiplication tables isn't inquiry. — but it's also true in cases where the learning goal is too general to unify the learner's activity as an inquiry. Consider, for instance, an undergraduate student with an interest in economics. This student decides she wants to learn more about the subject, so she attends the introductory lecture of Econ 101. The student is learning, and she is doing so intentionally. She is trying to learn about economics. But she's not inquiring. She's collecting information, but

\textsuperscript{4} This example is borrowed from Deanna Kuhn's \textit{Education for Thinking}, where it is part of a curriculum for training elementary students in inquiry skills. See 2005 ch. 5, especially p. 91-97.

\textsuperscript{5} I use the term 'question-driven' here to distinguish it from Friedman's term 'question-directed' which has a technical meaning when applied to attitudes. Since an attitude is question-directed when it has a question as content, activities that are focused around questions can’t be question-directed in the same way. Activities don’t have contents in that sense. See Chapter 1, p. 17-19 for more on this distinction.
she’s not using that information to answer specific questions or to solve a problem. Of course, if she enrolls in the course, the student may soon be engaged in inquiries in economics. The claim, however, is that at the time that she attends that first lecture, the student is learning but not inquiring. She lacks the unifying problem or aim that is necessary for inquiry.

Similar considerations apply to cases where I pick up a book or skim through a Wikipedia article just because a topic seems interesting and I want to learn more. Also, in this category of learning that lacks an inquiry goal are cases of pure information gathering. This might include collecting survey data that goes unanalyzed or cases where the information gatherer is merely a conduit. I ask my research assistant to bring me some figures. I may well be in the midst of an inquiry and use those figures as evidence, but if my research assistant simply brings me the numbers and doesn't give the matter another thought, she herself is not inquiring.

These general learning and information gathering cases make the case that the first candidate feature above is indeed an essential feature of inquiry. Inquiry is question-driven. In the words of Dewey, “The problem fixes the end of thought and the end controls the process of thinking”. “Problem” for Dewey and “question” for me are intended in the broad sense that includes the detective’s, the undergraduate philosopher’s, and the fourth grader’s inquiry goals. And it is notable that the questions that drive inquiry are diverse. Some are binary questions: Is this hypothesis correct? Many call for distinguishing a unique true answer from a set of possibilities: Who is the perpetrator? But still others ask what the possibilities are in the first place: Who are the possible suspects? Whatever it’s form, a question is essential to unifying and directing inquiry activity. From the start, there must be something identifiable that the inquirer is trying to understand or figure out, even if exactly what that something is is

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refined as the inquiry proceeds. Before we can aim at its solution, we first have to recognize the problem itself.

I.i Inquiry Involves Agency

Next, inquiry requires agency. Not every process by which an agent comes to have an answer to a question counts as inquiry. To see that this is so, consider a case in which an agent answers her question by taking a pill that causes her to believe one of the question’s possible answers. Whether taking the pill is what the agent ought to do in this situation is not relevant to the judgment of whether taking the pill constitutes an inquiry. In fact, we can imagine that the pill causes the agent to believe the question’s true answer, and the agent knows this. Even in these circumstances, the agent does not inquire into the question by taking the pill. She brings about a state of affairs in which she knows the question’s true answer, but she does not inquire.

Thus, inquiry requires that we don’t bypass our own agency en route to bringing about a state of affairs in which we believe or know the answer. The pill case is fanciful, but we can also bypass our own agency in this sense by tasking someone else to perform the inquiry. Rather than merely asking my research assistant to bring me some figures, I might ask her to solve a problem for me and report back with the solution. Here, when I accept the solution the assistant presents me, I have an answer to my question but I myself have not inquired. The research assistant was the agent of the inquiry.

The corollary to requiring that we don’t bypass our own agency is that inquiry is a diachronic activity. It is an activity we engage in qua agents; it is not merely something that happens to us. The detective is out there surveying the crime scene and interviewing witnesses. The philosophy student is reading and tracing out implications of various views.
The fourth-grader is building and testing many versions of her sailboat. Of course, some of the processes involved in an inquiry may be sub-personal. Some reasoning likely occurs at this low level. But the claim here is simply that the activity as a whole is something that we do at the agent level. Inquiry is an activity like baking a cake or riding a bike. While we can let our minds wander for awhile while riding or walk away from the kitchen for a time while the cake is in the oven, these activities won't go well if we don't give them our conscious attention. Inquiry is like this too. It requires our conscious attention and effort, at least some of the time.

Because inquiry is such an activity, we can exercise direct control over whether we inquire in typical cases. Whether the fourth grader conducts the experiment with boats or refuses to participate in the activity is up to her, even if the consequences of the latter choice are not. Whether the philosophy student reflects on her reading outside of class is up to her. Even for the detective who has been assigned the case, there is a sense in which inquiry is voluntary. She could refuse to do her job. This is not to say that it’s never the case that an agent feels compelled to inquire. Perhaps the detective does feel so compelled, since she needs to keep her job, and often there are questions we just can’t get out of our heads. Likewise, it is also not to claim that every inquiry begins with an explicit, conscious decision to inquire into a question. Sometimes we are just startled by an unexpected noise and jump up to figure out what caused it. The claim is rather that, if we take the time to reflect on whether we want to be inquiring into a matter, we can typically exercise control over whether we start, continue, or stop inquiring.

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7 The leading conception of the mental processes involved in human reasoning and inference is mental model theory. A good starting place is Johnson-Laird 2010.

8 Consider in this connection Dewey: “Active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it, and the further conclusions to which it tends, constitutes reflective thought... once begun, it is a conscious and voluntary effort to establish belief upon a firm basis of reasons” (1997, p. 6, bold mine) What Dewey calls the process of “reflective thought” corresponds closely to what I have in mind as inquiry; Dewey reserves ‘inquiry’ for the information gathering phase of reflective thought.
In sum, the second essential feature of inquiry is agency. Inquiry is a diachronic activity that we engage in and over which we have direct control in typical cases. To count as an inquiry, the process by which the focal question is answered must be one that the agent engages in, not merely a process she sets in motion that brings about a state of affairs in which she knows the answer to her question. We can say more about what this required engagement comes to by looking at the next set of cases that fail to be inquiry — cases that don't involve evidence.

I.iii Inquiry Requires Evidence

Even among activities in which an agent settles a question, many are not inquiry. In some cases, this is because the process fails to bring evidence to bear on the question. What exactly counts as evidence is an issue that I won't deal with here. The criteria will depend in part on the subject of the inquiry and the sophistication of the inquirer, and one way an inquirer can go wrong and end up inquiring badly is by misjudging evidence or taking information to be evidence that bears on her question when it really bears no such relation. What matters for the judgment that an activity counts as inquiry, as opposed to as good inquiry or bad inquiry, is whether the agent attempts to gather and assess evidence that bears on her question.

To see that this is so, consider a case where an agent answers her question by a random procedure. Suppose the detective in our paradigm case, instead of collecting evidence at the crime scene, simply made a list of all known robbers in the state, assigned them numbers, and drew one out of hat. This sounds absurd. But the reason it sounds so absurd is that the detective is accountable for engaging in a genuine inquiry into the heist, and drawing a number fails to constitute inquiry. There may be other reasons why it fails, but a central one is
because the detective uses no evidence to settle the question. She can give no reason that distinguishes the answer she arrives at from the other possibilities. The detective’s question-answering process fails to count as inquiry because inquiry is an activity of bringing evidence to bear on the relevant question.

We can say even more here. Saying that inquiry is an activity of bringing evidence to bear is not the same as saying inquiry requires evidence gathering. The agent must also evaluate or apply purported evidence to the question. Again, I don't want to get too far into the weeds of what counts as applying evidence, but a pair of cases will help bring out the point: A town is considering a proposal to convert an undeveloped area into a new retail center. The town wants to know what residents think of the proposal. Several town representatives conduct a survey to find out. In the first case, the representatives simply take the survey and compile all the answers they receive into a spreadsheet. In the second case, the representatives also analyze the results. They discard several responses that appear to be jokes; they synthesize the remaining responses and present the conclusions in a few bullet points. Only in the latter case, I think, did the representatives conduct an inquiry into what residents think of the proposal. The former case, even though it involved a specific question and data collection, fails to be inquiry because nothing is done with the data. The representative merely gathered information. Bringing evidence to bear requires that the inquirer use the data in some way to support her conclusions.

I suspect intuitions will diverge on this case. Perhaps, the spreadsheet compilers conducted a poor inquiry rather than no inquiry at all. After all, they did end up with beliefs about what the residents think of the proposal that are based on the responses given by residents. In general, situations in which the relevant evidence consists of testimony are useful limit cases and intuition tests here. We say things like, “I inquired about how Alex is doing.” or “Will you inquire about whether Sam is coming to dinner?” Such cases seem to fail the evidence requirement and constitute mere asking, but I’m open to the thought that there are cases where asking the relevant expert/source and accepting the answer is enough for inquiry, provided in such cases one makes implicit judgments that the source isn’t joking with them, etc., and the acceptance therefore isn’t completely passive. This seems especially appealing in cases where the inquirers are young children. Young children often rely heavily on testimony from adults in their inquiries. What constitutes bringing evidence to bear must vary depending on the sophistication of the inquirer.

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That evidence is required for inquiry is also a consequence of the fact that the goal of doxastic inquiry is epistemic change. In contrast to practical deliberation, which if all goes well, yields changes in our intentions or actions, doxastic inquiry yields changes in our epistemic state. In typical cases this amounts to a change in belief, but knowledge and understanding are also oft-cited goals of inquiry. I will have more to say about these various goal states in later sections. For now, the relevant point is that these states are responsive to evidence and are in some sense not under our direct control. We can't simply choose to believe simpliciter. If we want to change our beliefs, we have to expose ourselves to (new) evidence on the issue at stake. Therefore, since the goal of doxastic inquiry is epistemic change, it only makes sense that inquiry would require that we bring evidence to bear. And taken together, this thought about the goal of doxastic inquiry and cases of question-answering by random procedure make a convincing case that candidate feature three above is indeed an essential feature of inquiry: Inquiry is a process of bringing evidence to bear on our questions.

I.iv Inquiry is Open

The other way that activities in which an agent settles a question can fail to be inquiry is if the outcome is pre-determined. There is an openness that is the hallmark of inquiry. What do I mean by this?

To inquire into a question, an agent must treat more than one competing possibility as live. That is, there must be more than one possible outcome open at the start of the inquiry.


11 The example of the fourth grade science lesson involving boats might appear to be an exception to this. Indeed, the stated purpose of the activity in Kuhn's description is to develop inquiry skills. She specifically says that the activity is not focused on the children developing content knowledge (2005, p. 79). But this, I think marks a shift in level of analysis of the activity. From a perspective internal to the activity, the students are acquiring new beliefs about boats. Yes, the teacher will not later test them on this knowledge, and class follow up on the activity
This is not to say that an agent must be aware of all these possibilities at the start of the inquiry. Neither is it to say that an inquiring agent can't be confident that a particular hypothesis will prove true nor that she need have equal credence in all of the open possibilities. Rather, she has to be open to following the evidence; she must treat the question as genuinely open, even if she's leaning strongly toward a particular answer.

The case for this openness requirement is made by two kinds of cases. An answer can be problematically predetermined — that is predetermined in a way that renders the activity not an inquiry — in one of two ways: First, the process might be question-begging with the “inquiry” aiming at a particular solution. To once again pick on the detective, imagine that rather than drawing numbers the detective sets about investigating the heist convinced that Bearded Bandit is the culprit. She doesn't just think it was probably ol' Beardy; she believes he did it and is unwilling to consider other suspects. The question is closed for the detective. She still gathers evidence and interviews witnesses, but she discounts any evidence that might exonerate Bearded Bandit. In this case, the detective’s so-called “inquiry” is question-begging. The conclusion is pre-determined, so while the detective is gathering evidence and going through the motions of inquiry, that's all she's doing — going through the motions.

Second, the particular solution may not be predetermined, but the procedure for arriving at a solution is, and the agent has resolved in advance to accept the result of the procedure whatever it is. That's a bit of a mouthful. What I have in mind here are cases where the question can be answered via an algorithm. A high school student solving an algebra problem using the FOIL method is executing an algorithm not conducting an inquiry. Of course, the student might double check her arithmetic, but this sort of procedural double

will focus on how the skills students used to acquire this boat knowledge transfer to other tasks. Nevertheless, there's still a perspective from which the goal of the activity is epistemic change.
checking aside, the question is answered using a pre-specified procedure, and the student decided in advance to accept the result of that method.\footnote{The reader might be thinking that this kind of case was already ruled out by the evidence requirement. I don’t disagree, but I think it is part of the case for the openness requirement too. The same thing can be said for cases of recall. Recall may be a question-driven process in some cases, but the answer is predetermined and the process of retrieving it doesn’t involve evidence (even if the original process of arriving at it did) and so recall is not inquiry.} Interestingly, the pre-determined procedure need not be an algorithm; it can come in the form of a human guide. Consider the familiar case of the slave boy in the \textit{Meno}.\footnote{82b-86b.} Here Socrates leads the slave boy through the reasoning, and the inference is pre-determined at each step. Once again, it seems the slave boy is not inquiring because the process is pre-determined. It’s not pre-determined from the boy’s perspective. Indeed, had he gone through this reasoning process independently it might count as an inquiry, but nevertheless, because of Socrates’ directive guidance, the process is problematically predetermined.

Thus, the final essential feature of inquiry is openness to multiple outcomes. Inquirers treat multiple possibilities as live and thereby treat their questions as genuinely open. They do not prejudge the issue at stake or rely solely on algorithms.

\textbf{I.v Essential Features}

The above considerations yield the following list of essential features of inquiry:

1) Inquiry is question-driven.
2) Inquiry is a diachronic activity agents engage in. As such, whether we inquire is typically under our direct control.
3) Inquiry requires that we bring evidence to bear on the relevant question.
4) Inquiry requires openness to multiple possibilities.

These features are evidenced in each of the three paradigm cases that opened this section, and they explain why related but non-inquiry learning activities fail to count as inquiry. Some
activities lack inquiry's unifying goal; others employ a procedure that leads to a determinate outcome, and so on. With this understanding of inquiry in hand, let me now turn to the project of this paper — an account of the sufficient conditions for being in inquiry. I begin with some desiderata any adequate account should satisfy.

III Desiderata

Based on the essential features of inquiry, we can identify four desiderata for an account of being in inquiry — distinctions the account should enable us to make and features of the activity that it should explain. First, the account should distinguish inquirers from non-inquirers, those who are in inquiry from those who don't meet the sufficient conditions. Second, the account should explain in exactly what sense inquiry is question-driven by explaining how the focal question is present at the start of inquiry. Third, the account should explain or at least make room for the direct control agents have over starting and stopping inquiry. And finally, the account should make clear that a person-level activity is initiated when an inquiry is opened. Note that these four desiderata don't speak to all of the features of inquiry. In particular, they don't say anything about evidence. This is in part because, plausibly, one can be in inquiry before one has gathered any evidence at all, so the sufficient conditions for being in inquiry are unlikely to have a lot to say on this point. However, I think we should think of these four desiderata not as a complete list but as a minimal standard any adequate account must meet, and as we’ll see, these four desiderata suffice to distinguish my proposal from competing accounts. Let me then say a bit more about each of these requirements.

