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1 Introduction: The Philosophical Significance of Anxiety

If you ain't nervous, you're not paying attention.

—Miles Davis

This book is about the various forms of anxiety—some familiar, some not—that color and shape our lives. The objective is twofold. The first aim, developed in part I, is to deepen our understanding of what anxiety is. We talk of ‘anxiety’ as if the label picks out a distinctive, uniform category. But does it? There is reason for doubt. We use ‘anxiety’ in a variety of ways: as a label for both social worries and hardwired responses to potential threats—not to mention existential angst and clinical disorders. To make sense of this, I develop an empirically informed account of anxiety. By providing a framework that identifies different varieties of anxiety, my account brings a much needed explanation of the diversity in our talk of anxiety. Moreover, my account also demonstrates, contra skepticism from both philosophers of science and emotion theorists, that we can reconcile empirical work indicating that anxiety is an automatic, hardwired feature of our psychology with our ordinary experiences of it as a cognitive, socially driven phenomenon.

The second aim, developed in part II, is to reorient thinking about the role of emotions in moral psychology and ethical theory. Here I argue that the current focus on largely backward-looking moral emotions like guilt and shame leaves us with a picture that is badly incomplete. To get a deeper understanding of emotions’ place in the moral and evaluative domains, we must also take note of the important role that more forward-looking emotions—*anxiety in particular*—play in moral thought and action. Building on the investigation of part I, I focus on what I call *practical anxiety*—an unappreciated variety of anxiety that not only helps individuals identify situations where they face a difficult choice, but also engages epistemic behaviors (e.g., deliberation, reflection, information gathering) that can help them determine what the correct thing to do is. By working principally to orient us toward questions about what we should do, rather than what we have done, practical anxiety can promote better moral decision making. As such, it is an emotion that plays an important role in agency, virtue, and moral progress.

Thus, my project engages with two sets of issues. First, in asking what anxiety is, I take up core questions in philosophical psychology as well as the social and cognitive sciences regarding the nature, function, and individuation of emotions. Second, by looking at the importance that anxiety has for agency, virtue, and decision making, I engage with central issues in moral psychology and ethical theory. Moreover, while these two projects are independently interesting, we will see that they are also intimately intertwined: part II’s account of the importance that anxiety has for agency and ethics builds on the empirically informed account of anxiety developed in part I.

The discussion that follows further draws out the philosophical significance of anxiety. I start by highlighting some of the ways anxiety contributes positively to social and moral life (section 1.1). I then turn to methodological and terminological matters. Here I explain my naturalistic framework and say more about how I will be using ‘anxiety’ and other emotion labels (section 1.2). I conclude with a brief outline of the argument to come (section 1.3).

1.1 *Life’s Anxieties*

The claim that anxiety makes an important, positive contribution to social and moral life meets an immediate hurdle. After all, folk wisdom tells us that anxiety is an inherently unpleasant, pernicious emotion.¹ Anxiety is unpleasant, no doubt. And it can clearly go awry—taking our attention away from what matters or, worse, paralyzing us when we need to act. This, of course, is obvious to anyone who has ever struggled with a bout of anxiety. A recent slew of ‘anxiety memoirs’ enriches the picture with tales of anxiety-wrought havoc and disaster (e.g., Berry, 2014; Stossel, 2013; Smith, 2012). But claims about the pain and trouble that anxiety can bring aren’t just bits of the common lore—they also have empirical and philosophical backing. For instance, a recent review of research investigating the effects of anxiety in evaluative settings notes that it’s “predominantly harmful to task performance” (Zeidner & Matthews, 2005, p. 147). And among philosophers, there is a long tradition—in both western and eastern writings—that views anxiety, and negative emotions more generally, as problematic for virtuous thought and action: the virtuous person is typically thought to display a ‘tranquil mind’ in the sense that there is ‘harmony’ or ‘serenity’ among her beliefs, feelings, and motives—competing impulses have been ‘silenced’ (e.g., Kant, 1797/1996; Annas, 1993, 2011; Hursthouse, 1999; McDowell, 1998; Confucius, 2007, p. 20; Sarkissian, 2010). In short, we seem to have a rather unflattering picture of anxiety: it is impairing, inherently unpleasant, and inconsistent with virtue.

