

Wonder as an Experience of Beauty

BY

ERIC BARCLAY MACTAGGART
B.M., University of Iowa, 2009
M.A., University of Kent, 2012
M.A., University of Illinois at Chicago, 2017

THESIS

Submitted as partial fulfillment of the requirements
for the degree of Doctor of Philosophy in Philosophy
in the Graduate College of the
University of Illinois at Chicago, 2022

Chicago, Illinois

Defense Committee:

A.W. Eaton, Chair and Advisor
Samuel Fleischacker
Anthony Laden
Marya Schechtman
Hans Maes, University of Kent

ACKNOWLEDGEMENTS

I am very grateful to Anne Eaton and Sam Fleischacker for their encouragement and insights from the start of this project. Anne has provided unwavering support and enthusiasm for my philosophical work and offered valuable feedback for countless drafts of various research projects over the years. Sam has been a great mentor, pushed me to do my best work, and asked questions that helped me develop the overall shape of the dissertation. I am also thankful for Tony Laden's feedback on drafts and his illuminating metaphors about philosophy, which have had a large influence on my dissertation and work in general.

I also thank Marya Schechtman for her support and Connie Meinwald for her guidance with my research on *aporia*, a project which has helped me sort out some of the conceptual terrain around wonder.

Hans Maes has played an important role in my journey as a philosopher; I thank him for his teachings at the University of Kent, for helping me find my way to UIC, and for joining my dissertation committee. My research on Walton's "Categories of Art" and accidental beauty under his supervision years ago informed parts of the dissertation.

I also want to acknowledge the intellectual community at the Center for Ethics and Education, who provided useful feedback for this project.

I am fortunate to have family and friends who have supported me in numerous ways. I thank Stephen Dvorak for the opportunity to talk about wonder with pre-med students, and I benefitted from conversations about wonder with Chris Carr, Travis Hawkes, Andrew Napier, and Alex Wilson. Finally, I thank Dana Hogarth for being a sounding board and so supportive and patient over the past few years of working on this dissertation—I dedicate it to her.

EBM

TABLE OF CONTENTS

CHAPTER

I.	WONDER.....	1
II.	WONDER AND BEAUTY.....	31
III.	INQUIRY.....	62
IV.	VIRTUOUS WONDER.....	94
V.	CULTIVATING VIRTUOUS WONDER.....	139
	CITED LITERATURE.....	167
	VITA.....	184

SUMMARY

Wonder plays a role in many aspects of our lives—e.g., in appreciating art and nature, religious experiences, and scientific and philosophical inquiry—and there is a wide variety of intuitive cases of the experience. This diversity raises philosophically interesting questions like, What is wonder? In what ways is this experience valuable? Are there objects at which we ought not wonder? Plato, Aristotle, and Descartes note the significance of wonder, yet the topic of wonder remains underexplored in philosophy. There have been few attempts to answer these questions about the nature and value of wonder in a systematic way. My dissertation aims to provide such answers. I show how understanding wonder as a type of experience of beauty—an idea that has not received serious attention—reveals new insights about wonder’s nature and value.

After I examine and make necessary modifications to features of wonder that are often cited in the literature, I further develop my picture of wonder and its relation to beauty by drawing on Alexander Nehamas’s account of the latter. On my Nehamasian view, the experience of beauty characteristically involves a pleasure of anticipation and a vague desire to learn more about the object. This prompts an inquiry in which the subject aims to better understand and appreciate what makes the object distinctive and finally valuable. Wonder is an experience of beauty in which the subject also has a sense that the object is extraordinary.

My characterization of wonder and the inquiry associated with this experience provides resources for thinking about the normative evaluations that we can make about episodes of wonder. Drawing on these investigations and neo-Aristotelian work on virtue, I develop an account of virtuous wonder (i.e., the disposition to experience wonder in appropriate ways) and argue that this trait is an aesthetic and intellectual virtue. Similarly, I bring together Aristotelian ideas and my previous insights to propose methods for cultivating this character virtue.