First, with regard to distinguishing inquirers from non-inquirers, the desideratum here is that the account ought to give us a principled way to distinguish genuine inquirers from others. This includes distinguishing genuine inquirers from pseudo inquirers — e.g. a
detective working a crime scene versus an actor merely playing the role on a movie set — but also distinguishing an agent inquiring into a question from someone merely considering or entertaining that question. This is, of course, not to claim that we will in every case be able to tell from the outside whether an agent is inquiring into Q or merely pseudo inquiring, or even that the agent will in every case be aware that she has initiated inquiry into Q exactly when she has. But the account should make a principled distinction between agents in inquiry and those who are not.

Second, the account ought to explain in exactly what sense inquiry is question-driven. I said in the previous section that the question is present in some form at the start of the inquiry. What does it mean for the question to be present? In addition, why think the question is necessary at the time inquiry opens? Perhaps it is possible to initiate inquiry into a subject like personal identity with specific questions coming only later. Thus, the account should explain what it is for a question to be present and make plausible that this happens at the start of inquiry.

The third desideratum then is that the account ought to explain why inquiry is voluntary in the sense described in the previous section, or at least, it ought to make it plausible that agents have this sort of direct control in paradigm cases. The force of this desideratum will become more apparent in the next section when I look at two candidate accounts from the literature. On both of these accounts, inquiry begins with the formation of an attitude. The problem, however, is that the specified attitudes don't seem to be under an agent's direct control. Thus, while the accounts certainly don't suggest that agents involuntarily start to gather evidence, it looks like, in a broad range of cases, when an inquiry begins is outside the agent's direct control.
The final desideratum is that the account ought to make clear that a diachronic activity begins when an inquiry is opened. The sufficient conditions for being in inquiry must be sufficient conditions for a person-level activity. Like the third desideratum, the import of this requirement will also become clearer after discussing some candidate accounts. In general, there is no necessary connection between having an attitude and engaging in an activity. It's possible to imagine an agent who believes she is playing baseball but who isn't playing or an agent who desires to bake a cake but isn't baking. Thus, on any account where an agent's having a certain attitude is sufficient for her to count as inquiring, we can ask what connects that attitude to the activity.

**IV Doubt and Suspension**

I turn now to two candidate attitudes — doubt and suspension — that have been posited as the mental state of inquirers. I should be clear at the outset: It is not the stated project of either of the authors I'll focus on to provide *sufficient* conditions for being in inquiry. For both accounts, there are reasons to think the authors want to make a somewhat weaker claim. Their focal mental states are necessary for inquiring or are sufficient to get agents into an inquiring frame of mind, which need not take us all the way to a diachronic activity. However, since my project here is sufficient conditions for being in inquiry, it will be instructive to read these accounts *as if* the authors were putting them forward as such accounts. What these accounts lack when understood this way is a good guide to what the shape of the final positive account should be.

The first candidate attitude is doubt. Charles Peirce famously cast inquiry as “the struggle to attain belief”. And he claimed that only doubt could occasion inquiry: “The
irritation of doubt is the only immediate motive for the struggle to attain belief.”  

14 As the inspiration for the first candidate account, I want to draw here not on Peirce’s own account but on the view of Isaac Levi who follows Peirce in taking doubt as the starting place for inquiry:

Inquiries that terminate with the settling of an issue are provoked by the presence of doubt. To be sure, the presence of doubt does not automatically induce the doubter to engage in inquiry. We attach greater urgency to the solution of some problems than to the solution of others, and often disagree, and disagree intensely, as to the priority to be attached to various unsettled issues.15

I will return shortly to the urgency condition Levi invokes here. But first, what is doubt according to Levi?

Levi follows the pragmatists in thinking that inquiry begins from a set of full beliefs and that an agent’s current beliefs do not require justification to her now.16 Quite the opposite—An agent requires justification for subjecting her current full beliefs to critical scrutiny, that is, if she is to treat them as anything other than settled certainties. Let me unpack that last claim. The claim is not that an agent’s full beliefs can’t be false or that she didn’t require justification for coming to have them; rather, now that she has them, an agent’s current full beliefs are certainties from her point of view. Practically, this means that the agent ought to take these beliefs as given in her reasoning.17 She ought to rely on them and proceed in her actions as if they are true without further consideration. And when things are going well, she

14 2014, p. 55.


17 Levi would say that the agent is “committed” to the truth of these beliefs and reasoning from them, etc. I’ve used “ought to” to avoid confusion with the notion of commitment that is central to my account in the following section. As one illustration of the distinction, Levi holds that one has a doxastic commitment to believing all of the logical consequences of one’s beliefs even though one often fails in what he calls one’s doxastic performance with respect to such commitments. The commitments I appeal to are spelled out in terms of behavioral dispositions and tendencies. See especially 2004, ch. 1 for Levi’s discussion of doxastic commitment versus performance.
does just that; she treats the beliefs as settled issues. The contrast Levi wants to highlight here is between this notion of certainty and what he calls incorrigibility. Another thing we might mean if we say a belief is certain is that there’s no chance the agent will change her mind. This for Levi is not certainty but incorrigibility. Full beliefs in Levi’s sense are subject to change, although to be rational such change requires justification, but they are not incorrigible. An agent may find reasons that lead her to no longer treat her belief as a closed matter.

In addition, an agent’s state of full belief sets what Levi calls her “standard for serious possibility.”¹⁸ Serious possibilities are all those propositions an agent could add to her state of full belief without inconsistency. Serious impossibilities are those propositions the addition of which would be inconsistent and so are ruled out by the agent’s state of full belief. Levi’s understanding of doubt is built out of these notions of serious possibility and impossibility. To doubt a proposition, according to Levi, is to treat both that proposition and its negation as serious possibilities. That is, to doubt that \( p \) is for both \( p \) and not-\( p \) to be consistent with one’s state of full belief:

Doubt that \( h \) sometimes means failure to believe—i.e., either suspense or belief that \( \sim h \). And sometimes it may mean full belief that \( h \) is false. The presence of doubt in either of these senses is not sufficient to motivate inquiry. If the agent fails to be in suspense (fails to be uncertain) as to whether \( h \) is true or false, either the agent fully believes that \( h \) or fully believes that \( \sim h \). There is no real and living doubt motivating efforts to eliminate the doubt by finding reasons to come to full belief that \( h \) or full belief that \( \sim h \). The presence of doubt as I shall understand it is in the sense of suspense.¹⁹

Thus, for Levi, to doubt requires that one’s full beliefs do not rule out either the doubted proposition or its negation, but it also seems to require something more. Locutions like “fails to be uncertain” and “the presence of doubt” seem to place a consideration requirement on doubt. There may be many propositions one has never considered of which it is true that

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¹⁸ 2012, p. 169.

¹⁹ 2012, p. 177, note 7.
neither they nor their negations are ruled out by one’s belief state, but these propositions cannot spur inquiry. To doubt a proposition in Levi’s sense, one must have cognitive contact with it.

In sum, to doubt a proposition is to, in some sense, recognize that its truth or falsehood is not settled by one’s state of full belief. When an agent is in doubt, she requires justification for any revision of her belief state that would resolve her doubt. Because her current full beliefs — what she can take as her current evidence — don’t settle the matter, she must acquire new information to resolve her doubt. Hence, for Levi, doubt is the impetus for inquiry.

Let me return then to the urgency condition. Levi says that doubt, while necessary for inquiry, does not automatically lead an agent to inquire. The matter must cross some threshold of priority or interest for doubt to occasion inquiry, and so, doubt alone is not sufficient for being in inquiry. The priority threshold is likely to be contextually determined, and while much could be said about the notion of sufficient interest, for my purposes here it will suffice to say that the relevant interest at a minimum requires that an agent have a desire — though not necessarily a wish — to resolve the matter that is the subject of her doubt. In addition, the agent must be aware that she has this desire; the fact that resolving it would be in her interests will not move her to inquire if she isn’t aware of this fact. Thus, the first candidate account is this: An agent A is in inquiry with respect to a question Q when she doubts that p and has a desire to resolve Q, where Q is the question whether p or a broader question to which p is an answer.20

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20 The reader will notice I’ve shifted here from talk of resolving the subject matter of the doubt to talk of questions. This may not be a significant shift, but it’s worth flagging. The idea that we can equate questions with subject matters has been the topic of recent work. See in this connection Yalcin 2016, Schoubye and Stokke 2016 also propose that assertions are relative to a subject matter best understood as a question.
The second candidate attitude is suspension of judgment. Recently, Jane Friedman has proposed that agents are in an inquiring state of mind with respect to a question if they have suspended judgment on that question.\textsuperscript{21, 22} According to Friedman, suspension is a genuine, contentful attitude which is not reducible to other doxastic states. That is, suspension is not mere lack of an attitude on the relevant subject matter, nor is it withholding of belief plus beliefs about the insufficiency of evidence or one's position with regard to the evidence.

Further, suspension for Friedman is the most general of a class of question-directed attitudes, which she calls the interrogative attitudes. The interrogative attitudes include familiar questioning attitudes like curiosity and wondering, as well as processes such as contemplating, deliberating, and investigating\textsuperscript{23}. I’ll focus just on the members of the class that look like attitudes here, but I don't think anything in my argument hangs on this point.

Interrogative attitudes take questions rather than propositions as contents, so an agent suspends about a question $Q$ rather than about a proposition $p$. The key thought here is that if questions are identified with sets of answers, there’s something that it is to latch onto the set itself that’s different from latching onto all or a subset of the contents of the set. The former is what an agent has cognitive contact with when she has a question-directed attitude. Cases that look like propositional suspension can be accommodated with whether questions, so a subject who seems to suspend judgment that $p$ really suspends about ‘whether $p$’.\textsuperscript{24} When an agent suspends on a question, this attitude is or represents her neutrality on the subject. So for Friedman, suspension is a question-directed, neutral, doxastic attitude.

\textsuperscript{21} See J Friedman 2017 for the argument.

\textsuperscript{22} For more on Friedman’s notion of inquiring state of mind and how it relates to the diachronic activity I characterized in Section II, see Chapter 1.

\textsuperscript{23} See J Friedman 2013 for the full account of the interrogative attitudes.

\textsuperscript{24} This is natural if we take it that a subject who is suspended about $p$ must necessarily be suspended about not-$p$ as well. See Friedman 2017, p. 304.
Importantly, suspension, like the other interrogative attitudes, has epistemic satisfaction conditions. That is, the state is resolved when an agent comes to be in a target doxastic state, which for Friedman is full belief or knowledge. Take for example curiosity. If A is now curious about who ate the last slice of cake, A’s curiosity is satisfied or resolved when she comes to believe that B ate it. Because suspension has satisfaction conditions, it can motivate its possessor. It’s a goal-directed state part of the function of which is to push its possessor to achieve that goal. So when an agent suspends judgment on a question, she is in a state that pushes her to come to believe an answer to the relevant question. It is because suspension motivates its possessor in this way that suspending judgment on a question puts an agent into an inquiring state of mind, and so, on the reading I’m after here, is sufficient for being in inquiry. Thus, the second candidate account is this: A is in inquiry with respect to Q when she suspends judgement about Q.

Turn then to the desiderata. How do these candidate accounts fare? As for the first desideratum — that the account distinguish inquirers from non-inquirers — both pass handily. In the case of suspension, inquirers are distinguished from non-inquirers because inquirers have an attitude non-inquirers lack, namely suspension on the relevant question Q. Likewise for doubt — inquirers are distinguished from non-inquirers because the former have a set of attitudes that the latter lack. Inquirers have doubts about answers to and desires to resolve their respective questions; non-inquirers lack one or both of these attitudes.

Doubt and suspension are split on the second desideratum — that the account explain how the question is present at the outset of inquiry. Suspension again meets this requirement handily. On the suspension account, inquiry is question-driven insofar as inquirers suspend
about particular questions. What it is for a question to be present at the start of inquiry is for that question to be the content of the agent’s attitude, the question she is suspended about. So the focal question is present at the outset of inquiry because suspending is what makes it the case that the agent is in inquiry, and to suspend judgment is to suspend judgment on a question.

Doubt, on the other hand, is not so straightforwardly connected to questions. Doubt seems to be a propositional rather than a question-directed attitude. One doubts that \( p \) rather than about some question \( Q \). But there are two things that might provide the requisite link between doubt and questions. First, doubting that \( p \) entails, on the account of doubt under consideration, that one recognize both \( p \) and not-\( p \) as a serious possibilities, and we said above that this recognition seems to require cognitive contact in some sense with the relevant propositions. This sounds a lot like asking whether \( p \). In addition, doubting that \( p \) often opens a larger possibility space than simply \( p \) or not-\( p \). Indeed, when one doubts that \( p \), one may be treating alternatives to \( p \) as serious possibilities in addition to not-\( p \). This sounds a lot like

35 There is an apparent exception to this in cases where an agent is said to suspend about an object or event. For example, it seems possible to suspend judgment about the origin of the universe or about the Tully Monster. But it is plausible that there is an implicit question in such attributions. To say that A suspended about the Tully Monster is really to say that A suspended about what kind of animal the Tully Monster was or whether the Tully Monster really existed. Friedman also suggests another way we might handle suspension ascriptions that embed noun phrases – We might take them to pick out the most general question about the subject. On this way of going, A suspended judgment about the origin of the universe would be a way of saying A suspended judgment on the most general question about that event. See Friedman 2013, p. 165-166 for further discussion.

36 One might note here that there are cases where we seemingly attribute doubt about a question. “A has doubts about who ate the last slice of cake” sounds fine as a sentence of English. But such an assertion is only appropriate in a context where some proposition about who did is part of the common ground. Imagine a person walking into the conversation who heard only that claim. It would be reasonable for this newcomer to respond, “What does A doubt?” looking for a response along the lines of “She doubts that B ate it, and he’s the only person she saw in the kitchen”.

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asking whether $p$ or $q$ or $r$. Neither Levi nor the pragmatists he follows sees a gap between doubt and questions or problems for this reason.\footnote{Consider in this connection Peirce: “We generally know when we wish to ask a question and when we wish to pronounce a judgment, for there is a dissimilarity between the sensation of doubting and that of believing.” See 2014, p. 53 and also Levi 2012, ch. 2 and 5.}

Second, we might think that the question is present at the outset of inquiry not in doubt itself but in the desire that must accompany it to occasion inquiry. Consider again A’s belief that B ate the last slice of cake. Suppose A came to doubt this when she learned that B didn’t come home last night. There was still cake in the refrigerator when A went to bed. A’s doubt that B ate the last slice of cake opens up a new space of possibilities. A likely now desires to know not just whether B ate the cake but also supposing he didn’t, who did. A’s inquiry opening desire, we might say, is the desire to know who ate the last slice. It thus looks like there are resources in the doubt plus desire account to meet the second desideratum, but the story is not as simple as in the case of suspension.

The third desideratum — the requirement that the account explain or at least allow for our direct control over inquiry — poses a challenge for doubt and suspension. In both cases whether an agent is inquiring into a question doesn’t seem to be under her direct control because doubt and suspension are not themselves under the agent’s direct control. Doubt and suspension are not attitudes an agent can acquire simply by deciding to form them. If this is right, then these accounts face a challenge explaining our typical direct control over inquiry. How is it that we have this direct control when the attitudes necessary for being in inquiry are at best controlled only indirectly?