However, while there is much that is correct in these observations about anxiety, they’re not the whole story. Anxiety also has a more moderate and productive side. Here we find forms of anxiety that not only can help us see that we face a potential threat or challenge but that also bring the caution and risk-assessment efforts that better enable us work through the challenges we face. To make this more vivid, consider Henry Marsh. Marsh is one of the world’s most accomplished neurosurgeons. Though he has performed over 400 brain surgeries, these procedures still make him anxious. But, importantly, he does not see his anxiety as a distraction or a curse. Rather, he sees it as the manifestation of his accumulated surgical expertise: when determining whether to remove more of a tumor—at the risk of damaging healthy brain tissue—he is guided by his anxiety. As he explains, “You stop when you start getting more anxious. That’s experience” (Knausgaard, 2015; also see Marsh, 2014).

But you don’t need to be a world-class brain surgeon to benefit from anxiety. The moderate twinge of helpful anxiety is a common feature of everyday life. The pinch of unease felt when talking to a new acquaintance signals that you may have said something offensive; this discomfort then brings an increased deference that can help you get your conversation back on track. Consider as well: feeling the itch of anxiety brings focus in advance of your big test; anxious about your important presentation, you decide to review it one more time and catch a subtle but significant mistake. Anxiety in situations like these—social interactions, public performances, and occasions where one may be evaluated by others—is beneficial because it functions as a regulating device: by signaling a potential danger or

¹ I will say more about anxiety as an emotion (rather than, say, a mood or feeling) below.

challenge, and by prompting caution, focusing attention, and engaging restraint, it operates as a check on overconfidence and our tendency to just go on autopilot.

Moreover, these examples are not just cherry-picked anecdotes. As David Barlow (2001)—a clinical psychologist and founder of the Center for Anxiety and Related Disorders at Boston University—explains,

we have known for almost 100 years that our physical and intellectual performance is driven and enhanced by the experience of anxiety, at least up to a point. In 1908, Yerkes and Dodson demonstrated this in the laboratory by showing that the performance of animals on a simple task was better if they were made ‘moderately anxious’ than if they were experiencing no anxiety at all. Since that time, similar observations have been made concerning human performance in a wide variety of situations and contexts. Without anxiety, little would be accomplished. The performance of athletes, entertainers, executives, artisans, and students would suffer; creativity would diminish. (p. 9)

So while we tend to focus on anxiety run amok—occasions where it manifests in unfortunate, even chronic and debilitating ways—that tendency obscures the milder, and likely more common, cases of anxiety and the benefits it can bring.

Importantly, anxiety’s positive contribution is not limited to facilitating social exchange or enhancing physical and intellectual performance. Contra the negative assessment suggested by the above comments from philosophers like Kant, McDowell, and Annas, anxiety can also make a positive contribution to moral thought and action. To see this, consider the remarks of the eighteenth-century abolitionist John Woolman (1952) as he recounts a particularly formative experience in his struggles with the institution of slavery:

My employer, having a negro woman, sold her, and desired me to write a bill of sale. ... The thing was sudden; and though I felt uneasy at the thoughts of writing an instrument of slavery for one of my fellow-creatures, yet I remembered that I was hired by the year, that it was my master who directed me to do it, and that it was an elderly man, a member of our Society, who bought her; so through weakness I gave way, and wrote it; but at the executing of it I was so afflicted in my mind, that I said before my master and the Friend that I believed slave-keeping to be a practice inconsistent with the Christian religion. (pp. 26–27, emphasis added)

Here Woolman’s talk of being “uneasy” and “afflicted in [his] mind” speaks to the anxiety he felt. More importantly, his anxiety appears to have been morally beneficial in two ways. First, it helped him recognize the decision he was contemplating—agreeing to write the bill of sale and thus to participate in the slave trade—might be mistaken. But his anxiety (his persistent “affliction”) also prompted the reflection and reassessment that ultimately brought him to protest the sale.

In a similar vein, consider a more familiar scenario. The doctor has just told you that given the extent of your mother’s Alzheimer’s, it may be time to put her in a care facility. While you are inclined to follow this suggestion, the decision makes you anxious—your mother has always been terrified of nursing homes. But because of your unease about this decision you know you must make, you begin to consider whether there might be a better way to reconcile her needs and fears. As this example draws out, your anxiety about your choice prompts (potentially) valuable brainstorming. Yet it seems

to do more than just get you engaged in instrumentally valuable thought. For notice: your anxiety also captures something admirable about you—namely, your sensitivity to the significance of the decision you must make and your awareness of the limits of your knowledge and experience with these matters. If that is right, then it suggests that anxiety in a situation like this—a situation where you face a difficult decision—has aretaic value. That is, your anxiety doesn't just help you make a better decision (i.e., it doesn't just have instrumental value); it's also central to your admirable character—it's the epitome of your virtuous concern. Similarly, Nelson Mandela often remarked on the unease that the demands of being both a father and a freedom fighter brought. In fact, these anxieties led him to reflect on “whether one was ever justified in neglecting the welfare of one's own family in order to fight for the welfare of others” (1994, p. 212). Mandela's anxiety not only reveals his sensitivity to his important—but clashing—values, it also underlies our assessment of him. Were he not anxious about how to reconcile his competing obligations to his family and the cause, our admiration of him as a moral exemplar would diminish.²