I. WONDER

The experience of wonder plays a role in several aspects of our lives, e.g., in appreciating art and nature, religious experiences, and scientific and philosophical inquiry.¹ There is a wide variety of intuitive cases of wonder. For example, it is common to experience wonder in viewing artworks such as Sagrada Família or natural wonders like the aurora borealis and flora or fauna that we find extraordinary (e.g., bowerbirds). Appreciating all the natural beauty around us might also elicit a wonder that has a transcendent element and is directed towards God's benevolence and powers (Lloyd 2018, p.201). We can also come to see the extraordinary and experience wonder towards what is often taken for granted, as is illustrated in Platonic dialogues or in what some theorists call 'existential wonder'—i.e., wonder at the thought that the universe as a whole and all that is in it simply *exists* rather than not (see, e.g., *Theaetetus* and Hepburn 1980). These artistic, natural, divine, or abstract objects can potentially elicit wonder in our first-time experience of them or after having been exposed to them in some way before. Our experiences of wonder might differ in intensity, and the way in which we engage with an object of wonder varies as well, from quiet contemplation to physically moving about to get a better look at the object.

This diversity raises philosophically interesting questions: Is there something that all these sorts of cases have in common and that is distinctive? *What is wonder?* There are also questions here about wonder's value: In what ways is this experience valuable? Are there objects at which we ought not wonder? Some famous philosophers have noted the significance of wonder: Plato and Aristotle state that philosophy begins in wonder, Descartes describes it as the

¹ My focus is on the experience or state of wonder rather than other, much more common, meanings found in ordinary speech like 'I was wondering if you could do me a favor' or 'I wonder what time it is' or 'It's no wonder they lost the game' (see Fisher 1998, p.11, Sherry 2013, p.343, and Tobia 2015, p.2 for similar ideas).

first of the passions, and Martha Nussbaum holds that it is an important emotion with respect to one's moral development but finds it difficult to fit into her theory of emotion.² Yet, the topic of wonder remains underexplored in philosophy. There have been few attempts to answer these sorts of questions about the nature and value of wonder in a systematic way. My dissertation aims to provide such answers.³

In this first chapter, I begin with a review of the relatively small body of literature on wonder (which includes work from various humanities disciplines). I focus my discussion on how five influential contemporary theorists characterize wonder: Ronald Hepburn, Martha Nussbaum, Kevin Tobia, Philip Fisher, and Robert Fuller.⁴ Section 1 focuses on the shortcomings of each view, noting how each requires some modification; each is too inclusive, too exclusive, or neglects important features of this experience. I indicate the strengths of these accounts of wonder in Section 2, where I offer my modified characterization of wonder which draws on these strengths while avoiding the weaknesses outlined in §1. But before laying out my revised set of features of wonder, I describe the structure of my view: I opt for a Wittgensteinian approach that provides *characteristic features* of wonder rather than individually necessary and jointly sufficient conditions of the concept. This approach is relevant in Section 3, where I offer

² See Plato's *Theaetetus* (155d), Aristotle's *Metaphysics* (982b), Descartes's *Passions of the Soul* (CSM I, p.350), and Nussbaum 2001, pp.53-6, 213, 322.

³ Along these lines, many wonder theorists share the sentiment that their work serves as a preliminary investigation and opens up a discussion about wonder (see, e.g., Parsons 1969, p.84; Hepburn 1980, pp.2, 21; Tobia 2015, p.13; Vasalou 2015, p.1).