To flesh this out, let’s begin with suspension. There’s a way of hearing talk about suspension on which suspending judgment sounds voluntary or at least more within an agent’s direct control than believing. When we say “A suspended judgment about who ate the
last slice of cake”, it’s possible to hear this as describing a choice A made. However, Friedman’s account of suspension as the most general interrogative attitude doesn’t allow this reading. Consider curiosity. Whether or not we’re curious does not seem to be something that’s up to us. A can’t just decide to be curious about who ate the last slice of cake if she isn’t already. She can insert herself into the lively conversation about whether B did and hope that it arouses her curiosity, but she can’t just make a choice to be curious. Likewise, if A is curious, she can’t just decide to give up that attitude. But on Friedman’s account, being curious entails being suspended. Therefore, there is a large class of cases — all the cases in which agents wonder or are curious — in which whether to suspend is not under the agent’s direct control. And so, in these cases whether these agent’s inquire is not, on the suspension account, under their direct control either.

Parallel considerations apply to doubt. We can’t just make a choice to doubt in the sense that Levi explicates. 28 When we consider p, whether we find ourselves believing p or doubting p is outside our direct control. We even speak of “experiencing” doubts in the way that we speak of experiencing fear or excitement. If an agent doesn’t now doubt some proposition and wants to, she’ll need to expose herself to evidence against that proposition or to people who disbelieve it and so forth until a seed of doubt starts to grow in her mind. Thus, doubt, like suspension, is not under the same direct control that inquiry is, and so this account too fails to provide the explanation called for by the third desideratum.

That brings us to the final desideratum — that the proposed sufficient conditions are indeed sufficient conditions for a diachronic activity. Here again doubt and suspension face a challenge, and once again, both for similar reasons. Doubt and suspension do motivate their

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28 Whether we can doubt voluntarily has been a point of historical contention. Peirce famously accused Descartes of trying to do the impossible, namely doubt voluntarily, and contrasted living doubts of the sort that occasion inquiry with what he called paper doubts, or treating a proposition as in question despite one’s actual doxastic commitments. See L Friedman 1999 for a good discussion of the historical debate.
possessors. Suspension is, as discussed, a goal-directed state that pushes agents to resolve the questions on which they are suspended. And doubt, in the sense at issue here, is likely to be experienced as uncomfortable since it involves recognizing that one is uncertain. Even if this isn't the case, there's no question that the desire that accompanies doubt is, like suspension, a goal-directed state. So we could try appealing to the presence of a goal-directed state in both instances to make the case that an activity is initiated when an agent has the relevant attitude(s).

But here we must be careful to distinguish an agent's being in a goal-directed state from an agent's aiming at that goal in a stronger sense. Consider in this connection a non-inquiry-related state — hunger. A subject who is hungry is in a goal-directed state, a state that has satisfaction conditions, a state that has the functional role of motivating the subject to secure the thing that meets its satisfaction conditions, namely nutrition. But a subject's being hungry does not entail that she herself is aiming to secure food. Perhaps she's focused on a project and is ignoring the fact that she's hungry. So it isn't clear that we can get directly from the goal-directedness of suspension or doubt plus desire to action. There's nothing in these accounts that ensures us that they are accounts of sufficient conditions for an activity.

In sum, because they struggle with the third and fourth desiderata, neither doubt nor suspension meets the minimum standard captured in the desiderata and so neither is sufficient for being in inquiry.

V Commitment

While both doubt and suspension come up short, the ways in which they fail to meet the desiderata are instructive. They failed to explain our direct control over inquiry and to provide the necessary link to action. This suggests that the missing element in the doubt and
suspension accounts comes into view when we focus on the distinction between an agent’s being in a goal-directed state and an agent aiming at an end. Doubting and suspending are ways of being in a goal-directed state, but what marked the difference between a genuine inquirer and a non-inquirer was that only the former is aiming to settle the matter. What moves an agent from simply being in a goal-directed state to aiming at the relevant goal? I want to suggest that the answer is a commitment. The inquiring agent is committed to settling her question in a way that an agent who’s merely curious or wondering or contemplating is not.

What is it then for an agent to commit to settling a question? The way to spell out this notion, I think, is to turn to the literature on intention. Both Michael Bratman and Gilbert Harman present intention as involving a sort of agential commitment or commitment of the will. The kind of commitment involved in intention is, to borrow a term from Bratman, conduct controlling. Such a commitment will, other things equal, move the agent to act accordingly: “[I]n the normal course of events, if a rational agent intends to A now, she will at least try to A.” As Harman puts it, “The ‘act’ of forming an intention is always a means to an end. It is always a means of guaranteeing that one will do what one intends to do”. Perhaps guarantee is a bit too strong. The relevant commitment need not involve any sort of accountability. The agent need not setup any additional mechanism whereby she guarantees that she will follow through. Rather, the commitment is one of taking on an end or goal. When it comes to settling questions, this commitment shows up in the agent’s behavior in a set of dispositions to gather and assess evidence relevant to the question, to formulate hypotheses, and generally to do the things that she thinks will lead to answering the question.

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30 Bratman 1987, p. 54.
It will be helpful to think of such commitments in terms of goals. When an agent commits to a question in this way we might say the question is on her epistemic agenda. Just as we have practical agendas which consist of our practical goals, so too we have epistemic agendas consisting of our knowledge goals. Tasks make it onto our practical agendas when we form intentions to perform those tasks and the actions that comprise them. Merely, wishing to do something is not enough to put it on one’s agenda. Likewise, questions make it onto our epistemic agendas when we commit to settling them. And again, merely wishing to settle or being curious about a question isn’t enough. To be on the agenda is to be among an agent’s epistemic goals. Thus, when an agent commits to settling a question in the sense just described, that question is on her epistemic agenda. She intends to settle the question, and because of this commitment she will, absent a change in circumstances, act in accordingly. She will open inquiry into her question.

I contend then that the gap left by the goal-directed state accounts of initiating inquiry can only be filled by a commitment in the form of an intention. What moves an agent from being in a goal-directed state focused on a question to actually aiming to settle that question is forming an intention. And so, my account of the sufficient conditions for being in inquiry is this: An agent A is in inquiry with respect to a question Q when, in a non-predetermined way, A intends to settle Q in a doxastic state. I’ll refer to the intentions that open inquiry as ‘intentions to settle’ for the rest of the paper. Explicating the intention to settle proposal will require a closer look at the proposal’s three components: (1) A intends, (2) to settle Q in a doxastic state, and (3) in a non-predetermined way.

A promising next step is to connect this idea of an epistemic agenda to recent work that incorporates a set of open questions or a ‘research agenda’ in formal modeling of an agent’s epistemic state. The view extends the typical pair model — (K, E) a set of belief sentences plus an entrenchment ordering — to include a third term — ‘A’ where A is the agent’s research agenda. The agenda consists of a set of K-questions, questions that are open for the agent given her current beliefs. The thought is that only when this third term is included can we accurately model and develop a logic of belief revision. See Olsson and Westlund 2010 and Enqvist 2012.
Beginning with (1): My own view of intention draws heavily on Bratman and Harman, but the intention to settle account of inquiry isn't bound to a particular account of intention. Any account of intention where intention plays the relevant functional role is a way to fill in the intention to settle proposal.

An intention to settle is an intention because it is a commitment in the sense described above. It is a mental state that decides, or encodes an agent's decisions, in practical deliberations enabling her to settle in advance on what to do. When an agent intends to φ the matter is settled; φ-ing is on her agenda. The intention sets an end for the agent. The agent can also take her φ-ing as a premise in future deliberations and further planning. She can count on her φ-ing unless a change in circumstances, such as finding out relevant, new information or a new opportunity presenting itself, leads her to re-deliberate about whether to φ. This is because, as discussed above, intentions are conduct controlling. It is through our intentions that we exercise control over our actions.

It is worth pausing briefly over the reasons for thinking intention is a distinctive mental state not reducible to ordinary beliefs and desires. Why think only an intention can play this role in our cognitive lives generally and in guiding the actions that comprise inquiry in particular? First, intentions play a different role in our practical reasoning than do beliefs and desires. Intentions settle practical deliberation and are conduct controlling. They enable us to plan in advance on what we will do at a later time. Since beliefs and desires do not include practical commitments, they cannot play this role of settling what an agent will do. Even an account on which intentions are identified with predominant desires plus the relevant beliefs

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33 Consider Bratman: “We are not frictionless deliberators. Rather, we settle in advance on prior, partial plans and tend to reconsider them only when faced with a problem. The ability to settle in advance on such plans enables us to achieve complex goals we would not otherwise be able to achieve” (1987, p. 28).

34 Lengthier discussions of this point can be found in Holton 2009, ch. 1 and Bratman 1987, ch. 2.
that one will act as one desires does not yield the kind of ceteris paribus guarantee that intending involves. When the time to act arrives, an agent may still be disposed to deliberate despite a predominant desire. Second, there are cases where we are genuinely indifferent or where the options are incommensurable or equally desirable and so we do not desire one over the other. In such cases, the intention to take one option cannot be a predominant desire to take that course nor can it be an ordinary belief that one will do so. The agent has no such desire and any such belief would be arbitrary. Finally, intentions are subject to rational requirements of consistency in a way that desires are not. One cannot rationally intend to $\phi$ and to $\psi$ if one knows that doing both is impossible. Not so with desires. There is nothing irrational about desiring both to $\phi$ and to $\psi$ even if one knows one cannot do both. While none of these reasons is definitive, together they make a compelling case for treating intention as a distinct state.

So on my account to intend is to commit, and an intention to settle is just a specific type of intention. It is a commitment to resolve the relevant question, one that manifests in the agent’s dispositions to gather and assess evidence, draw inferences and so on. When an agent makes such a commitment to a question, she is in inquiry.

But the content of an intention to settle is more specific than simply resolving the question. That is the significance of component (2) to settle $Q$ in a doxastic state. This clause includes three key features of the intention to settle proposal. First, intentions to settle are intentions to resolve a particular question. The detective in our paradigm case has an intention to settle the question ‘who committed the heist’; the third-grader has an intention to settle ‘what makes the boat go faster’. One might have a more general question settling intention, e.g. an intention to answer every question on the quiz, but this isn’t the inquirer’s intention.

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35 For more on this argument, see Bratman 1987, p. 11-12 and Holton 2009, p. 4, especially fn. 6.
Inquiry guiding intentions always specify a focal question. This, however, does not imply that an agent must explicitly formulate that question to herself to open the inquiry. She may consciously think of the subject matter in only an abbreviated way or, if the inquiry is in response to a surprising circumstance, begin moving to solve the problem before she articulates the question at all. Neither is it to say that an inquiry’s target can’t evolve as the inquiry progresses. An intention to settle a broad question may lead to sub-inquiries and the corresponding intentions to settle more specific questions. An intention to settle a vague question may be updated to include a more refined version.

It is worth noting that this aspect of my account — the inclusion of focal questions in intentions to settle — ensures that the focal question is present in the mental contents of the inquirer throughout the inquiry. This enables my account to make sense of the unity of inquiry over time, since the inquiring agent maintains cognitive contact with the questions on her agenda via her intentions to settle, even when there are breaks in her inquiry. In this regard, inquiry is like other activities of extended duration. My project of completing this dissertation took place over a period of years, at times with gaps of weeks between work, but all the actions that comprised the project were unified at least in part because all were guided by an intention to complete the dissertation. So too with inquiries. While all the acts that comprise an inquiry can take place in a continuous span of time, they often do not, and in cases where there are gaps, the persistence of the guiding intention is essential to uniting these acts as an activity.

Second, intentions to settle are intentions to settle in a doxastic state. This reflects the aim of doxastic inquiry to improve our epistemic standing. I want to remain neutral on which particular attitudes are the aim of inquiry. True belief, knowledge, and understanding are
typically proposed as candidate aims.\textsuperscript{36} I think that inquiries can aim at any of the three or leave their attitudinal goal unspecified depending on the context of the inquiry and the sophistication of the inquirer. But the intention to settle is an intention to settle in some full doxastic state or other. By inquiring, the agent moves from treating the subject matter as open with several competing possibilities live to having a settled opinion and treating the matter as closed. That closure is represented in her resulting doxastic attitude. This distinguishes doxastic inquiry from practical deliberation where the aim is to settle on what to do, and perhaps, from some types of hypothetical or wishful thinking, where one draws conclusions about imagined scenarios but does not aim to alter one’s doxastic state per se.\textsuperscript{37}

Third, the intention is an intention to settle. It is an intention to engage in a process of settling. The contrast here is with merely intending that a state of affairs obtain in which one is in the relevant doxastic state. The inquirer intends not merely that she knows the answer, but that she comes to know it via a process that she engages in.\textsuperscript{38} It’s tempting to add that some inquirers have much more specific intentions with regard to the process of settling, for example intentions with regard to what evidence is brought to bear and how. However, while I think sophisticated inquirers have these richer intentions, they go beyond minimum sufficient conditions for being in inquiry. Thus, an agent who intends to settle commits to resolving a

\textsuperscript{36} Of course, there is debate about whether understanding is a species of knowledge or a distinct kind of state. See e.g. Grimm 2006 and Pritchard, et. al, ch. 4 as entry points to the debate.

\textsuperscript{37} These hypothetical cases are complicated, however. In some cases we might think the supposition is just built into the question that guides inquiry. For example, a student engaging in suppositional reasoning while solving a logic problem might be inquiring into the question ‘what follows given that $p \supset q$’ and as a result of her inquiry form the belief that $p \lor \neg q$ does. On the other hand, wishful musings about what one would do if one won the lottery might not aim at epistemic change.

\textsuperscript{38} This point is related though not identical to Harman’s idea that intentions are “self-referential”. The thought is that when A intends to $\phi$, it is not just that A intends that a state of affairs obtains in which A has $\phi$-ed. A also intends that her intention to $\phi$ is instrumental in her $\phi$-ing; in some sense, A intends a state of affairs in which A $\phi$-ed because of her intention to do so. See 1986, p. 87-88 and 1976, p. 442-444 for Harman’s discussions of the issue.
particular question Q, and she commits to resolving it in a particular way, via a process she engages in and in a doxastic attitude that closes the matter.

Lastly, component (3) in a non-predetermined way responds to the fourth feature of inquiry elucidated in Section II, inquiry's openness. Notice that an agent might intend to settle a question in belief but still fail to inquire because the outcome of her question-answering process is predetermined. The algebra student who uses the FOIL method to multiply polynomials and thereby settle 'what is the solution to homework problem number 3' intends to settle the question, does so via a process that she engages in, and arrives at knowledge via that process. But nevertheless, she's not inquiring because her process is an algorithm.

Including the predetermination requirement in the sufficient conditions and placing it outside the scope of the intention, yields just this result. Question-answering processes that are predetermined fail to count as inquiries at all because they fail the initial condition. This is true of both cases that are predetermined due to an algorithmic procedure and of cases where the process is question-begging. This failure to count as inquiry is in contrast to inquiries that simply go badly. An inquiry might go badly because the agent mishandles evidence or takes evidence to bear on her question when it really has no relevance. Likewise, an inquiry might go badly because an agent fails to consider an important or even the correct possibility. These sorts of inquiries are problematic, but they don't violate the predetermination condition and so, if the agent has the relevant intention, do count as inquiries. Intuitively, this is just what we'd expect. The predetermination condition marks an important line between failures to inquire and failed inquiries.