The emerging picture of anxiety we have here reveals it to be a complicated emotion, one that has the potential to both help and hinder our ability to negotiate the complexities of social and moral life. What are we to make of all this? That, in a nutshell, is the central question of this book. As a first pass at a response, we can turn to some brief claims—slogans if you will—that gesture toward my answers.

- Anxiety is a response to problematic uncertainty: it's an emotion that can help individuals recognize and respond to potential threats, dangers, and challenges.
- Not all that we call 'anxiety' is really anxiety.
- There are distinctive varieties of anxiety that we employ in the face of (evolutionarily and culturally) significant threats—not just the threat of a potential physical harm or social critique, but also, for instance, the more general practical challenges that arise when prior experience proves to be an insufficient guide about what to do.
- Though anxiety can go badly awry, it can also be very valuable.
- A particular variety of anxiety—what I call 'practical anxiety'—is central for virtuous thought and action. It represents an important form of metacognition: one that helps us identify and address conflicts in our beliefs, attitudes, and values.
- Practical anxiety's value is not merely instrumental. It can also be aretaically, perhaps even intrinsically, valuable.
- Anxiety of a moral sort plays a central role in our understanding of good moral decision making and so can shed light on larger questions about moral progress and development.
- Like other emotions, anxiety is something we can learn to regulate—even cultivate—through instruction and experience.

The remainder of this introductory chapter will give more content to these slogans by saying more about what I take anxiety to be and placing it within the context of my broader naturalistic methodology. I end with a brief summary of the arguments to come.

² See Harbin (2016) for a related, somewhat overlapping, discussion of “moral disorientations”—the situation of discomfort we experience when our moral orientation is challenged, undermined, or radically altered.

1.2 Anxiety as a Biocognitive Emotion

In the discussion so far, I have made use of an intuitive understanding of anxiety. But more needs to be said. For one, we use ‘anxiety’ to refer to a wide-ranging set of phenomena and this makes it unclear what, if anything, might unify our anxiety talk. Moreover, even if we agree that there’s something that undergirds our use of ‘anxiety,’ there is still the challenge of explaining what sort of thing anxiety is. For starters, ‘anxiety’ seems to refer to a range of affective states: an emotion, a mood, and a feeling. So which is most relevant and why? Moreover, even if we focus on anxiety understood as an emotion, significant questions remain. After all, as anyone with even a passing familiarity with emotion research is aware, there’s little consensus about the nature of emotions. So what does it mean to say that anxiety is an emotion? With this as backdrop, in the balance of this section, I provide an initial sketch of the account of anxiety that I will be developing in the chapters to come. In doing this, my starting place will be somewhat stipulative (as all starting places must be). The chapters that follow aim to develop and defend this initial picture, arguing that it captures the core of what we’re interested in when we talk of anxiety’s importance for moral and social life.

Anxiety, as I am understanding it, is a negatively valenced affective state that can be fruitfully understood on what I will call the biocognitive model of emotion (cf. Levenson, Soto, & Pole, 2007; Sripada & Stich, 2004; Levenson, 1999). As the name suggests, the biocognitive model takes emotional episodes (e.g., instances of fear, anger, disgust, joy) to be the product of two mechanisms. First, there is a biologically hardwired “core” system that consists of emotion-specific affect programs—largely encapsulated mechanisms that automatically engage stereotyped patterns of behavior to a narrow range of basic challenges and opportunities. Second, there is a more flexible, cognitive, and culturally influenced “control” system. The control system functions both to give shape to the range of stimuli that engage the core system’s affect programs and to influence the patterns of behavior that result.³

To better draw out what understanding anxiety as a biocognitive emotion amounts to, we can start by initially characterizing anxiety as an aversive emotional response to problematic uncertainty: anxiety is typically provoked in situations where one faces a potential threat, danger, or challenge and it tends to bring behaviors aimed at helping one address the uncertainty at hand. Within the context of the biocognitive model, this characterization suggests that anxiety’s biological core (the anxiety affect program) engages a mechanism that (i) sensitizes one to situations where one faces a threat, danger, or challenge whose potential is in some way uncertain and that (ii) prompts unease and associated behaviors—risk minimization efforts, information gathering, and so on—that are aimed at helping one address the uncertainty at hand. The control mechanism then gives (cultural and experience-based) shape to both the range of situations that are seen as problematically uncertain and the specific types of risk-minimization and information-gathering efforts that one subsequently engages in.