⁴ While I do not focus on the history of wonder in this dissertation, there are a few books on this topic, e.g., Daston and Park 1998, Quinn 2002, Vasalou 2015, and (to some extent) Lloyd 2018. Also, I should note that Adam Smith provides a somewhat detailed account of wonder. I do not provide a detailed discussion of it here because contemporary theorists like Hepburn offer improvements to it. Similarly, while Martin Heidegger provides a rather detailed account of wonder, I take it to be of a very special type—one that is exclusive to metaphysical inquiry (or, at least, one concerning the activity of philosophy) (see, e.g., Lloyd 2018, p.132; Rubenstein 2013, pp.149-50, 153, 164 and 2008, pp.17, 25, 38). Heidegger's analysis of wonder (*Verhaltenheit*) does not account for many experiences of wonder—e.g., the intuitive case concerning the Sagrada Família noted above.

an initial exploration of an idea suggested by my modified characterization of wonder but that has not been seriously considered in the literature: *wonder is a type of experience of beauty*.

The remainder of the dissertation fleshes out this idea and illustrates how understanding wonder in terms of beauty reveals novel insights about wonder's nature and value. This includes making a couple of further refinements to my modified characterization of wonder from this first chapter; in Chapters 2 and 3, I make further refinements regarding pleasure (positive valence), the aim of the inquiry that is motivated by the experience of wonder, and the relation between wonder and the inquiry that it prompts. Developing a detailed account of the nature of wonder in Chapters 1-3 provides important resources for Chapters 4-5, where I focus on the value of this experience. I draw upon insights from the first three chapters in developing an account of what I call *virtuous wonder* and how to cultivate this character virtue.

§1

Hepburn's 1980 essay, "The Inaugural Address: Wonder," offers several insights about the nature and value of wonder. In exploring what he considers to be problematic aspects of wonder, Hepburn discusses several types of wonder. This variety both highlights the restrictiveness of some previous accounts and helps us develop a characterization of wonder that captures this diversity. For example, Hepburn describes varieties of wonder that survive causal explanations, which challenges Adam Smith's view that once an object of wonder is completely explained (i.e., the object is classified, or a gap between successive events is smoothed over) our wonder vanishes (Smith 1980, pp.39, 42).

Given that Hepburn does not intend to lay out a full characterization or account of wonder, it is not surprising that his article leaves out some important and oft-cited features of wonder, such as the experience prompting inquiry and the object of wonder being experienced as

extraordinary. Nevertheless, such features are compatible with what he does say about wonder. The main issue with Hepburn's account is that it inadequately handles the relation between wonder and aesthetic experience—a topic I focus upon later in the dissertation.

When Hepburn explains that “The fields of aesthetic experience and wonder do indeed overlap; but I would resist any stronger claim,” the extent or nature of the overlap is unclear (Hepburn 1980, p.16).⁵ Would he describe wonder as *typically* an aesthetic experience? One might interpret Hepburn as rejecting this sort of view, as he suggests that wonder arising from religious and metaphysical reflection does not belong to aesthetic experience at least partly because the former “acquire a sense of mystery” in the sense that there is no resolution to an inquiry about the object (pp.16-7). However, Hepburn does not explain how a sense of (unresolvable) mystery stands in opposition to the aesthetic realm. Moreover, in his discussion of the overlap, he briefly notes that both aesthetic experience and wonder “are concerned with unusually concentrated, rapt experience” and that some aesthetic theories include an “interrogative and restless element” which bring out further similarities between the two, but he is unclear whether he endorses such theories (p.17).

As I will illustrate later in the dissertation, there are many benefits to adopting this type of aesthetic theory, and such a theory suggests a more significant overlap between wonder and aesthetic experience than Hepburn's initial statement (quoted above). The burgeoning field of everyday aesthetics provides additional support for there being a significant overlap insofar as it argues for inclusive conceptions of aesthetic experience. For example, Yuriko Saito holds that, aside from extremely dangerous, evil, or physically over-taxing phenomena, “there is no

⁵ Also see p.17. Hepburn's suggestion that all instances of the sublime include a component of wonder represents at least *part* of the overlap, but this does not indicate the *extent* of the overlap (see p.21). On my view, the sublime and wonder are distinct sorts of experience (see Chapter 2).