How then does my account fare with respect to the desiderata? Like doubt and suspension, intention to settle meets the first two requirements handily. Inquirers are distinguished from non-inquirers because they have intentions to settle their focal questions.
Non-inquirers lack such intentions. Non-inquirers may have question-directed attitudes such as curiosity or be contemplating questions, but if they don't intend to settle they aren't in inquiry. Likewise, a question is present at the outset of inquiry because an intention to settle is always an intention to settle \( Q \), where \( Q \) is the focal question of the ensuing inquiry. Thus, inquiry is question-driven in the sense that the inquiring agent is in cognitive contact with her focal question for the duration via her intention to settle.

Unlike doubt and suspension, my account also has no trouble with desiderata three and four. Intention to settle explains our direct control over inquiry because an agent has voluntary control over what she intends in a way that she does not have control over what she doubts or is curious about. To reprise the discussion of agency in Section II, this is not to say that there are never cases where an agent feels forced to inquire. The reasons for settling some question may be so compelling that the agent feels she has no choice. In addition, this is not to claim that forming an intention to settle always involves an extended or conscious decision-making process. An agent may just hear a disturbing noise and run to investigate. But rather, it is to claim that when we are reflective, we have the requisite sort of control over our intentions to settle.

Likewise, intention to settle ensures that the sufficient conditions for being in inquiry are sufficient conditions for an activity. Intention to settle is not merely a goal-directed state like doubt or suspension. It is a conduct controlling commitment. When an agent intends to settle a question, that intention will lead her to gather and assess evidence, formulate hypotheses, and to perform other acts she takes to conduce to answering that question. And further, those acts will be directed and unified by this guiding intention.

This point about intention to settle's connection to activity is worth elaborating. Recall the pill case from Section II. There the agent could have had an intention to settle prior to
finding out about the knowledge-giving pill, but once she takes the pill, she brings about a state of affairs in which she knows the answer via a process that isn't inquiry. To be adequate, it seems my account should rule out such cases.

Indeed, Dewey went to some trouble to distinguish inquiry from these sorts of non-inquiry question-answering processes:

Dewey was concerned to distinguish problem-solving inquiry from techniques for removal of doubt by some form of therapy such as the taking of a pill or undergoing hypnosis. He concluded that the doubts addressed by the inquirer should not be the inquirer's doubts. Instead, it should be the doubtfulness of the situation in which the inquirer is located.\(^{39}\)

Dewey's solution was to locate the question outside the agent, thereby ensuring that no psychological tricks could impact whether the matter was in fact settled. But I think intention to settle yields a neat solution to this sort of worry also. As discussed above, when an agent intends to settle \(Q\), she intends not that a state of affairs in which she believes an answer to \(Q\) is brought about, but she intends to settle \(Q\). She intends that she engages in a process of bringing evidence to bear on her question. An agent who intends to settle her question via taking a knowledge pill lacks an intention to settle. And even if the agent has an intention to settle prior to discovering the pill, when she decides to take the pill, she bypasses her own agency in a way that fails to fulfill the intention.

This aspect of intention to settle further distinguishes it from doubt and suspension because there's nothing about a goal-directed state that sets conditions on how its satisfaction conditions are met. This is, after all, why Dewey was motivated to move the doubts that occasion inquiry from the mind of the agent to the external situation. The agent who took the knowledge pill successfully resolved her doubt and/or suspension. Her current doxastic state is just the state that those attitudes motivated her to attain — She knows \(Q\). But this knowledge is

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\(^{39}\) Levi 2012, p. 84.
not the product of an inquiry. Thus, intention to settle speaks to the fourth desideratum in an additional way that goal-directed attitudes cannot.

To recap: The goal-directed states doubt and suspension seemed like plausible candidates for sufficient conditions for being in inquiry because they capture two central aspects of inquiry — inquiry’s orientation around a problem or question and the openness characteristic of agents first starting to inquire. However, these goal-directed states failed to meet all of the desiderata. They aren’t under our direct control, and more importantly, they don’t bear the right relationship to activities we engage in qua agents. The missing ingredient in these accounts, I’ve argued, is a commitment, and the best way to understand that commitment is as an intention. Thus, the sufficient conditions for being in inquiry are these:

*An agent A is in inquiry with respect to a question Q when, in a non-predetermined way, A intends to settle Q in a doxastic state.*

VI Questions & Answers

It’s only fitting that I complete my account of inquiry via a set of questions and answers. I’ll respond in this section to three potential worries facing the intention to settle account before concluding in Section VII with some remarks about implications of the account for the attitudes that settle inquiry.

The first question has to do with the level of cognitive sophistication necessary for inquiry: Does having an intention to settle require that the inquirer conceive in some explicit way of the aim of her inquiry? Specifically, must an agent have the concept of the doxastic state in which she intends to settle? For example, if an agent intends to settle Q with knowledge must she have a robust enough concept of knowledge such that she can distinguish it from belief? If so, you might worry that the intention to settle account places inquiry out of reach of
unsophisticated subjects like young children who lack such robust concepts. Any account with this consequence would at a minimum owe us an explanation of what's going on in children's “inquiries”, but even this might not be enough. Children are surely inquirers.

The answer here is generally no, but in special cases yes. Let me begin with the no. Generally, an agent need not conceive in some explicit way of the doxastic state that is the goal of her inquiry, and further, she need not explicitly conceive of her intention to settle as an intention to settle in some doxastic state or other. The inquirer's explicit thought may simply be “I'm trying to figure out Q”. For an agent to count as having an intention to settle, it is enough that she has the capacity to be aware, when she reaches the target state, that she is in a state which settles her question. And in addition, this state of which she is aware must be one of the doxastic attitudes, although the agent need not know that it is.

This seems to be what's going on in children's inquiries. The fourth grader experimenting with the toy boats is inquiring into 'what makes the boat go faster'. She thinks to herself and maybe wonders aloud, “Will less weight make it go faster?” After she clocks the boat's time with the weight removed, she finds out that the boat does in fact travel faster when lighter. She now knows that weight is one of the features relevant to speed. The fourth grader may not conceptualize her resulting state as one of knowledge in any sophisticated sense, but she is aware that her question is settled, that it's no longer a source of uncertainty for her. As long as an agent is capable of this awareness and capable of at least one of the kinds of doxastic states that settle inquiry, she is capable of intentions to settle.

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40 These sorts of worries pushed both J Friedman and Dennis Whitcomb to identify the contents of the interrogative attitudes and curiosity, respectively, as questions. Accounts that treat curiosity and the other interrogative attitudes as desires for knowledge or another doxastic state, they claim, yield the paradoxical result that children who lack those concepts cannot have interrogative attitudes. See Whitcomb 2010 and Friedman 2013 for these arguments.

41 This account of what it is to be capable of an intention to settle is inspired by Yalcin’s notion of question sensitivity:
However intentions to settle, like inquiries themselves, fall on a spectrum of sophistication. On one end of the spectrum are inquiries where the agent has no specific target state in mind. Whether the aim of the inquiry is belief or knowledge is left unspecified. But on the other end are inquiries with specified and perhaps complex aims. These are the special cases where the answer is yes. An expert in some subject may already believe an answer to $Q$ but bracket that belief in order to settle $Q$ via a method which she thinks will yield deeper understanding. These sorts of complex intentions to settle are likely out of reach for unsophisticated agents like young children. So the full response here is this: Children are exemplar inquirers, even if their inquiries cannot exhibit all the sophistication of adult experts. While young children and other unsophisticated inquirers may not be capable of intentions to settle in specific, demanding doxastic states, they surely have intentions to settle.

Next, you might worry that intention to settle doesn't capture a compelling feature of the doubt and suspension accounts. As Dewey and Peirce emphasize, doubt and suspense are uncomfortable; they are literally unsettling. This is in part because, on the accounts of these attitudes I've considered, an agent only has these attitudes when real, conflicting possibilities are live for her. These attitudes mark a genuine doxastic openness on the part of the agent, and this openness, we said in Section II, is an essential feature of inquiry. Having an intention to settle, you might think, doesn't require this sort of doxastic openness. After all, in discussing

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"To be sensitive to a question seems at least to be equipped with possible states that distinguish possible answers to the question, and to be receptive to information which speaks the question... Understood in this way, question-sensitivity is the sort of thing simple measuring devices can manifest. My thermostat is equipped with possible states that distinguish possible answers to the question, within what range is the temperature in this room?, and it is receptive to information which speaks that question. It is not equipped with possible states that distinguish possible answers to the question how is the weather in Topeka?; it is not receptive to information which speaks that question" (2016, p.13).

Intention to settle requires this sort of question-sensitivity, where the relevant states that an agent must be capable of are beliefs. But in addition, it requires that the agent is aware when she has formed one of these distinguishing states that she's in a state that settles her question.

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sophisticated inquirers above, I said an expert might form an intention to settle Q in a way that yields deeper understanding while already believing an answer to Q. Doesn't this show that intention to settle is compatible with only one possibility being live for the agent, and therefore, that intention to settle fails to explain the openness required for inquiry?

Again the answer is no. That conclusion comes too hastily. While it is certainly possible to have an intention to settle a question while believing one of it's possible answers — perhaps in a way that it's not possible to suspend judgment while transparently believing — my account puts strict limits on when an agent can have this combination of attitudes and still count as inquiring. These limits are built into the predetermination clause.

The predetermination clause says that any question-answering process which proceeds by a pre-specified algorithmic procedure or in a question-begging way fails to count as inquiry. The question here is best answered by a fuller discussion of when a question-answering process is question-begging. The case which originally suggested the question-begging criterion was a detective who decided that a certain suspect was guilty prior to investigating the case. This is certainly a malicious form of question-begging, but it's not what's going on in the case of the expert who reopens a question in order to settle it in a way that yields greater understanding. The expert is not knowingly prejudging a matter, which she has a responsibility to investigative with integrity. While not necessarily a case of expertise, we can illustrate what's going on in the expert case with a scenario like the following: My friend is completing a sudoku puzzle, and after looking over his shoulder for a minute, I point to an empty square in the bottom left and tell him it's a five. I arrived at this judgment heuristically, but I do believe it. If my friend asks if I'm willing to bet the next cup of coffee on it, I'd say yes. Later, I decide I want to be certain that I was right, so I find a copy of the puzzle and start reworking it methodically.
In order for this reworking process to count as inquiry and not be ruled out by the predetermination clause, I must bracket my prior belief that the square on the bottom left is a five. That doesn't mean I have to pretend that I don't have the belief. Indeed, if as I'm reworking I find that my only option for a different square in the same region is five, my prior belief may guide me to do more double-checking than I otherwise would. What it does mean is that I don't use my prior belief as a premise in any reasoning I do as a part of the new inquiry. I can't use the fact that the lower left square is a five as a basis for deciding the content of any other square until I have independent reason to conclude that the lower left is indeed a five. And most importantly, bracketing requires that I admit as live possibilities that are incompatible with my prior belief. It has to be true of me that, if it turns out that my new attempt at solving the puzzle does not vindicate my prior belief — say I've double-checked three times and the lower left is really a four — that I'll accept that I was incorrect before. If I'm instead disposed to discount any evidence that would disprove my prior belief and will not admit that I was wrong, I'm not really inquiring. Perhaps I'm seeking confirmatory evidence, but my problem-solving process is predetermined in a way that runs afoul of the predetermination clause.

Thus, the predetermination clause, and so my account of the sufficient conditions on being in inquiry, does explain and set a high bar for the openness of inquirers. An agent may not have to be all-things-considered undecided, in fact she can have a considered opinion, on the question that is the focus of her inquiry. However, she does have to proceed in a non-question-begging way, and by so proceeding, demonstrate the openness essential to inquiry.

That this is the right account of the openness required for inquiry is also supported by cases of group inquiry or domain-specific inquiry. We bracket beliefs to engage in these sorts

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43 Compare Bratman on genuine reconsideration of intentions: “...when I seriously reconsider my prior intention to A, I bracket this intention: during the course of reconsideration I no longer, strictly speaking, intend to A. One sign of this is that I am treating as admissible certain options believed by me to be incompatible with my A-ing” (1987, p. 94).
of inquiries, and I see no reason to rule them out as inquiries just because the participants aren't all-things-considered undecided. Here are two examples:

**Skepticism** An undergraduate is taking a philosophy course in which the topic of this week’s discussion is external world skepticism. The student believes that physical objects exist and does not think skepticism is a live possibility. However, she wants to engage as fully in the course discussion as possible, so she suspends or brackets her belief for the hour of discussion and approaches the evidence for skepticism as though the existence of physical objects is an open question for her.44

**Disagreement** Two agents disagree about some matter. They decide that the best way to figure out who is right is to bracket their current beliefs and inquire into the matter together as if from scratch, although both are skeptical about whether a new inquiry will ultimately change their stances. Here the two agents bracket their beliefs and the reasoning that led to those beliefs in order to ensure that their cooperative inquiry is not question-begging.

While these sorts of inquiries may not have the same potential to revise our overall epistemic states that other inquiries do, in the relevant context, they exhibit all the essential features of inquiry. These inquiries have targets, are processes agents engage in, use evidence, and are not predetermined. Because intending to settle Q is possible even when one is not, all-things-considered undecided about Q, the intention to settle account makes room for these sorts of cases as genuine inquiries. And so long as the agents bracket their beliefs so as not to proceed in a question-begging way, they too demonstrate the openness essential to inquiry, albeit in a limited domain.

The third and final question concerns the structure of inquiries. Thus far I’ve focused on inquiries that move from a set of live possibilities to a single accepted answer. The inquiry process is one of bringing evidence to bear to narrow the range of possibilities, and the openness involved is that of not predetermining which of the various live possibilities one will eventually settle on. But not all inquiries have this structure. Many inquiries are about generating possibilities. For example, the undergraduate philosopher, instead of trying to

44 Thanks to Zoe Jenkin for the suggestion of a case along these lines.
figure out what personal identity consists in, might aim to understand the various accounts we could give. Her inquiry process would then move not from many possibilities to one, but by proceeding to fill out and distinguish the space of possibilities. Can intention to settle accommodate cases like this that don't appear to aim at settling?

The intention to settle account is flexible enough to accommodate such cases. Recall the point from the discussion of inquiry in Section II that the questions that drive inquiry are diverse. While many questions call for distinguishing a unique answer from a set of possibilities, there are questions which call for many partial answers: What could personal identity consist in? Who are the possible suspects? What are the features of boats that could impact their speed? Of course, each of these questions has a unique true complete answer — the conjunction of all of the true partial answers. But when we ask these questions, we usually ask from a place of ignorance of many of the partial answers. We are asking because we haven't yet conceived of the possibilities and want to. Thus, the process by which we inquire into such questions has a different structure than that of the paradigm inquiries I've focused on so far. We settle this type of focal question by forming hypotheses and generating ideas and then testing these ideas against some set of criteria to see if they are admissible as possible answers. Where the paradigm cases were narrowing processes, these inquiries are processes of expansion.