With this initial sketch of anxiety as a biocognitive emotion in hand, we can now turn to look at five distinctions that will help us better understand how this picture of anxiety fits within debates about the nature of emotion.

(1) To get started, it will be helpful to situate our understanding anxiety as a biocognitive emotion within the context of the distinction, familiar from research in psychology, between trait anxiety and

³ While I take anxiety (and, as we will see, fear) to be best understood as biocognitive emotions, I remain neutral on whether all emotions should be similarly modeled.

state anxiety. As commonly understood, trait anxiety refers to a stable feature of personality—namely, an individual’s tendency to feel anxious. By contrast, state anxiety is the immediate episode or feeling of anxiety. Applying this, we can see trait anxiety (i.e., anxiety as a disposition or dimension of personality) as being undergirded by the core and control mechanisms of the biocognitive model. State anxiety then amounts to the felt experience of unease that one can have when those mechanisms are engaged—that is, when one sees one’s situation as involving problematic uncertainty. So in thinking about anxiety as a biocognitive emotion, we have a model that incorporates both its state and trait dimensions. In fact, the biocognitive model’s account of the relationship between state and trait—namely, that particular anxious experiences (the state) are the upshot of interactions between the underlying trait and features of one’s situation—accords both with how the dominant psychological models understand this connection and with the experimental work that substantiates it (e.g., Spielberger, 1983; Endler, Edwards, & Vitelli, 1991).⁴ Moreover, that we see this is significant because it licenses the use of research on trait anxiety in support of claims about state anxiety.⁵

(2) In understanding anxiety on the biocognitive model, we get an account of it as an object-directed emotion—an affective state that is different in kind from moods (and feelings). This distinction and its significance merit some discussion. The difference between emotions and moods (or feelings) is, I believe, best understood in terms of the distinctive functional roles that these states play.⁶ At a high level, we can see emotions as affective states whose core function is to monitor an individual’s situation vis-à-vis their environment (what threats/opportunities are present); they do this by engaging mechanisms (the core and control systems) that forge a tight causal connection between one’s appraisal of particular features of one’s situation and the response behaviors that result. Moods, by contrast, are affective states that function to monitor an individual’s internal resources (e.g., mental and physical energy levels); these assessments then act as catalysts/inhibitors to the operation of a range of mental and physical systems—particular moods work to bias an individual’s subsequent beliefs, memories, feelings, and action tendencies.

Applying this to anxiety suggests the following. Instances of anxiety (the emotion) are occasions where one experiences an affective response that combines the appraisal of particular features of one’s situation as potentially threatening/challenging with a range of risk-minimization and epistemic behaviors aimed at helping one address the uncertainty at hand. So understood, anxiety (the emotion) is an intentional state both in the sense that it has content or “aboutness” and in the sense that it is directed at something in particular (e.g., a person, one’s circumstances, the decision at hand). Moreover, and as with emotions in general, this content is evaluatively loaded: to feel anxious about

⁴ In the standard experimental paradigm used to vet state/trait models of anxiety, researchers use responses to questions about trait anxiety (e.g., In social situations I tend to feel uncomfortable; I typically get nervous when I give public presentations) to predict state anxiety (e.g., self-reports of feeling anxious after having been put in a social situation or after having been made to give a public talk). Research of this sort is taken to support the claim that an individual’s state anxiety is the product of her trait anxiety and her situation. See Endler and Kocovski (2001) for an overview of this work.

⁵ As we will see (chapters 2 and 3), the legitimacy of appeals to trait anxiety research of this sort is further enhanced when the research in question also identifies self-reports of feelings of unease or anxiety-related physiological changes among those with high trait anxiety scores—it bolsters the inference that the experimental findings are the result of anxiety, not something else.