theoretical limit to what can be the object of an aesthetic experience” (Saito 2007, p.13). Robert Stecker defines aesthetic experience as “the experience of attending in a discriminating manner to forms, qualities, or meaningful features of things, attending to these for their own sake or for the sake of this very experience” (Stecker 2006, p.4). Sherri Irvin (2008) draws on this definition to argue that itches can afford aesthetic experiences. As I highlight in Chapter 2, it is tenable that wonder is at least *typically* a type of aesthetic experience.⁶

Like Hepburn, Nussbaum does not focus on providing a full account of wonder in her *Upheavals of Thought* (2001). Also like we saw in my discussion of Hepburn, important and oft-cited features of wonder that Nussbaum merely suggests or does not at all include (namely, that the subject experiences the object as extraordinary) could readily be incorporated into her somewhat cursory characterization of wonder. As I indicated earlier, Nussbaum is most interested in wonder’s role in morality and the one feature of the experience that poses difficulties to her theory of emotion: wonder is non-eudaimonistic.⁷ Nussbaum argues that emotions are necessarily eudaimonistic, i.e., they involve the subject’s sense of the relation between the object eliciting the emotion and their own goals and values. However, she

⁶ I do agree with Hepburn, though, that “Not all aesthetic experience is ‘wondering’ in tone and attitude” (Hepburn 1980, p.15). Cf. Fuller 2006a, p.116.

It is worth noting that, in contrast to Hepburn’s suggestion, Ronald Dworkin holds that natural beauty is both an aesthetic and religious value (2013, p.47). Dworkin brings the aesthetic realm into the religious by defining the latter (‘being religious’) in terms of a commitment to *value* and its independent reality, including aesthetic value. This commitment includes a judgment (and faith) that nature and the universe more generally are beautiful—see pp.10-11 for the key connection between the beauty of nature and the ‘religious attitude.’

⁷ See Nussbaum 2001, pp.54, 55, 73, 191, 56 (especially fn.57, in comparison to fn.21 on p.30). Also see Vasalou 2015, pp.16-7.

acknowledges that wonder—which she takes to be an emotion—is an exception.⁸ In wonder, “the subject is maximally aware of the value of the object, and only minimally aware, if at all, of its relationship to her own plans” (2001, p.54).⁹ This passage and the feature of non-eudaimonism has been particularly influential in the wonder literature; it is discussed or incorporated into several recent characterizations of wonder.¹⁰

However, the main problem with Nussbaum’s view about wonder is that the feature upon which she focuses the most—non-eudaimonism—is inadequate in characterizing wonder. It is unable to capture how a subject’s strong awareness of the object’s instrumental value in relation to *another* person’s plans and projects either counts against or outright excludes the experience being one of wonder. On Nussbaum’s view, the following example does not have any features that count against it being one of wonder:

A teenager visits the Tate Modern and is struck and captivated by Picasso’s *Nude, Green Leaves and Bust*. But instead of being maximally aware of the painting’s final value, she is instead focused on the painting’s instrumental value—not in relation to her *own* projects, but in relation to the projects and plans of *the work’s current owner*. She thinks about how the monetary value of the painting (that it is worth over \$100 million) would have great instrumental value for its owner, whomever that may be.

To address this counterintuitive result, we can instead characterize wonder as including a focused awareness on the final value of the object (that is, its value as an end), and a minimal awareness, if any, of the instrumental value the object has to a particular person.¹¹

⁸ Both Martha Nussbaum and Jesse Prinz—two prominent theorists in philosophy of emotion—consider wonder an emotion. See Nussbaum (2001) and Fingerhut and Prinz (2018, 2020). Moreover, if wonder instead turns out to be a mental state that involves a range of emotions, my views about wonder in this dissertation are not undermined—they might only need minor modification (I thank Samuel Fleischacker for raising this point). Nevertheless, my discussion in later chapters about the formal object of wonder (along with the common move of individuating emotions on these grounds) illustrates the plausibility of understanding wonder as a bona fide emotion.