Nevertheless, these inquiries are still accounted for by the intention to settle view. The inquirer in these cases intends to settle a focal question — a question with many true partial answers, e.g. a ‘what are’ question — and she intends to settle it in a doxastic state, likely a set of beliefs about the possibilities she uncovers. She may not intend to settle it with a belief in the question’s unique true complete answer. She may be satisfied with a mostly complete but still partial answer, but this is nevertheless settling in a new doxastic state. Likewise, the agent
in these cases must go about her inquiry in a non-predetermined way or her questionanswering process fails to count as inquiry. If she already knows what all the possibilities are, her inquiry will be question-begging. Thus, the intention to settle account makes room for inquiries with both narrowing and expanding structures.45

VII Settling Attitudes

I’d like to conclude with a few remarks about settling inquiries. While my project here has been sufficient conditions for being in inquiry, my account of those conditions has implications for the kinds of attitudes that settle inquiries. Namely, the intention to settle account and its stance that inquiry begins with a commitment provides support for some recent views which argue that doxastic attitudes are themselves commitment-involving. If inquiry begins with a commitment, it only makes sense that inquiry would end, if successful, with a fulfilling of that commitment, or if unsuccessful, with a relinquishing of it. The doxastic attitudes on these accounts do just this.

First, Richard Holton has argued that full belief can be modeled on Bratman’s account of intention.46 Like intention, full belief, in Holton’s view, is a state that settles deliberation and so helps us manage our cognitive resources. Beliefs close off possibilities or even whole issues from deliberation making current deliberations manageable and allowing us to allocate

45 One might still think there’s something this way of accounting for inquires that proceed by expanding the possibilities doesn’t get right. The undergrad philosopher on this account is inquiring into ‘what are the various accounts we could give of personal identity’ or ‘what could personal identity consist in’ rather than into her original question ‘what does personal identity consist in’. This seems to me a harmless shift, one the student herself makes when she says I just want to understand the possibilities. But you might want to hold that there is no such question shift. The student’s inquiry really is still targeting the original question; it’s just that she’s aiming at something more modest than settling. Perhaps, she’s aiming to better understand the subject matter marked out by that question. If this is your view, you might be inclined to think that the student is inquiring without the intention to settle. Rather, her inquiry initiating attitude is an intention to understand or an intention to map the space of possibilities. While there might be such intentions, incorporating them into the intention to settle account seems to me a more complicated way of accommodating such cases than allowing that the question has shifted.
resources to new issues. Therefore, Holton argues, beliefs have a degree of stability; once settled on, beliefs have a tendency to persist and resist reconsideration. When Holton says beliefs resist reconsideration, he has in mind a shift in information threshold. The threshold for information to count as sufficient new evidence to reopen the matter once one has already settled in belief is higher than the threshold for counting as relevant evidence in an initial deliberation.\textsuperscript{47}

While Holton doesn’t explicitly characterize belief in terms of commitments, I think we get a nice picture of what it is to model full belief on Bratman’s concept of intention when we do so. On Bratman’s conception, intention involves two sorts of commitments: (1) a commitment to act as intended and to take one’s so acting as a premise in further deliberations about what to do, and (2) a commitment not to reopen deliberation in the absence of a change in circumstances.\textsuperscript{48} (1) was the commitment I focused on in my account of intention to settle, but Bratman also thinks that intentions are stable in the sense of (2). On this model, belief would involve a parallel set of commitments: (1) a commitment to proceed as if the content of the belief is true and to use it as a premise in further reasoning. The commitment to proceed as if is evidenced in behavioral dispositions of the agent not necessarily in any conscious act of commitment on her part. And (2) a commitment not to reopen the matter until the relevant threshold for new evidence has been reached. This second commitment encapsulates the stability Holton thinks is characteristic of belief. So on this model, belief is a commitment-involving state that promotes cognitive efficiency.

\textsuperscript{46} For Holton on belief, see 2014 and 2009, ch. 2.

\textsuperscript{47} 2009, p. 2.

\textsuperscript{48} See 1987, ch. 2 and 7.
Second, David Thorstad and I have argued that a species of suspension is best understood on the model of intention as well.\textsuperscript{49} While suspension cannot involve the commitment to proceed as if or to use as a premise in reasoning that belief does, suspension is a way of closing unsuccessful inquiry. So suspension too is an attitude that ends deliberation. As such, suspension on our account involves two commitments that parallel those of belief: (1) a commitment not to proceed as if for any of the possibilities still left open by the unsuccessful inquiry, and (2) a commitment to block further inquiry in the absence of new evidence. (2) yields a similar sort of stability over time to that which Holton proposes characterizes belief.

The intention to settle account of inquiry should push us toward these views of the doxastic attitudes. If inquiry begins with a commitment, then it ought to end with a change in the agent’s commitments. If inquiry is settled by a change in an agent’s commitments, then it’s no accident that the states which settle inquiry involve these sorts of commitments. If part of what it is to form a belief is to commit to not reopening the matter absent a change in epistemic circumstances, this explains why closing inquiry and belief formation so often go together. The kinds of commitments that close inquiry just are the commitments that characterize belief.

Conclusion

I’ve argued for a picture of inquiry where inquiry is a process centered around agents’ commitments to questions. By committing to a question, an agent puts that question on her agenda as an epistemic goal. An agent commits to a question in this way when she forms an intention to settle the question. When she forms an intention to settle she is in inquiry. Thus, the full account of the sufficient conditions for being in inquiry I defended was this: An agent

\textsuperscript{49} Davidson & Thorstad, unpublished ms.
A is in inquiry with respect to a question Q when, in a non-predetermined way A intends to settle Q in a doxastic state.

This account is responsive to the essential features of inquiry distilled by comparing paradigm cases of inquiry with instances of question answering or learning that fail to count as inquiry. That process yielded four features that distinguish inquiry from non-inquiry:

1) Inquiry is question-driven.
2) Inquiry is a diachronic activity agents engage in. As such, whether we inquire is typically under our direct control.
3) Inquiry requires that we bring evidence to bear on the relevant question.
4) Inquiry requires openness to multiple possibilities.

The intention to settle account of being in inquiry explains each of these four features in a way that competing accounts cannot. Accounts of the sufficient conditions for being in inquiry that feature goal-directed attitudes like doubt and suspension are initially attractive candidates because these attitudes are attitudes of openness and questioning. However, these states do not take us all the way to an activity. There is a distinction between an agent’s being in a goal-directed state — even when that goal is resolving a question — and an agent’s aiming at that goal. The latter is what is needed for an inquiry to begin, and so an intention to settle is required. By so intending we commit to inquiry.
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Doubt is a familiar state: Adrian doubts that they’ll make it to the party on time. Blake is having a crisis of faith and is experiencing doubts about his belief in god. Casey is caught in a cycle of self-doubt. Dylan is dubious that Adrian even wants to make it to the party at all. And perhaps some facts are indubitable. But ‘doubt’ and its cognates surely describe a variety of epistemic or affective states. In Adrian’s case, doubt seems to indicate a degree of belief. She may have a partial belief or a relatively high credence that they won’t make it, but her doxastic state falls short of all out belief. Blake’s doubt is potentially some kind of process. He’s still a believer for now, but at times, his confidence wanes. Casey’s doubts may involve partial belief like Blake’s, or she may not have propositional doubts at all but rather be experiencing a kind of depression. Dylan may just be a disbeliever. And indubitability, if there is any such thing, is a property of propositions, albeit one that’s not independent of epistemic agents.

Given this variation, it is unsurprising that accounts of doubt in the literature target different phenomena. One view may focus on cases like Blake’s, capturing doubt as the state of ascribing low probability to a proposition, while another takes cases like Casey’s as its starting point and highlights doubt’s affective component. In addition, disjunctive accounts are not uncommon: An agent doubts a proposition when she either disbelieves it or neither believes nor disbelieves it after consideration, for instance. As in this example, accounts that characterize doubt as an epistemic phenomenon often attempt to reduce doubt to other doxastic states, perhaps with a condition on interest in or consideration of the relevant matter.

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1 1997, p. 12.

2 See, e.g., Tucker 2010, Salmon 1995, and Faust 2000. I discuss the latter two in more detail in Section I.i.
It may be that this is all we can say for doubt considered as an epistemic state, whatever else we might say about its affective profile. Perhaps doubt simply is the lack of belief.

But my project in this paper is to see what room there is for a notion of doubt that doesn’t reduce to the doxastic attitudes. I defend an account of doubt on which doubting is not a matter of having some doxastic attitude or other toward a proposition, but rather a pre-inquiry process, a process of considering whether to reopen a matter currently settled by one’s beliefs. I won’t claim that the notion of doubt I put forward is the only one. As above, examples are easy to generate in which agents in a range of epistemic and affective states that fall short of believing are aptly described as doubting. I don’t think any one theoretical notion can hope to capture every state picked out by ‘doubt’ and related phrases. However, an account of doubt as a pre-inquiry process adds an important element to our understanding of the mindset of questioning and inquiring agents.

The notion of doubt I explicate draws inspiration from a comment of Bertrand Russell’s. In a brief passage where he contrasts doubt with belief and degrees of belief, Russell says that doubt “suggests a vacillation, an alternate between belief and disbelief”.3 While there’s a natural reading of Russell’s claim on which doubt is simply a back and forth between belief and disbelief, and so the view may be reductionist, what inspires my account is Russell’s analysis of doubt as a process. I think Russell is right that a central family of doubt phenomena involves a sort of vacillation, and my account thus aims to explain doubt as an occurrent process.

My account also depends on a particular understanding of full or all out doxastic states. Elsewhere I develop an account of inquiry as centered around a commitment to settle a focal

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3 1992, p. 143.
question. That the idea that inquiry is commitment-driven supports an account of the doxastic attitudes as, to borrow a phrase from Richard Holton, “practical attitudes”. That is, all out doxastic attitudes — belief, disbelief, and suspension of judgment — involve not only a stance toward a content but also an element of stability. Part of their function is to settle matters so we can reason and deliberate efficiently given the limits on our cognitive resources. My preferred way of understanding this element of stability is also as a commitment. Having a stable belief involves a commitment not to reopen the matter until some threshold for new evidence is reached. Since this commitment closes off inquiry into a subject matter — whether or not inquiry has previously taken place — we might think of these commitments as the stability or inquiry-related commitments involved in belief, and in this framework, we can understand doubt as the process of considering whether to revise one’s belief-commitments.

En route to this account, I begin in Section I by surveying some of the available analyses of doubt in the literature. These views fall into three rough categories, what I call “reductive”, “live option”, and “incoherence” accounts respectively. This brief tour will not aim to challenge the accounts under consideration but rather to use them as a lens through which to zero in on the relevant phenomena. In Section II, I sketch the framework of full doxastic states as practical, commitment-involving attitudes that gives rise to my account of doubt. And finally, in Sections III and IV, I present the account itself.

I Existing Accounts

The literature on doubt divides into three sorts of views, though there is overlap between categories: First, there are what I call “reductive” accounts that define doubt strictly in

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4 See Chapter 2.

terms of the other doxastic attitudes. On these views doubt turns out to be a kind of (dis)belief. Second, there are the “live option” views. These views take it that doubt is a more active attitude toward a proposition than mere belief or disbelief. The agent who doubts is somehow treating conflicting options as live and in some way recognizes that she is doing so. Third, there are “incoherence” views. These views hold that doubt not only involves treating mutually exclusive options as live but that at least one of the live options must be incompatible with the agent’s current beliefs.

Let’s look briefly at examples of each type of view. Along the way, I’ll mention some advantages of and challenges for selected views. None are meant to be decisive. Rather, the aim is to draw out the sorts of concerns that motivate different account types and to come to some general conclusions about the phenomena these accounts are trying to capture.

I.i Reductive Accounts

Nathan Salmon defines doubt in the following way:

\[
A \text{ doubts } p =_{\text{def}} (A \text{ disbelieves } p) \lor (A \text{ suspends judgment concerning } p).^6
\]

For Salmon, suspension of judgment is defined as failure to both believe and disbelieve, so his view is logically equivalent to A doubts that \( p \) just in case A fails to believe \( p \). Thus, Salmon’s definition is both reductive and disjunctive.

Similarly, Jennifer Faust in discussing notions of doubt cited in jury instructions identifies two distinct senses of doubt paralleling Salmon’s two disjuncts:

\[
S \text{ doubts, that } p =_{\text{def}} S \text{ believes that not}\-p.
\]

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S doubts, that \( p \equiv_S S \) does not believe that \( p \).

Neither Salmon's nor Faust's definition includes a consideration requirement, but it is plausible that doubt, unlike mere failure to believe, also requires that the doubter has considered the relevant proposition. We wouldn't want to say, for instance, that two hundred years ago people doubted that it would be possible to access the internet from one's phone. They had no concept of the internet. But both of the above definitions can accommodate such a requirement with minimal modification, so this is a minor point.

In favor of these reductive views, they do capture something of the intuitive diversity of doubt. We often speak as though states of doubt can be compared in relative intensity. I doubt that \( p \), but not as much as you do. Reductive views allow that any doxastic stance from full disbelief to treating both \( p \) and not-\( p \) as equally plausible to leaning strongly toward \( p \) but failing to all out believe it can count as doubting that \( p \). Thus, these reductive views capture much of the range of our ascriptions of doubt.

However, it's unclear that disbelieving \( p \), that is believing not-\( p \), is a way of doubting \( p \). I disbelieve that the sky is green and that humans can fly without technological aids. Do I therefore doubt these propositions? If I do, these are at best limit cases of doubt. These are not live possibilities for me. At the very least, all out disbelief seems to be a distinct state from many central examples of doubt because all out disbelief involves no uncertainty. When I disbelieve, no set of incompatible possibilities is live for me. With disbelief opinion is settled, whereas uncertainty is often taken as a hallmark of doubt. This idea that doubting seems to

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\(^{7}\) 2000, p. 1.

\(^{8}\) Of course, the consideration requirement is tacitly endorsed in Faust's discussion, since she is comparing notions of doubt appealed to in instructions to juries. The relevant propositions are possible verdicts and so are explicitly included in the jury instructions. Thus, the jury has presumably considered them.

\(^{9}\) See Tucker 2010, p. 507 for an example a reductive view that endorses a version of this condition.
involve treating some set of mutually incompatible options as live possibilities, even if very remote, motivates the second kind of account, the live option views.

I.ii Live Option Accounts

Live option accounts then start from the idea that disbelieving \( p \) is not a way of doubting \( p \). There’s something more “active” or more unsettled about doubting.\(^{10}\) At the very least, doubting a proposition requires that one treat both that proposition’s being true and its being false as live options, even if not equally likely ones. The views I’m calling live option accounts are divided on whether this unsettled aspect of doubt makes doubting more akin to an occurrent process than a state.

Olsson and Proietti propose that doubt is a state. They claim that to doubt that \( p \) requires both not believing both \( p \) and not-\( p \) and having the question ‘whether-\( p \)’ on one’s research agenda, which they characterize as “the set of questions that the agent aims to resolve in the process of inquiry”.\(^{11}\) Olsson and Proietti’s project is to define doubt so as to include it in an epistemic logic, so their proposed definition is formal:

\[
DX =_{\text{def}} \neg BX \land \neg B \land X \land (X \land \neg X)\]

Here \( B \) is the epistemic operator ‘believes that’ and \( (X \land \neg X)? \) means that the question ‘whether-\( X \)’ is on the research agenda, which is represented as a set of such questions. So, this definition says that to doubt that \( X \) is to fail to believe both \( X \) and not-\( X \) while at the same time inquiring into ‘whether-\( X \)’.

\(^{10}\) “Active” is Olsson and Proietti’s term. See the discussion below.

\(^{11}\) 2016, p. 93.