⁶ What follows is meant as an articulation of the emotion/mood distinction as it applies to discussion of anxiety and not as a full-fledged argument for the resulting account. (For insightful defenses of the picture I am presenting, see Wong, 2016, and Sizer, 2006. For alternatives, see Prinz, 2004, pp. 182–188; Price, 2006; Goldie, 2000; and Colombetti, 2014.)

the meeting with your boss is to see the meeting as potentially threatening; to be anxious when walking through the woods is to be concerned about the dangers that may be lurking in the trees.

By contrast, someone in an anxious mood (because, say, she's psychologically overwhelmed or fatigued) will experience a sense of unease or worry that either isn't directed at anything in particular or is only "about" very general/diffuse features of one's situation (e.g., a broad, negative assessment about what the future holds). Moreover, this general unease will not—at least not in the first place—lead to specific risk-minimization and epistemic behaviors of the sort characteristic of anxiety the emotion. Rather, someone in an anxious mood will display certain biases. For instance, she will be more likely to see features of her situation as potentially threatening and so will be more likely to feel anxious (the emotion). But she is also more likely to experience other negative emotions like sadness and fear, and will tend to think more about past situations where she has felt overwhelmed or threatened.

With this overview of the emotion/mood distinction in hand, we can now see why it matters. For starters, because our ordinary use of 'anxiety' often fails to distinguish between anxiety the emotion and anxiety the mood, it is important for me to be clear on what my focus is—anxiety the emotion.⁷ Second, in focusing on anxiety the emotion, I am taking up a project that is importantly different than other philosophical investigations of 'anxiety' that have used that label to pick out a mood-like state (e.g., Price, 2006; Heidegger, 1962) or a more diffuse feeling of unease (e.g., Ratcliffe, 2008). Finally, while anxiety the emotion and anxiety the mood are functionally distinct affective states, they nonetheless interact with one another—as well as (e.g.,) other affective/mental states—in significant ways. Thus, we can explain why, for instance, people in anxious moods more readily feel anxiety the emotion. We also get the beginnings of an explanation of the familiar correlation between anxiety the mood and things like sadness and depression.

(3) Implicit in the above discussion is the idea that anxiety is, in the first place, a forward-looking emotion. Granted, we can sometimes be anxious about things in the past (e.g., when we worry about whether we said something silly at last night's party).⁸ However, as a response that—like fear—concerns threats and challenges, anxiety is an emotion that, at its core, is oriented toward the future (e.g., anxiety about, say, your big talk tomorrow or whether to take the new job). In this way, anxiety contrasts with emotions like guilt, sadness, and shame. Though these emotions can be forward-looking (e.g., anticipatory guilt), they are in the first place backward-looking.⁹ As we will see, anxiety's forward-looking orientation is central not just to our understanding of it as an emotion, but also to our appreciation of its relevance for social and moral life.

(4) In taking anxiety to be a biocognitive emotion, we are understanding it to be more than just a clinical phenomenon. But much of the empirical work on anxiety focuses on its extreme or pathological manifestations and this can leave the impression that 'anxiety' refers only to a clinical

⁷ 'Anxiety' is not the only label that is ambiguous in this way. My talk of my sadness or joy can be ambiguous between the emotional state (e.g., sadness that my father has passed; joy about my successful talk) and a distinct, but similar, mood (e.g., a diffuse sadness about the state of world; a generally happy outlook on my future).

⁸ Though I grant that anxiety can be backward-looking, it's worth noting that examples like the one in the text invite alternative explanations—for instance, the unease isn't anxiety, but backward-looking regret about your behavior at the party or forward-looking anxiety about whether your actions will have repercussions.

⁹ Here too we might raise questions: Is (e.g.,) anticipatory guilt really a feeling of the emotion guilt and not instead a general unease (or anxiety) about the prospect that one is likely to feel guilt in the future?

condition—an anxiety disorder. However, while ‘anxiety’ can be used to exclusively refer to a clinical state, I will be using the term in a broader sense. ‘Anxiety’ here will refer not just to extreme and pathological instances of apprehension and worry, but also to the more common and less intense twinges of unease that we experience, for instance, in a social encounter, before giving a public talk, or when thinking about what to do. Not only do I take this broader understanding of anxiety to pick out a familiar feature of everyday life, it’s also one that is generally accepted (though often only implicitly acknowledged) among anxiety researchers (e.g., Barlow, 2001; Zeidner & Matthews, 2011; LeDoux, 2015). So, as we proceed, anxiety of the nonclinical sort will be my central focus.