⁹ Nussbaum emphasizes in several other places that eudaimonism concerns the subject’s *own* plans and projects (e.g., see 2001, pp.52, 118-9, 147).

¹⁰ For example, Fuller 2006a and 2006b; Evans 2012; Vasalou 2013 and 2015; and Kristjánsson 2017 seem to endorse this view. While Tobia 2015 draws upon Nussbaum’s view, he holds that non-eudaimonism is a feature of only *some* instances of wonder (Nussbaum suggests that this feature is to some degree present in all instances of wonder).

¹¹ I further develop this idea in Chapter 2, p.51.

In contrast to Hepburn and Nussbaum, Tobia attempts to provide and defend a full-fledged and systematic account of wonder (which answers the question, What is wonder?) in his 2015 article, “Wonder and Value.” Tobia defends four individually necessary and jointly sufficient conditions for wonder: 1) the subject *attends* to the object of wonder, 2) the subject is *interested* in the object—that is, the subject is captivated, engaged, or disposed to engage further with it, 3) to the subject, the object of wonder seems important or valuable as an end; the object seems to have *final value* and 4) the subject’s experience *includes a positively valenced affect*. I find it laudable that even though Tobia mentions eyes widening and other physiological responses when providing some intuitive cases of wonder, he does not include any of these in his list of necessary and sufficient conditions. Smiling or other physiological responses seem to be present in only some instances of wonder.¹²

However, there are two main issues with Tobia’s account, both of which relate to his attempt to provide necessary and sufficient conditions for wonder. The first is that the sublime, and perhaps other types of aesthetic experience, meet all four sufficient conditions of wonder; yet, Tobia rightly suggests that wonder and the sublime are distinct experiences. To remedy this, Tobia could make either the interest or positive valence conditions more restrictive or nuanced: either characterize interest in terms of an interrogative attitude (as Hepburn does) or provide a more nuanced account of positive valence, e.g., that wonder is a purely pleasurable experience

¹² For a similar view about physiological responses, see Nussbaum 2001, p.25 (also see p.60).

(whereas the experience of the sublime is a mix of pleasure and displeasure).¹³ I suspect that taking the latter route is more fruitful, as Burke's sublime, for instance, includes elements of mystery and inquiry.¹⁴ In any case, Tobia has more work to do with respect to sufficiency.¹⁵

The second issue is the way in which Tobia draws distinctions between wonder and neighboring concepts like awe and curiosity.¹⁶ While Tobia's view that wonder can be distinguished from, say, awe by appealing to his conditions of interest and positivity is plausible, he makes such distinctions in terms of what is *typically* displayed in each type of experience. This move is not inherently problematic, but it does not meet our expectations of an account that provides necessary and sufficient conditions of wonder. We expect clear conceptual lines drawn between wonder and other experiences so that we can sort out not only typical examples, but also atypical cases.

¹³ An alternative solution might be to say that wonder involves a pleasure phenomenologically different from the pleasure involved in the sublime (similar ideas are expressed in Rueger 2013, p.206). There are a couple reasons to take this solution seriously. First, at least in the case of the Kantian sublime, *the source* of pleasure is different from that in the case of wonder. In the latter, theorists often suggest that the source of pleasure is the perceived non-instrumental value of the object. In the former, a second-order judgment involving the subject's higher powers is the source of pleasure (see, e.g., Kant 2000, pp.142, 145; Allison 2001, p.329; and Forsey 2017, p.97. Also see Vasalou 2015, pp.145-6). Second, the sort of relationship between the subject and object in the case of wonder and the sublime is fundamentally different: Kant's sublime is described in terms of power, whereas wonder is usually described in terms of inquiry (see Kant 2000, pp.147, 154, 106).