\(^{12}\) Ibid., p. 94.
The idea that doubting a proposition requires inquiring into its truth is intriguing. It certainly would explain why disbelievers are not doubters. They are not inquiring. And, as Olsson and Proietti point out, it can explain why doubt is often accompanied by emotions: Having ‘whether-\(p\)’ on one’s research agenda involves acknowledging an uncertainty; one is asking whether \(p\) is true. Uncertainty is often uncomfortable and, especially when the issue is of great importance to us, can produce anxiety and other strong emotions.\(^{13}\)

However, it’s unclear that every inquirer who has not yet formed a belief is a doubter. Suppose I tell you that mill circles are easier on lyra than on trapeze. If you’re like most people reading this, you don’t have enough experience with aerial arts to judge my claim true or false. You may not know what I’m talking about. But suppose you trust me enough to think that the claim is probably true and further suppose that you begin trying to find out. You’re now searching trapeze videos on YouTube. In such a case, I think, you meet Olsson and Proietti’s criteria for doubting this proposition. You don’t yet believe it, but neither do you disbelieve it, and you’re inquiring into the question of whether it is true. Yet, it’s not obvious that you really are a doubter. On the contrary, it seems that you are close to becoming a believer.\(^{14}\)

Perhaps the case is even more compelling if we consider an inquirer just beginning her query and near neutral with regard to the question into which she’s inquiring. If you asked for her opinion at this stage, she would say, “I have no idea; that’s why I’m trying to find out.” She may be aptly described as curious or wondering, but it sounds strange to say she is in doubt.

\(^{13}\)Olsson and Proietti think any adequate account of doubt ought to be able to explain why doubt is often accompanied by emotions. See 2016, p. 94-95. While I won’t discuss this criterion further, I’m inclined to agree with it as a test and think it poses an additional worry for the kinds of reductive analyses presented in the previous section.

\(^{14}\)As will become clear later, I think this is not the only, and not the primary, reason why you shouldn’t count as doubting. Not only are you close to believing, but in the scenario I have in mind, you are actively inquiring. On my view, doubting and inquiring are two distinct ways of relating to a subject matter or space of possibilities. One cannot both be in doubt about and be in inquiry with respect to the same subject matter.
Of course, the linguistic data is far from decisive here, but I do think it suggests that we should be cautious in pegging doubt to the state of mind of inquirers. The active or holding open component of doubt is not necessarily inquiry.

An alternative way of understanding the relation of doubt and inquiry is Isaac Levi’s account of doubt as a pre-inquiry phenomenon. For Levi, doubt functions to provoke or generate inquiry rather than being the state of mind of the inquirer. Still, like Olsson and Proietti, Levi sees doubt as a kind of active suspension:

Doubt that \( h \) sometimes means failure to believe—i.e., either suspense or belief that \( \sim h \). And sometimes it may mean full belief that \( h \) is false. The presence of doubt in either of these senses is not sufficient to motivate inquiry. If the agent fails to be in suspense (fails to be uncertain) as to whether \( h \) is true or false, either the agent fully believes that \( h \) or fully believes that \( \sim h \). There is no real and living doubt motivating efforts to eliminate the doubt by finding reasons to come to full belief that \( h \) or full belief that \( \sim h \). The presence of doubt as I shall understand it is in the sense of suspense.\(^\text{15}\)

There is a sense then in which Levi’s view just is that doubt is suspension of judgment, and so, you might think it belongs among the reductive views. Certainly, his view doesn’t fit neatly in any one category. But on Levi’s account, doubt plays a particular functional role. Doubt involves a conscious pull toward resolution, toward resolving the doubt by coming to believe or disbelieve, and so, for Levi, doubt has the active or unsettled element characteristic of live option accounts.

Levi follows the pragmatists in thinking that inquiry begins from a set of full beliefs and that an agent’s current beliefs do not require justification to her now.\(^\text{16}\) On the contrary, an agent requires justification for subjecting her current full beliefs to critical scrutiny because her current beliefs are certainties from her point of view. That a belief is certain, in Levi’s sense, is not to say that there’s no chance that the agent will change her mind or no evidence

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\(^{15}\) 2012, p. 177, note 7.

\(^{16}\) For Levi on belief see, e.g., 2012 ch. 9, especially p. 166-167 on justification, 2004 ch. 1, and 1991 sect. 2.1.
that would justify her revisiting the matter. Rather, it is to say that the agent takes the belief as given in her inquiries without further justification. She relies on her full beliefs and proceeds as if they are true. On the pragmatist picture, part of what it is to believe is to hold fixed in inquiry.

In addition, an agent’s state of full belief sets what Levi calls her “standard for serious possibility”. Serious possibilities are all those propositions an agent could add to her state of full belief without inconsistency. Serious impossibilities are those propositions the addition of which would be inconsistent and so are ruled out by the agent’s state of full belief. Levi’s understanding of suspense, and so of doubt, is built out of these notions of serious possibility and impossibility. To be in suspense about a proposition, according to Levi, is to treat both that proposition and its negation as serious possibilities. That is, to doubt that \( p \) is to recognize that neither \( p \) nor \( \neg p \) is ruled out by one’s current beliefs, to recognize that one needs additional justification for treating either \( p \) or \( \neg p \) as certain.

But it must also be something more if doubt is to provoke inquiry. This is where the active element comes in. Consider the locution “the presence of doubt”, not to mention Peirce’s classic “real and living doubt” in the quote above. Levi’s thought here, I take it, is that doubt is a goal-directed state. Like hunger, thirst, and other desires, doubts have satisfaction conditions, and their functional role is to motivate their possessors to fulfill those conditions. Doubt is satisfied, and so resolved, when the agent comes to full belief or disbelief in the relevant

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17 2012, p. 169.

18 Levi is careful, however, to distinguish the conscious discomfort that the pull of doubt can incite from the momentary feelings of uncertainty that all of us feel from time to time, which he calls angst rather than doubt: “... an inquirer may have moments of anxious doubt concerning matters about which he or she is convinced. The pangs of uncertainty may prompt a search for solace in the medicine or liquor cabinet or in the moral support of one’s friends. But inquirers should not automatically recognize the angst as a legitimate occasion for inquiry” (2004, p. 3).
proposition. Thus, doubt can provoke inquiry because it motivates the search for justification. The “active” element of doubting, for Levi, is not inquiring itself but the pull to resolve the relevant matter that doubt as a goal-directed state has on an agent. While more needs to be said to fill out the account of how and when doubt provokes inquiry, there’s something plausible about the idea that doubt is a state that pushes toward resolution. Indeed, the idea that doubt is a stage of pre-inquiry is a thread I’ll pick up in my own account.

Finally, Russell’s suggestion that doubt is a vacillation takes us to the thought that doubt is an occurrent process. While not more than a gesture at an account of doubt, Russell’s intriguing remarks are oft cited. Since the remarks are so brief, they are worth quoting in full:

> This conclusion may be somewhat reinforced by considering doubt. It is fairly obvious, I think, that we may have many degrees of uncertainty concerning a proposition. We may feel nearly sure that it is true; evenly balanced between its truth and its falsehood; nearly sure that it is false; and between these attitudes any number of other attitudes seem possible. If all these are, as I believe, indefinable relations to one proposition, it would seem natural to place complete disbelief at the bottom of the scale, to balance complete belief at the top. It would be absurd to pretend that such an argument is conclusive, but when it agrees with inspection it may be allowed to count for something.

> The word doubt is perhaps not the best word to describe the attitudes intermediate between complete belief and complete disbelief. “Doubt” suggests a vacillation, an alternate belief and disbelief, which is not the attitude I mean to characterize. I mean an attitude, which may be perfectly stable, in which there is an element of uncertainty — what we should describe by saying, “I think so, but I don’t feel sure”.

The key idea here is that not only belief and disbelief but degrees of belief as well are settled. They are determinate attitudes even if they come in degrees. Russell later in the passage says even suspension of judgment belongs on this scale: “[Complete suspension of judgment] is a determinate attitude with respect to belief and disbelief, and represents the result of an attempt to decide between the two.”

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20 Ibid., p. 143.
Doubt, according to Russell, is not like this. What is characteristic of doubt is instability. Thus, doubt is a different kind of entity altogether from belief, disbelief, and suspension of judgment. Indeed, doubt looks not like an attitude but like a process. To doubt is not merely to assign low or middling probability to a proposition. To do so might involve just as stable and determinate an attitude as all out belief. Rather, to doubt is to be unsettled, to alternate between different determinate attitudes one could have toward that proposition. While I don’t think that doubting involves alternating between conflicting all out doxastic states – that would be too radical a swing in epistemic stance to capture what’s going on in typical cases of being in doubt – the account I’ll go on to propose picks up on this idea that doubt is literally unsettled, and therefore, in at least one of its guises, doubt is best understood as a process.

I.ii Incoherence Accounts

Lastly, incoherence accounts require not only that a doubter treat incompatible possibilities as live, but that those live possibilities conflict in some way with the agent’s existing beliefs. We might see this requirement as responding to the worry facing Olsson and Proietti’s account that inquirers starting from neutral or without any determinate opinion are not in doubt. Incoherence accounts render such agents not doubters because their inquiries need not require revision of existing beliefs.

Paul Thagard’s view is a representative of this kind of account. According to Thagard, doubt is not merely a cognitive attitude but is “emotional incoherence”.21 His starting point is cases like the following:

In 1983, medical researchers heard a young Australian, Barry Marshall, propose that most peptic ulcers are caused by infection by a newly discovered bacterium, now known as *Helicobacter pylori*. The researchers strongly doubted that Marshall could be right about the

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causes of ulcers, and were very annoyed that a beginner would propose such a preposterous theory.\textsuperscript{22}

Based on such cases, Thagard presents the following as an account of doubt:

1. Someone makes a claim about some proposition X.
2. Others notice that X is incoherent with their beliefs.
3. They care about the proposition because it is relevant to their goals.
4. They entertain emotions related to the proposition.
5. The emotions are caused by a combination of the claim, the incoherence and the relevance of the proposition.\textsuperscript{23}

While Thagard makes clear that this account is not a definition but rather a prototype drawn from cases like the one above, it will be useful to proceed as if this is the view of a counterpart of Thagard who does so define doubt.

It is not essential to this hypothetical account that the someone in (1) is distinct from or present with the others in (2). A person might encounter the proposition X while reading or, in rare cases, raise X herself as when one reminds oneself of an alternative one has failed to consider.\textsuperscript{24} But regardless of how the proposition comes to be the subject of attention, on this view doubt looks like a cognitive \textit{and} affective process. Thagard himself describes doubt as a kind of “hot cognition”.\textsuperscript{25}

\textsuperscript{22} \textit{Ibid.}, p.394.

\textsuperscript{23} \textit{Ibid.}, p. 395.

\textsuperscript{24} Thagard gives the example of thinking one’s gloves are in one’s pocket but then realizing one might have forgotten to put them there as a case where doubt is self-generated. See 2004, p. 395. However, it does seem to me that Thagard places undue emphasis on the idea of a claim being made, seeming to imply that doubt can only arise because someone advocates, as opposed to merely presents for consideration, a claim. He says this requirement rules out “fanciful, imaginary cases” where the truth of the proposition isn’t really taken seriously, but his main examples of such cases seem to be cases of philosophical skepticism, e.g. the claims Descartes considers in \textit{Meditation 1}. See p. 401 for Thagard on Descartes.

\textsuperscript{25} 2004, p. 393, 405.
As on Levi’s account, doubt on this view requires not merely that the agent has considered the relevant proposition but also that the matter has some pull for her, even if this pull needn’t be so strong as to immediately put the matter on her agenda for inquiry. Merely entertaining what you take to be an unlikely proposition is not enough to produce the phenomenon described by this account. Again, I think there’s something plausible about this idea that there’s a class of doubt phenomena that require resolution. The medical researchers could not do nothing when confronted with the newcomer’s theory.

In addition, our Thagard-counterpart’s claim that the kind of resolution required is a reconciliation of incoherence between an agent’s beliefs and the proposition(s) she’s entertaining has intuitive plausibility. A detective who has arrested a suspect but then finds evidence that points to that suspect’s innocence may doubt that she has arrested the right person. What this detective needs to resolve her doubt is a way of reconciling the new evidence with her prior beliefs and the evidence that supports them. Indeed, such a reconciling would also go a long way toward resolving the negative affect accompanying her doubts as well.

However, it’s not clear exactly how we should understand the relation between doubt and the emotions on this view. At least one place where they are hard to tease apart is Thagard’s diagnoses of cases of doubt as reasonable or unreasonable, which we might imagine the hypothetical counterpart making as well. Consider the contrasting diagnoses, for example, of the ulcer case above and of philosophical skepticism:

When gastroenterologists first encountered the bacterial theory of ulcers, they had strong negative emotional reactions in part because it was incoherent with their beliefs about the causes of ulcers and the absence of bacteria in the stomach, but also because of their concern about people being treated inappropriately. Their doubts about Barry Marshall’s views were reasonable in 1983, because there was little evidence then that bacteria cause ulcers . . .

. . . Cartesian doubt about whether one exists is not reasonable: no one claims non-existence, and the hypothesis is not incoherent with other beliefs. The same is true for Humean doubt.

26 Ibid., p. 403.
about whether the future will be like the past. There are no negative emotions involved in these philosophical exercises . . .

On the one hand, Cartesian and Humean doubts are charged with lacking affect. A very literal reading of (5) in the definition above would have it that what doubt is is an affective state caused in the right way. Thus, the charge here is consistent with such a reading. And indeed, Thagard, and so again we might imagine his hypothetical counterpart also, claims that noticing incoherence may not involve any conscious recognition at all but merely a negative emotional reaction to a proposition.

But, and this is the other hand, the account also includes criteria for when doubt is reasonable. Those criteria, in keeping with the basis for the judgment of the reasonableness of the gastroenterologists’ doubt, refer only to considerations about evidence and whether the new evidence results in legitimate or illegitimate incoherence. This would suggest that the literal reading of (5) is not quite right; doubt is a state that is responsive to evidence. Thus, while this Thagard counterpart account zeros in on some important features of the phenomena – the need for resolution and the kind of resolution needed – it also highlights

\[\text{Ibid., p. 401.}\]

\[\text{Ibid., p. 396–397.}\]

\[\text{According to Thagard, doubt is reasonable when:}\]

\[\text{“1. A claim about the proposition has been made.}\]

\[\text{2. The noticed incoherence of the proposition with other beliefs is based on a legitimate assessment of coherence.”}\]

And an assessment of coherence is legitimate when:

\[\text{“1. The available evidence has all been taken into account.}\]

\[\text{2. The available hypotheses have all been taken into account.}\]

\[\text{3. The available explanatory relations have all been used to establish constraints among the hypotheses and evidence.}\]

\[\text{4. Constraint maximization has been performed, consciously or unconsciously, producing a coherence judgment about which propositions to accept or reject.”}\]
that care is needed in untangling the epistemic and affective aspects and accompaniments of doubt.

Liv Upshots

This snapshot of the literature reveals two distinct threads that inform thinking about doubt. One the one hand, there’s the idea that doubt is an epistemic stance, perhaps best understood as having or lacking certain doxastic attitudes. The reductive accounts capture this sense of doubt, and to some extent, Olsson and Proietti’s analysis has this idea at its core as well. But there’s also the idea that doubt is a distinct kind of entity from the other doxastic states. Doubting is somehow active or process-like; doubting involves some kind of conscious engagement with the doubted proposition. Russell, Thagard, and perhaps Levi all emphasize this facet of doubt.