(5) Finally, on some understandings, the term ‘anxiety’ refers exclusively to consciously experienced worry, nervousness, and discomfort (e.g., LeDoux, 2015; McNally, 2009; Rachman, 2004).¹⁰ However, and as will become more apparent in chapter 2, understanding anxiety as a biocognitive emotion entails that it’s not an exclusively conscious state. More specifically, anxiety can manifest below the level of conscious awareness. It can also be experienced as a mere twinge of unease or a mild feeling of unsettledness (e.g., Horwitz & Wakefield, 2012; Öhman, 2008; Corr, 2008; LeDoux, 1996; Barlow, 2001). This broader understanding of ‘anxiety’ raises important questions that I want to flag. For starters, there are questions about the relationship between conscious and unconscious anxiety and what, if anything, might be special about anxiety when it’s consciously experienced. There’s also the implication that anxiety involves “multilevel” mental processing—at a minimum, it suggests that the processing of anxiety-provoking stimuli can proceed at a “higher” level that engages conscious processing and a “lower” level that does not.¹¹ Having noted some of the issues that arise when we allow that anxiety is not an exclusively conscious state, I want to postpone discussion of them and their significance until chapters 2 and 3.

Shifting gears a bit, the above discussion begins to draw out some of my methodological commitments. So let’s now turn to questions of methodology. As a naturalist, I am concerned to see whether and how our ordinary talk of anxiety (and emotion more generally) fits with existing work in the social and cognitive sciences. So, for instance, I take seriously the skeptical possibility that there may be no unique thing that our anxiety talk refers to. If that’s right, then ‘anxiety’ will be much like ‘jade’ or ‘lily’—terms that pick out heterogeneous collections rather than distinct natural kinds. While I do not believe that such skepticism is warranted, I do believe, as we will see, that some revision of our pretheoretical understanding of anxiety is needed (i.e., not everything we call ‘anxiety’ is, in fact, anxiety). That said, the revisions are modest—or so I will argue.¹²

¹⁰ These proposals generally acknowledge that conscious anxiety is (typically) produced by unconscious threat-detection mechanisms, but they deny that these mechanisms are (part of) “anxiety.” More on this in chapters 2 and 3.

¹¹ A couple of elaborations: (1) My talk of “lower”- and “higher”-level processing is distinct from the labels “low-road” and “high-road” of LeDoux 1996. Though some have taken LeDoux’s terms to pick out (respectively) unconscious and conscious emotion processing, in recent work (e.g., LeDoux, 2015, pp. 209–214) he makes clear that this is not correct—both his “low-road” and “high-road” forms of processing are unconscious. (2) While my use of “lower”- and “higher”-level processing has affinities with the type 1 / type 2 distinction of dual-process theory, one needn’t endorse a dual-process account to accept the account of anxiety that I will be developing. I return to this in chapters 2 and 3.

¹² Here I follow others (e.g., Railton, 1989; Cohen, 2009) in denying that there is a sharp cutoff between when skepticism about the terms/concepts of a discourse is merited or not. Rather, philosophical accounts of a discourse can be more or less revisionary with regard to our commonsense, pretheoretical understanding of it. Thus, in aiming for a nonskeptical account, I am aiming for an account that is, in Railton’s words, “tolerably revisionary” with regard to our commonsense conception.

My naturalistic commitments concern more than just my approach to issues in philosophical psychology and emotion theory. They also give shape to my thinking about moral psychology and ethical theory. This means that I am interested in the role that a scientifically realistic account of anxiety might have for our understanding of human agency and value. Emotions, both positive and negative, are central to how beings like us perceive, learn about, and assess the world. While it may be possible for, say, a Spock-like creature to perceive, learn, and assess without emotion, that's not how we do it. Thus, my methodology investigates the normative realm as it concerns beings like us—not radically idealized beings whose psychologies and frailties are much different from ours.

1.3 Puzzles and Projects: A Preview of What's to Come

If we want to understand why anxiety matters for moral psychology and ethical theory, we need to start with an understanding of what anxiety is in the first place. Thus, the book has two parts: part I develops and defends the biocognitive account of anxiety introduced above; part II then uses this account to tackle a range of issues regarding value, virtue, and decision making. As we will see, there is some modularity to my argument (e.g., much of the account of anxiety's value in part II could be retained even if one is skeptical of the model of anxiety as a biocognitive emotion developed in part I). That said, the discussion of part I is independently significant with respect to central issues in philosophical psychology and emotion theory. Moreover, we will see that the case for anxiety's significance for practical/moral life is stronger when paired with the account of what anxiety is from part I.