¹⁴ The following passage from Carolyn Korsmeyer's discussion of Burke's sublime highlights the element of inquiry (also see Burke 1909, p.12):

The *magnetism* of the sublime indicates something excellent in human character and its *quest for knowledge* of the most difficult sort. Burke is somewhat unusual for his time in admitting that there may be something just a little depraved in this paradoxical *curiosity*. He observes that we find the same *fascination* about death in real life as in artistic experience, speculating that a theatre readied for a performance of tragedy would empty with the news that a public execution was being held nearby. One vividly pictures the well-dressed audience flocking to the foot of the gallows to get even closer to the *mystery* of death. (Korsmeyer 2004, p.134, my italics).

This passage seems to refer to Burke 1909, pp.28-30, where Burke explains that we "eagerly pursue" uncommon and grievous calamities and provides the example of the staged tragedy in the theater competing with the spectacle happening outside in the adjoining square. Nevertheless, Burke and Kant both describe the sublime *primarily* in terms of power, whereas wonder is commonly characterized in terms of inquiry (of course, each type of experience could have an element of inquiry or power in it). Also see my fn.13 above.

¹⁵ Tobia acknowledges this when he explains that his article provides an "extended defense" of the four conditions as necessary (2015, p.5) and a "preliminary defense" of them as sufficient (p.13).

¹⁶ See, e.g., Tobia 2015, fn.13.

Like Tobia, Fisher also attempts to provide and defend a full-fledged account of wonder. In his book, *Wonder, the Rainbow, and the Aesthetics of Rare Experiences* (1998), Fisher's (essential) definition of wonder is "a sudden experience of an extraordinary object that produces delight" (1998, p.55).¹⁷ He fills out his account of wonder with notions of the sudden, the unexpected, the simultaneity of the visual (i.e., seeing the whole object of wonder all at once), first-time experiences, rare and singular events, the progression from mystification to explanation, feelings of the freshness of the world, and bodily states like smiling (1998, pp.22, 26-8). A central view that also fleshes out this definition is that, for Fisher, objects of wonder lie in a middle-ground; they are outside of the ordinary, but short of the irrational, inexpressible, unthinkable, unknowable, or unsolvable. Furthermore, the inquiry connected to the state of wonder avoids unthinkable or unsolvable lines of investigation associated with the latter type of object. In contrast to the previously discussed views, Fisher's work highlights the narrative structure of wonder. One of his primary aims is to explore ways in which wonder can unfold, and he is particularly interested in the aesthetic and intellectual aspects of this experience (what he calls the 'aesthetics of wonder' and 'poetics of thought') and their relationship in the contexts of science and art.

While one of the main issues with Tobia's account is that it is too inclusive, the main problem with Fisher's account is that it is too restrictive; his definition excludes several intuitive cases of wonder. This issue can be attributed to three of Fisher's views. The first is his middle-ground view, as it leads to counterintuitive conclusions. Most notably, this middle-ground view excludes our intuitive case of existential wonder from earlier, as the puzzle of existential

¹⁷ Also see Vasalou 2015, p.2.

wonder—that things exist rather than not—is not explainable given the limitations of our resources. Fisher requires that objects of wonder are the not-yet-known, but knowable.

The second is Fisher's claim that wonder is a *sudden* sort of experience in a strong sense; to him, narrative arts normally cannot be objects of wonder because the subject cannot take the work in *all at once*. The only way in which a musical performance, poem, or other narrative art can be a candidate object of wonder is if it is 'visual' in the sense that it lacks a narrative—that is, if it suspends "the machinery that narrativizes the object" (1998, p.24; also p.22). He suggests that sudden and unexpected changes in Stravinsky's music, for example, creates moments that can elicit wonder in the listener. Similarly, a poem can create moments of wonder if it breaks down the syntax to the point where "expectation itself ceases to work and the experience of wonder can take over" (1998, p.23). But this notion of the visual with respect to wonder excludes several pieces of music and poetry that we intuitively consider objects of wonder. I have had experiences of wonder in response to music that is strikingly unique but does not feature sudden and unexpected changes *within* the musical work, e.g., hearing the music of Yeasayer on my first day of a recording studio internship. Further, there are cases where the subject experiences wonder in response to a work that *gradually* reveals interesting features worthy of wonder (e.g., one's first encounter with a performance of John Cage's *4'33*" or recording of The Velvet Underground's *Heroin*).