That there are two very different senses of doubting is, I think, born out both by the phenomena and by the linguistic data. While the value of linguistic data in this arena is up for debate, there is a clear split in the ways we talk about doubt. We say that A doubts that \( p \), but we just as naturally say that A is experiencing doubts about \( p \). “Adrian doubts that god exists”, but “Blake is experiencing doubts”. Adrian is an agnostic. Her attitude toward the proposition ‘god exists’ is suspension leaning toward disbelief. Blake is a believer who has just encountered new evidence against his belief. Adrian’s doubt isn’t accompanied by strong emotions or any urge to inquire. Blake’s is accompanied by both. Now, while it’s true that beliefs can be accompanied by various emotions, notice that there’s no equivalent split in the way we talk about believing. We say A believes that \( p \), but to say that A is experiencing belief doesn’t make
sense. Beliefs seem to be things one has not things one experiences. Doubt, on the other hand, appears to be both.\textsuperscript{30}

The upshot, I take it, is that any account of doubt ought to acknowledge this split in the phenomena and begin by zeroing in on the account’s target. So I’ll do just that: My account targets doubt as an experience or process. Understanding the full doxastic attitudes as practical attitudes on the model of intentions yields a way of understanding what’s going on when an agent is wavering between belief and suspension or stuck in that uncomfortable position of having to assimilate new evidence that conflicts with her current beliefs. It yields an account of what’s going on when an agent is \textit{experiencing} doubt.

In addition, my account will tie in two other threads from the views surveyed: From Levi – the idea that doubt is a pre-inquiry phenomenon. And from Thagard – the idea that doubt is typically occasioned by recognition of a conflict with one’s beliefs. Let me begin then with the understanding of the doxastic attitudes that gives rise to my account.

\textbf{II Practical Attitudes}

In recent work, Richard Holton has argued that we should understand full or all out belief on the model of intention, in a word, as a “practical attitude”.\textsuperscript{31} Holton follows Michael Bratman in taking intentions to be attitudes that settle deliberations. Once we’ve deliberated about what to do, we form an intention that settles the matter. Ordinarily, we then have no need to reconsider, and at the appropriate time, the intention leads us to act as intended.

\textsuperscript{30} Consider in this connection Thagard’s comment, “[T]here is no point in wasting your time doubting (or even entertaining) a claim that you do not care about” (2004, p. 397). That this claim is intelligible implies there is at least one species of doubt which is a process that takes time, which makes doubting a way someone could waste precious minutes.

\textsuperscript{31} 2014, p.2.
Intentions thus serve two purposes. First, intentions help us cope with our limited cognitive resources. By settling deliberations in advance, we can avoid investing cognitive energy in continuous deliberation up to the moment of action. We also can, in many cases, choose to deliberate when time and resources are more available. Second, intentions allow us to plan and coordinate both intra- and inter-personally. We close off possible courses of action so we can focus on implementing those we have chosen and so we can coordinate our activities with others. In this way, intentions serve as fixed points in our reasoning and deliberating.\(^{32}\) They encode our plans.

Holton argues that beliefs also, like intentions, serve as fixed points for reasoning and deliberation. And they do so in the same way that intentions do — by closing off possibilities. It is just that rather than closing off possible courses of action or practical possibilities, beliefs close off ways the world might be or epistemic possibilities.\(^ {33}\)

The idea is this: When we deliberate about what to do, we spend some amount of time evaluating the relevant considerations and then we make a choice. We form an intention, and when the time comes, the intention leads us to act.\(^ {34}\) In the meantime, we can treat the content of that intention as a premise in further deliberations and as information we can convey to others. So if I intend to go to the library today at 2 p.m. to pick up a book I requested, and I believe that it takes twenty minutes to walk from the library to the coffee shop, I conclude that I can make it to the coffee shop to meet you at 2:30, and I confirm our meeting accordingly. My intention of being at the library at 2 p.m. ruled out possibilities in which I was too far from the

\(^ {32}\) The term “fixed points” is Holton’s. See 2014, p. 1-2.

\(^ {33}\) See 2009, p.29-32 and 2014, p. 13-15 for Holton’s discussions of all out beliefs as foreclosing possibilities.

\(^ {34}\) This is not, I hope it’s clear, to claim that all intentions are formed under choice. However, cases where we form intentions as a result of conscious deliberation often do involve choice.
coffee shop to make it there by 2:30 to meet you. It ruled out my being at the grocery store or at home at that time. But likewise, my belief that it takes twenty minutes to walk from the library to the coffee shop played a role as a fixed point in my reasoning. While of course it's possible that construction will force me to take a longer route to the coffee shop or that I trip and roll my ankle and so have to walk much more slowly, and so the walk could take thirty minutes or forty minutes, these are not live possibilities in my reasoning. My belief that the walk takes twenty minutes forecloses these contingencies and so streamlines my deliberation.

Importantly for Holton, beliefs play this role not only in practical deliberations about how to act but also in deliberations about the past and future in which no question of action is involved.35 Thus, unlike intentions, beliefs serve as fixed points in both our theoretical and our practical reasoning. But nevertheless, beliefs resemble intentions, on Holton's view, because, as fixed points, both beliefs and intentions serve to make deliberations manageable for creatures like us.

There is a second way in which Holton thinks beliefs can be modeled on intentions.36 Intentions are stable attitudes. If intentions were not, they could not play the role they do in planning, since we could not count on them in our attempts at coordination. Beliefs, Holton thinks, also involve this element of stability. This is not to say, of course, that we never revise beliefs, but rather that beliefs evidence a tendency to persist once formed. Holton understands this tendency to persist in terms of resistance to re-deliberation. Once a belief is formed, the threshold for new information being sufficient to reopen the matter the belief settles is higher than the threshold for information counting as evidence in an open inquiry into that same question. In other words, some information that would have been relevant and taken into

35 2009, p. 31.

consideration in an initial inquiry is no longer enough to reopen the issue. Thus, beliefs serve as fixed points for reasoning not only because they rule in and out possibilities but also because we can count on them over time. They function as givens, enabling us to cope with the complexity of our inquiries.

While not Holton’s view, I find it most useful to understand belief on this model as consisting of two sorts of commitments — a doxastic commitment and a stability or inquiry-related commitment. For a belief that \( p \), the doxastic commitment is the commitment to take \( p \) as given and to take \( p \) as a premise in reasoning without additional justification. The stability commitment is the commitment not to reopen the question of ‘whether-\( p \)’ absent a significant change in evidence, one that crosses the relevant threshold.\(^{37}\) The first commitment captures Holton’s idea that belief settles deliberation by ruling in and out possibilities and by providing premises for future deliberations both doxastic and practical. The second commitment captures the idea that stability is a matter of thresholds of information.

Note that the relevant commitments do not require any act of committing on the part of the agent and need not involve any sort of accountability. The agent does not setup any additional mechanism whereby she guarantees that she will follow through. Rather, the commitments are evidenced in the agent’s behavior in a set of dispositions to proceed as if, to reason from, and to deliberate or refrain from deliberating.

On this way of understanding all out doxastic attitudes, disbelief is just like belief but with the doxastic commitment reversed — to take not-\( p \) as given and to not treat \( p \) as a live possibility. In addition, David Thorstad and I have argued that at least one species of

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\(^{37}\) Note that this threshold may be rather low in some cases. Perhaps the belief was formed on the basis of little evidence in the first place. Or it might be the case that context plays a role in setting these thresholds, and so if the stakes of the current inquiry are high, the commitment to take \( p \) as given may be rather weak, since the threshold for reopening ‘whether-\( p \)’ in the face of new, contravening evidence might be lower than it otherwise would be.
suspension of judgment, which we term “settling suspension”, is also best understood in this commitment framework. Of course, the doxastic commitment involved in suspension cannot be to proceed as if any proposition is true. Rather, suspension involves the doxastic commitment to treat some set of (what are taken as) mutually incompatible propositions as live possibilities. In the simplest case where the subject matter the agent suspends judgment about can be captured with the propositional question ‘whether-\(p\)’, this set includes just \(p\) and its negation. But agents can also suspend judgment on more complex matters — What causes ulcers? Who will be at the party? Why doesn’t Adrian want to go? In these cases, the set of propositions the agent is committed to treating as live in virtue of suspending is broader. However, even though the doxastic commitment distinguishes settling suspension from belief and disbelief, the stability commitment is the same. Consider in this connection an agnostic who, while undecided on the relevant matter, is committed to not investing further cognitive resources into investigating. She is convinced such effort would be fruitless. In such cases, suspension, like belief, is a stable attitude. It too resists re-deliberation, and for this reason, suspension is also neatly accounted for by the practical attitudes framework.

The framework is summarized in the table below:

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38 See “Settling on Suspension” (unpublished manuscript).
As noted above, settling suspension may not be the only species of full suspension. Settling suspension, you might think, does not account for the range of agents we want to say are suspended. One need not be committed to remaining suspended and refraining from further investigation the way the committed agnostic is to be suspended on a matter. This sets the bar for suspension too high. In particular, there are two classes of agents who we might want to count as suspended but who don’t seem to have the attitude Thorstad and I call settling suspension. First, there are agents who encountered a matter – a question or proposition depending on what sorts of contents you think we suspend on – considered it to some extent and decided that they are not interested enough to pursue it. This is the agent who says, “Hmm, that’s interesting,” and then moves on. Second, there are agents who are active inquirers. They treat a set of possibilities as open because they are engaged in an inquiry that, if all goes well, will lead to settling on one of them.

With regard to the first class of agents, there are three possibilities here. First, it could be that they don’t have any attitude at all toward the matter after moving on. Perhaps they considered it so briefly that they formed no lasting attitude. Second, supposing they do have an enduring attitude on the subject, it could be that this attitude is not robust enough to be suspension, or at least not robust enough to be among the full doxastic states that are my focus here. Such an attitude could be thought of as an analogue of partial belief. Finally, it could be that the attitude of these agents really is settled suspension. It’s just that, in cases like this, the thresholds encoded in the stability commitment are very low because the agents suspended on the basis of little or no inquiry.

In contrast, the second class of agents pushes Thorstad and I to argue that there might be two species of full suspension. Inquiring agents are treating a set of propositions as live possibilities and not proceeding as if any of them are true, so the doxastic commitment involved in their stance toward the relevant subject matter is the same as that of agents whose attitude is settling suspension. However, the attitude of inquiring agents is not stable. On the contrary, as I argued in Chapter 2, they are committed to settling the question and likely aiming to come to believe. Nevertheless, the attitude of these agents can be understood as involving two commitments – a doxastic commitment and a, so to speak, anti-stability commitment – and so we might add the following row to the table of doxastic attitudes:

<table>
<thead>
<tr>
<th>Attitude</th>
<th>Doxastic Commitment</th>
<th>Stability Commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belief</td>
<td>To treat ( p ) as given and ( \neg p ) as not a live possibility; to proceed as if ( p ); to use ( p ) as a premise in reasoning/deliberation/coordination</td>
<td>To not reopen ‘whether-( p )’ until new information reaches the relevant threshold</td>
</tr>
<tr>
<td>Settling Suspension</td>
<td>To treat a set of propositions ( {p_n, p_2 \ldots p_n} ) as live possibilities; to not proceed as if ( {p_n, p_2 \ldots p_n} ); to not use ( {p_n, p_2 \ldots p_n} ) as premises, except in hypothetical reasoning</td>
<td>To not reopen the relevant question until new information reaches the relevant threshold</td>
</tr>
<tr>
<td>Disbelief</td>
<td>To treat ( \neg p ) as given and ( p ) as not a live possibility; to proceed as if ( \neg p ); to use ( \neg p ) as a premise in reasoning/deliberation/coordination</td>
<td>To not reopen ‘whether-( p )’ until new information reaches the relevant threshold</td>
</tr>
</tbody>
</table>
With this understanding of the doxastic attitudes as background, let me finally turn to my positive proposal beginning with some cases to further fix the target.

III Target Phenomena

I’ve already said quite a bit about the phenomena that are central to my account. But here are the cases I’ll have in view in the argument to come:

Police Detective A detective is completing the final paperwork to close a case. She has arrested, processed, and interviewed a suspect. She’s confident that she’s caught the right person. But then some unexpected new evidence comes to light. The new evidence points to her suspect’s innocence. The detective thus finds herself in doubt. Should she finalize the paperwork?

Unexpected Visit You are hosting a party which you believe your friend Tatum is not attending. She previously told you that she has a conflicting appointment. But when you arrive home after a quick trip to the store to pick up a few forgotten items, you see Tatum’s car in your driveway. You naturally believe that Tatum’s car wouldn’t be at your house unless Tatum is, but then again, perhaps Tatum loaned her car to someone else. So upon seeing Tatum’s car you are in a state of doubt.

Following Thagard’s inspiration, my final case comes from the annals of medical history:

Medical Detective In 1854 a particularly virulent strain of cholera broke out in a London neighborhood. This epidemic and the people who investigated it were crucial to convincing medical orthodoxy that cholera is waterborne. A perhaps unlikely amateur investigator, local curate Henry Whitehead was the individual who eventually found the index case and demonstrated how cholera entered the water supply. But Whitehead was initially a skeptic of the waterborne theory. When he first heard the

| Inquiring Suspension | To treat a set of propositions \([p_1, p_2, \ldots, p_n]\) as live possibilities; to not proceed as if \([p_1, p_2, \ldots, p_n]\); to not use \([p_1, p_2, \ldots, p_n]\) as premises, except in hypothetical reasoning | To settle the relevant question in one of the other full doxastic attitudes |

To be clear: Nothing in the argument to come turns on inquiring suspension. If there is such a state, any agent whose attitude toward a subject matter is inquiring suspension is inquiring into that matter not in doubt about it.
idea, he added it to his list of theories to disprove. It was not until he began to tabulate the mortality data that Whitehead began to reconsider his disbelief.\footnote{The story of the cholera epidemic in 1854 London is told in Steven Johnson’s \textit{The Ghost Map}. Whitehead’s discovery of the index case is described in the chapter titled “The Pump Handle”.
}

Note that the experience of doubt in these cases can be located in time even if the exact start and end points are a bit fuzzy. The police detective begins to doubt when she considers the new evidence. Depending on what course of action she pursues, the detective’s doubt will be resolved by some future event — the new evidence turns out to have been fabricated, say. Your doubt in \textit{Unexpected Visit} is even more easily pinpointed in time. You begin to doubt when you see the car in the driveway; your doubt will end no later than when you enter the house and see who’s there. In addition, although I’m not committed to any particular description of the quality of the experiences, I hope it’s plausible that doubt in these cases involves some kind of conscious awareness. Whitehead might have been surprised by the data; the detective might be worried by the new evidence. While I don’t mean to claim that surprise or worry are themselves doubt — I think doubt is an underlying commonality that produces these affective states — doubt is occurrent in these cases. The agents don’t just have doubts; they are in doubt.