The claim that anxiety is a biocognitive emotion presumes that 'anxiety' picks out a unique category. But is this a mistake? After all, we use 'anxiety' in a variety of ways. Yet it's far from obvious whether or how these uses might fit with one another. For instance, in attributing 'anxiety' not just to humans, but to monkeys, rodents—even crayfish¹³—we seem to be picking out some kind of primitive, hardwired defense mechanism. But when we use the term in the context of the unease we experience in the face of social interactions and public performances, we appear to have something different in mind—a more conscious, cognitive state of worried apprehension. To this we can add talk of anxiety in clinical settings as well as the existential angst familiar from the writings of Kierkegaard, Sartre, and others. To many working in areas like the philosophy of science and emotion theory, seeing such a heterogeneous lot is grounds for skepticism—it's evidence that there's no common core to our anxiety talk (e.g., Griffiths, 1997; Rorty, 1980; Russell, 2003; Barrett, 2006; Rachman, 2004). If this skepticism is well founded, then the claim that anxiety is a biocognitive emotion is in trouble. There would be no unique thing that underlies our anxiety talk.

With this mess as backdrop, two puzzles emerge. The Puzzle of Kinds asks what, if anything, explains the striking range of experiences that get put under the label 'anxiety.' More specifically, does 'anxiety' pick out a genuine category, or is it—as the above might suggest—nothing more than a label for a motley collection of disparate phenomena? The Puzzle of Diversity builds from here. If 'anxiety' does pick out a uniform category, what distinguishes it from similar phenomena like fear, shame, and cognitive dissonance? Similarly, how are we to make sense of the range of "anxieties" we just surveyed?

¹³ We find talk of crayfish anxiety in both academic circles (e.g., Fossat, Bacqué-Cazenave, et al., 2014) and the mainstream press (e.g., Gorman, 2014). For more examples and further discussion, see LeDoux (2015, pp. 37–41).

Chapter 2 takes on the Puzzle of Kinds. In particular, observations about the diversity in our use of ‘anxiety’ raise questions not just about whether there is a substantive core to our anxiety talk, but also about whether that core is best understood as a biologically hardwired affect program as the biocognitive model presumes. Drawing on a significant body of work in behavioral and abnormal psychology, psychopharmacology, and neuroscience, I show that these concerns are misplaced: the claim that anxiety is a biocognitive emotion fits better with the empirical findings than do the leading alternative accounts (e.g., anxiety is just a form of fear).

In chapter 3, I show how the biocognitive model allows us to make progress on the Puzzle of Diversity. Understanding anxiety as an emotion that combines a core affect program with a culturally shaped control system both allows us to explain how there can be different varieties of anxiety and provides us with a set of individuation criteria that we can use to determine which forms of anxiety are genuine and which only count as anxiety in a more adulterated or metaphorical sense. When we then apply these insights to our use of ‘anxiety,’ we see that we’re able to vindicate much, though not all, of our anxiety talk. Moreover, the investigation of chapter 3 has two further payoffs. In looking more closely at the ways we talk about anxiety, we will develop a better understanding of the forms of problematic uncertainty it tracks. This, in turn, will allow us to identify three broad varieties of anxiety—what I call environmental, punishment, and practical anxiety—that will take center stage in part II of the book.

With the above model of anxiety in hand, I turn in part II to show how it helps us make progress on issues in moral psychology and ethical theory. Here we find three more puzzles: the Puzzle of Value, the Puzzle of Virtue, and the Puzzle of Progress.

At its core, the Puzzle of Value asks about the ways anxiety is valuable—or not. The case of Henry Marsh suggests that anxiety can, at least on some occasions, be useful. Similarly for the mild anxiety that helps you get your conversation with your new acquaintance back on track. But even if we grant that anxiety can sometimes be instrumentally valuable in situations like these, we might still think that—on balance—it tends to do more harm than good. Is that correct?

Pushing further, we can ask whether anxiety has noninstrumental value: Could it be morally valuable as the Woolman and Mandela quotes seem to suggest? Similarly, we have seen that virtuous thought and action are typically taken to entail tranquility of mind or harmony among one’s beliefs, feelings, and motives. But as the case of your mother’s Alzheimer’s suggests, anxiety in the face of a difficult choice doesn’t just get you to deliberate in ways that can help you come to a better decision. It can also reflect well on you—it can be an expression of your awareness of both what is at stake and your own fallibility. If that’s correct, then anxiety may be aretaically valuable: it can contribute to the excellence of your character. How might we reconcile these competing assessments? And what might an answer to this question imply about the plausibility of the standard “harmony” model of virtue?