An additional observation about the cases: They are split on whether the new information that occasions the doubt is taken as a previously unrecognized fact or is simply under consideration. In \textit{Police Detective}, the new evidence is merely under consideration. It may turn out to be fabricated or misleading. The second two cases involve acquisition or recognition of a previously unrecognized fact. The individuals in these cases — you and Whitehead — are confronted with facts — Tatum’s car in your driveway or mortality data, respectively — that are surprising and don’t fit with their existing beliefs. But these new facts are not themselves in dispute.
This suggests that essential to doubt is not consideration of some proposition that one finds improbable or is in need of justification for but rather some other feature that these cases share. In all of these cases, the information being entertained doesn't fit with the individual's existing beliefs. Of course, more needs to be said about what is meant by “doesn't fit”, but at the very least, accepting the information would require that the individuals in question modify their beliefs. And the individuals recognize this.

These cases and observations together give us a solid pre-theoretical grip. The next section develops the theory of doubt by applying the doxastic attitudes as practical attitudes framework to these cases.

IV The View

Russell's suggestion was that doubt is a vacillation between belief and disbelief. But while the idea that doubt is a process motivates my account, the tendency of beliefs to persist tells against that process being one of alternating between belief and disbelief. In my framework, to alternate between belief and disbelief would involve not only continually revising one's commitments on the matter but also moving lightly, if not spontaneously, from one stable attitude to a conflicting one. And at least in the case of the police detective where the new evidence is not taken as fact, this seems to be precisely what the detective is hesitating to do. Part of her experience of doubt is being unsure of whether to reopen the question of her suspect's guilt. She's hesitating to revise her commitments. So I think the process, or to use Russell's term, vacillation, involved in doubting is less dramatic than a back and forth in one's commitments on the matter. An agent in doubt is not alternating between two stable attitudes. But she is wavering about something, and we can think of her process as a kind of deliberation.
A clue to what kind of deliberation it might be comes from Bratman's discussion of reconsideration and non-reconsideration of intentions. In the normal case, according to Bratman, once formed we don't reconsider our intentions. We settle our deliberations only once. This is what Bratman calls “nonreflective nonreconsideration”.41 We simply act on our previously formed intentions. Even in cases where we do reconsider our intentions, we normally don't ask whether we should now modify our plans; we just go ahead and redeliberate. In Bratman's terms, this is “nonreflective reconsideration”. But, Bratman adds, there are also occasions when we reflectively reconsider or reflectively forego reconsidering. In these cases, we deliberate not about what do in a particular case but about whether to reconsider our prior intention to φ in that circumstance:

There are occasions, however, in which an agent does reconsider — or refrains from reconsidering — on the basis of present deliberation about whether to reconsider. Perhaps I am worried about the wisdom of my plan to finish my book this year, but am also wary of the emotional costs of reopening the issue and of the danger of becoming so self-absorbed that I get little done. So I deliberate about whether to reconsider my prior plan to finish the book...42

In cases of reflective (non-)reconsideration then, a kind of deliberation takes place, but it isn't deliberation about a matter the agent has previously settled exactly. It is a deliberation about whether to reopen that previously settled matter. It is a deliberation about whether revising one's prior intention-commitments is worth the costs.

When belief is modeled on intention, there is a natural analogue of reflective (non-)reconsideration for belief. And that analogue, in my view, is doubt. Doubt is the process of considering whether to reopen a question currently settled by one's all out doxastic states — by belief, disbelief, or settled suspension. In other words, doubt is the process of deliberating

41 1987, p.60. Bratman spells both 'nonreflective' and 'nonreconsideration' without hyphens. I’ve preserved this spelling in quotations, although I prefer the hyphens in my own use.

42 Ibid., p. 60-61.
about whether to reopen a question on which one already has commitments. Of course, this process need not be experienced by the agent as a rational deliberation, and the agent need not conceive of it in any specific terms. The experience will often be more like the vacillation that Russell has in mind — a wavering or feeling of uncertainty about how to proceed.

But what Bratman’s discussion of reflective and non-reflective reconsideration highlights is that, unusual accidents and mad scientists aside, only three things can happen when one has a stable attitude like an intention or belief: (1) The attitude persists and plays its characteristic role in behavior. (2) One non-reflectively redeliberates or reopens inquiry into the matter the attitude previously settled. Such deliberation requires bracketing or giving up the attitude in question. Or (3) one enters a pre-inquiry phase where one considers whether to reopen the matter settled by the attitude. When the settling attitude in question is an intention, (3) is Bratman’s reflective (non-)reconsideration. My claim is that when the settling attitude involved is belief, the pre-inquiry phase marked by (3) is doubt. Thus, my view is that doubt is the pre-inquiry process of considering whether to reopen a matter already settled by one’s doxastic attitudes. Since genuine reopening would require that one, at the very least, bracket one’s existing commitments on the matter, as a shorthand, I will say my account takes doubt to be the process of considering whether to revise one’s belief-commitments.

43 When I say that reopening requires bracketing, I have in mind something along the lines of Bratman’s discussion of genuine redeliberation: “... when I seriously reconsider my prior intention to A, I bracket this intention: during the course of the reconsideration I no longer, strictly speaking, intend to A. One sign of this is that I am treating as admissible certain options believed by me to be incompatible with my A-ing” (1987, p. 94). Reopening a matter requires that possibilities that were previously ruled out by my belief once again be treated as live.

44 There is potentially a fourth possibility here. It is that after some long enough period of time, the attitude is forgotten and so given up without any kind of reconsideration, but this possibility can be set aside.

45 Two points of clarification: First, when I say belief-commitments I mean to include not only commitments involved in belief but also in disbelief and settling suspension. “Doxastic attitude commitments” just doesn’t roll off the tongue. Second, the label belief-commitments may be misleading in the following way: It might give the impression that the deliberation that is doubt could itself lead to new belief formation. Doubt may set off a chain of events that leads to that, but what’s under consideration while doubting is only whether to (re)open inquiry. If inquiry is opened and new beliefs formed, they are formed as a result of inquiry and only indirectly as a result of
In Section I, I said my account of doubt would bring together three threads from the literature: (1) process, (2) pre-inquiry, and (3) occasioned by conflict. While the account of doubt as considering whether to revise one's belief-commitments makes good on (1) and (2), I haven't yet said anything about (3).

Notice that in Bratman's example of reflective reconsideration, it is worry about the wisdom of his plan that leads to deliberation about whether to reconsider. Some consideration, whether a new insight or a recollection, always occasions such deliberation. And this makes sense given the stability of intentions. It's unlikely our intentions would be stable attitudes if we were prone to spontaneous reconsideration of them. Bratman's example is worry, but it's easy to imagine, for example, that acquiring new information about coming events might also lead one to reflectively reconsider one's plans.

Likewise doubting is occasioned by consideration of information or evidence. Like reconsideration of intentions, reconsideration of beliefs is unlikely to be spontaneous given the tendency of beliefs to persist. A trigger is needed to provoke doubt. Characteristic of the information or evidence that triggers doubt is that it conflicts, or is taken to conflict, with the agent's current epistemic state.\(^{46}\) Incorporating this information into the agent's beliefs without inconsistency would (seem to) require revision of at least one of the agent's current attitudes. In this incoherence accounts are correct – doubt is typically occasioned by recognition of doubt. Further, even if doubt occasions renewed inquiry, that new inquiry might end up confirming the prior belief. So, while the agent would have transitioned from a settled mode to an inquiring one and back again, her ultimate commitments would remain the same as those she started with.

\(^{46}\) Of course not every instance of entertaining conflicting information occasions doubt. While it would be nice to be able to say more here about what's required to get to doubt, spelling out the conditions under which such consideration occasions doubt seems to me at least in part an empirical matter. It does seem clear, though, that circumstances can prevent an agent from taking information seriously and so from doubting. For example, information that was passed on by what the agent takes to be an untrustworthy source may fail to occasion doubt because of the agent's distrust of the source, regardless of whether the information would have occasioned doubt in different circumstances.
(apparent) epistemic conflict. However, care is needed in marking the relationship between what occasions doubt and doubt itself. Doubt itself is the process of considering whether to reopen an issue which is already settled by one’s doxastic attitudes. Entertaining new information or evidence that conflicts with one’s current doxastic attitudes is what most often occasions doubt, but it is not what doubting is.\(^{47}\)

To sum up: Doubt, in at least one of its central guises, is the process of considering whether to revise one’s belief-commitments, and this process is typically occasioned by an agent’s entertaining information that is inconsistent with her current beliefs. As such, doubt is a pre-inquiry process, a process of determining whether to inquire.

Return now to my three cases. How are they handled by the account? Police Detective is the paradigm of this phenomenon. In that case, the detective has settled her inquiry into ‘who committed the crime’. She has arrested a suspect who she believes is guilty, and she is finishing the paperwork. But then unexpected new evidence comes to light that seems to point to her suspect’s innocence. So the detective has a belief — the suspect I arrested is the perpetrator — and thus the involved doxastic and stability commitments. When she gets the new evidence, one of two things must be true: Either the new evidence meets the threshold for reopening the matter, in which case she will reopen inquiry, or the evidence does not meet the threshold and her current commitments will be maintained. But the detective isn’t sure which is true; she is conflicted. Of course, the detective herself does not conceive of what she’s

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\(^{47}\) I’m tempted to take this a step further and say that such conflict always rather than merely typically occasions doubting, and so while it isn’t what doubting is, it is necessary for doubting. But I hesitate for two reasons. One, while the stability of beliefs tells against spontaneous reconsideration, I’m not sure it conclusively rules it out. Or at least, it seems to me that further work is needed to establish the point. Two, even if we could rule out spontaneous doubt, it seems possible that the process doubt I’m discussing could be initiated for pragmatic reasons. If there are pragmatic reasons for belief, consideration of such a reason might provoke one to consider whether to revise one’s belief-commitments, but in that case, the reason itself wouldn’t necessarily be inconsistent with the content of the agent’s current doxastic attitudes.
experiencing in these terms, but she feels less confident that her suspect is guilty and finds herself wavering about whether to pursue the new evidence further. To use Bratman's phrase, the detective is reflectively reconsidering whether to reopen the question of her suspect's guilt. She hasn't yet bracketed her belief that the suspect is guilty and reopened inquiry. Instead she's in the process of considering whether to reopen the matter – Is the new evidence enough? The detective is experiencing doubt.

Medical Detective is a case of considering whether to revise disbelief-commitments rather than belief-commitments. But this is really a distinction without a difference. When Henry Whitehead first heard the waterborne theory, he rejected it. He didn't suspend judgment; rather his attitude was disbelief. He added the theory to his list of ideas to gather evidence against. But then as he proceeded to collect the mortality data that he hoped would silence the theory once and for all, the evidence surprised him. Rather than disproving the waterborne theory, the data supported it. But Whitehead was not easily swayed. Some time passed before he set out to find the index case that would finally convince him of the truth of the waterborne theory. In that time, while he collected data but before he explicitly opened inquiry into whether the waterborne theory could be decisively vindicated, Whitehead was reflectively reconsidering. Like the police detective, Whitehead was for a time in the position of being unsure whether his new evidence was sufficient for him to revise his commitments. As the evidence mounted, Henry Whitehead was experiencing doubt.

Finally, Unexpected Visit. On the surface, you might think this case is distinct from the other two. After all, you see Tatum's car in the driveway, and you are not questioning your eyes. While you might for a second wonder whether someone else borrowed the car, seemingly there's no question you will revise your belief. So, isn't this a case of non-reflective reconsideration? But notice what happens if we modify the case so that instead of wondering if
someone borrowed Tatum's car, you know for certain that Tatum never loans her car to anyone. In addition, you know there's no possibility that Tatum left her car at your house while she takes the train, etc. The only possible explanation for Tatum's car being at your house is that Tatum is there. Now when you pull up and see Tatum's car, you immediately revise your belief that Tatum isn't coming. There's no question this version is a case of non-reflective reconsideration. You will walk into the house expecting to see Tatum.

But now we can see that the original case isn't so straightforward. In that case, it is at least possible that when you pull up you are momentarily unsure what the presence of Tatum's car means. It is possible that you waver for a moment on the strength of the evidence because another possibility has presented itself to you, namely that someone might have borrowed the car. Of course, supposing you do doubt, you'll in all likelihood only doubt for a moment. You are going into the house anyway, and we might expect, you decide before you open the front door to search for Tatum when you enter. So you move from doubting to inquiring in very little time. Indeed, it may happen so fast that doubting and inquiring may not seem distinct to you.

Thus, while it's clear that the exact details of the case make a difference to whether you in fact doubt in Unexpected Visit, it is nevertheless an important limit case for my account. If there is a moment of doubt in Unexpected Visit, this represents the minimum in terms of occurrent process required for being in doubt. On the other hand, we can imagine even a third version of the case where something prevents you from entering the house, at least for a few minutes, extending the period of time in which you might doubt. Perhaps some such time delay is required. Thus, the variations of Unexpected Visit help to carve out the, so speak, lower bound of the experience of doubt.
Conclusion

That concludes my case that doubt is the process of considering whether to revise one’s belief-commitments. The jumping off point for my proposal was the observation that the literature on doubt tracks a split in the phenomena we refer to with ‘doubt’ and related terms. On the one hand, we say an individual doubts that $p$ when they attribute a low probability to that proposition. In these kinds of cases, what we refer to as doubt looks like an epistemic state. On the other hand, we talk of doubt as an experience, an individual is in doubt or having doubts. In these sorts of cases doubt looks like a process. While this split is not always explicitly acknowledged as such, accounts of doubt normally focus on only one kind of phenomena.

My own account focused on the latter category of doubt phenomena — doubt as an occurrent process. I have proposed that, when we understand the all out doxastic attitudes on the model of intention, a new possibility for what this process might be is available to us. By cashing out the doxastic and stability components of doxastic attitudes as commitments, we can see that many cases of doubting are well explained as instances of an agent considering whether to revise her belief-commitments, that is, whether to reopen for inquiry a matter that her doxastic attitudes currently settle. Thus, in my view, doubt is a kind of pre-inquiry process.

Of course, you might wonder why I mark such a clear distinction between doubting and inquiring. Why does doubt end when inquiry begins? In other words, why is doubt only a pre-inquiry process? Here the answer is that doubting, in the sense relevant to my account, and inquiring are distinct ways of relating to the space of possibilities. An inquirer is intentionally treating as live two or more incompatible, competing possibilities. A doubter has settled attitudes that rule out those competing possibilities. Her doubt is possible precisely because she still has these commitments. After all, doubt is the process of considering whether revise
those very commitments. In addition, not every process of doubt occasions inquiry. Just as there are processes of reflective non-reconsideration for intentions, there are doubts that never actually lead to reopening the matter.

Finally, while I restricted my tour of the literature to contemporary accounts, the account I’ve proposed is in the spirit of the pragmatist understanding of doubt. Peirce famously claimed, “The irritation of doubt causes a struggle to attain a state of belief.” And likewise Dewey argued that all reflective thinking, what we might call reasoning or inquiry, begins with a problem or uncertainty: “Thinking is not a case of spontaneous combustion; it does not just occur on ‘general principles’. There is something which occasions and evokes it.” According to the pragmatists, doubt is essential to moving us to inquire, and our goal of resolving our doubt sets the end of inquiry. While I don’t claim that every inquiry begins with the process of doubt I’ve elucidated here, by identifying doubt as a kind of pre-inquiry process my account speaks to the intimate connection the pragmatists saw between doubt and inquiry. Doubt is a component of the mindset of questioning and soon-to-be inquiring agents, a component not accounted for by the doxastic attitudes alone. There is, after all, room for doubt.

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48 2014, p. 55.

References


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