Related to the Puzzle of Value is the Puzzle of Virtue. As we just noted, the Alzheimer’s case suggests not only that anxiety matters for virtue, but that it matters, in part, because it gets you to reflect on the decision you face. But this claim—that deliberation and reflection matter—is challenged by a recent, empirically motivated line of argument. This skepticism seeks to undermine the widely held thought that deliberation is essential to virtuous agency by arguing that we rarely—if ever—engage in the kind of genuine deliberation presupposed by most standard views of agency (e.g., Haidt, 2001;

Doris, 2015; Prinz, 2007). What, if anything, might our understanding of anxiety and its value add to this debate?

In chapter 4, I argue in response to the Puzzle of Value that anxiety can be valuable. A key part of defanging worries on this front lies in turning our attention away from vivid but atypical cases of extreme anxiety and the unfortunate consequences it brings (Woody Allen movies come to mind here). When we focus instead on our more common—and less intense—experiences of anxiety, we see that the above concerns fade. So while it's certainly true that intense bouts (or deficits) of anxiety can be problematic, the emotion in general tends to be a fitting and beneficial response to a wide range of uncertain threats and difficult challenges. The argument for anxiety's value gains further support from the conclusion from part I that there are different kinds of anxiety—some of which, it turns out, are more valuable than others.

Having made a case for anxiety as a fitting and instrumentally valuable emotion, I then turn to argue for a more provocative claim: anxiety—more specifically, practical anxiety—is aretaically valuable. Building from examples like the above case of your decision about what to do for your Alzheimer's-stricken mother, I argue that feeling anxiety in the face of a novel or difficult decision like this is part of what it is to be a virtuous, morally concerned individual. To not be uneasy or worried in such a situation strikes us not just as odd, but as a failing—one is disturbingly detached from the significance and uncertainty inherent in the decision at hand. If that's correct, then anxiety is aretaically valuable.

Chapter 5 argues that an appreciation of practical anxiety is crucial for making sense of the central role that deliberation plays in our understanding of virtuous human agency and so is crucial to resolving the Puzzle of Virtue. To draw this out, I argue that an understanding of anxiety's role in our psychology provides important tools for disarming Doris/Haidt-style skepticism. In particular, I develop a two-part argument. First, I explain why deliberation matters for virtuous agency: in short, it's essential to our ability to come to good decisions about what to do in hard or novel situations—situations where automatic mechanisms alone are insufficient to provide us with the guidance we need. Second, I argue that practical anxiety is uniquely well suited to engage us in this deliberation. Not only is practical anxiety central to our ability to recognize that we face a hard choice, but the manner in which it (typically) does this—an unpleasant feeling of unease—acts as an alarm that spurs the deliberation and reflection that can help us better understand what the best thing to do is.

Building on the Puzzle of Virtue, we find the final puzzle—the Puzzle of Progress. If there is an important role for anxiety in virtuous agency and good decision making, then anxiety is likely to be a central mechanism of moral progress. Here the Woolman example is suggestive. But one might worry that his situation isn't representative—anxiety about (social) change seems more likely to bring resistance, not improvement.

Chapter 6 argues not only that anxiety is a central mechanism of moral progress, but also that understanding why this is the case provides us with insight both into when (practical) anxiety will contribute to progressive change in moral belief and attitude, and into what we can do to harness its potential as a mechanism of moral reform. To do this, I move in two steps. First, I examine the role that moral reformers—abolitionists, suffragists, and defenders of equality more generally—play in bringing genuinely progressive change in moral beliefs and attitudes. What we find is that many of these moral reformers display a distinctive, anxiety-driven form of moral doubt and concern: they are

sensitive to the possibility that the correct thing to do might not be what is prescribed by existing moral conventions, and (as a result) they are motivated to figure out what the morally correct thing to do is. In the second step, I assemble insights uncovered in part I about what anxiety is and how it functions as well as lessons from psychiatry and clinical psychology regarding how we can productively shape when and how we feel anxiety. The result is an initial account of how (practical) anxiety can be cultivated so that we experience it at the right time and in the right way.

Stepping back, the answers to the five puzzles that emerge from these chapters hang together in a mutually reinforcing way. The account of part I offers an empirically informed model of what anxiety is and how it functions. This model then provides important resources that help us understand, in part II, the value of a forward-looking emotion like anxiety. With these preliminary matters dispatched, we are now ready to start our investigation. I begin with the Puzzle of Kinds.