While the second view discussed here incorporates the idea that sudden and unexpected stimuli play a role in wonder, it is important to discuss Fisher's rather strong view regarding the unexpected—the third view which leads to an overly restrictive account of wonder. To Fisher, wonder occurs only when something *completely unexpected* occurs, i.e., in the absence of any

expectation. “For wonder there must be no element of memory in the experience” (1998, p.18).¹⁸ But, as Patrick Sherry and other theorists point out, wonder “can come suddenly and unexpectedly as well as being anticipated” (Sherry 2013, p.350; also Prinz 2011, p.83; Fingerhut and Prinz 2018, p.117). There are plenty of intuitive cases of wonder in which there is some degree of expectation involved, e.g., my own experience of visiting Sagrada Família.¹⁹

Fisher states that three things are important within the experience of wonder: the visual, the sudden, and the unexpected. The last couple of issues raised here show that this view leads to an overly restrictive account of wonder.

In contrast to the four previous theorists discussed, Fuller *explicitly* deviates from searching for necessary and sufficient conditions for wonder; he instead offers a prototype theory of wonder, following philosopher Aaron Ben-Ze’ev’s approach to understanding emotion-types (Fuller 2006a, pp.30-1, 33; Ben-Ze’ev 2001, pp.6-9). Fuller indicates several “prototypical characteristics” of wonder, i.e., characteristics that are fully manifest in the prototypical case and that are significant for the category ‘wonder.’²⁰ Some prototypical characteristics of wonder include the following: the experience is relatively brief in duration, it is positively valenced, and

¹⁸ The completely unexpected is too restrictive of a condition for an account of wonder even on Zazkis and Zazkis’s more charitable reading of Fisher: that, in the experience of wonder, the subject is not *conscious of* their expectations (2014, p.75).

It is worth mentioning that Fisher describes an instance of a type of wonder involving the *unexpectedness of interconnectivity* and that I find very relatable: We “wonder that there could be any connection between the spray around an oar as it comes out of the water on a sunny day and a single drop of dew on a blade of grass as we lay on the ground nearby, and between both those and an echo, is an experience of the genuine but unexpected interconnectedness of things” (1998, p.99). For similar ideas, see Fuller 2006b, p.374.

¹⁹ Another issue with Fisher’s account is that he seems to conflate ‘extraordinary’ and the ‘unexpected’ (see Fisher 1998, p.57 and Vasalou 2013, p.28/fn.29). On my view, an object that we to some extent expect can still be extraordinary. I will return to this idea later.

²⁰ Ultimately, I opt for a slightly different approach by drawing upon Dennis Dutton’s work. I do not think that trying to find “the best example” or “most typical case” of the category ‘wonder’ is an illuminating or otherwise worthwhile project. It seems misguided and very difficult to rank strong intuitions and ultimately identify “the best” example of the category (Ben-Ze’ev 2001 p.6).

the subject remains focused on the intrinsic value of the object while minimally aware of its relationship to human projects and plans.²¹ Fuller focuses, though, on two characteristics which provide the most support for his thesis that wonder is and should be a principal source of (open-minded) spirituality.²² The first is that wonder is elicited by either novel, unexpected, or inexplicable displays of vitality, beauty, order, or truth; particularly intense or vivid instances of vitality, beauty, order, truth, or power; or phenomena with a mix of these features.²³ Second (and related to the first), the subject seeks increased rapport with and connection to *the source* of such phenomena; they are prompted to search for some causal agency or general order of existence that somehow lies beyond sensory experience. In other words, in pursuing this search, the subject engages in *abstract, higher-order thinking*.

Fuller is clear that wonder prompts inquiry of a special sort (Fuller 2006b, pp.371, 374, 378-9).²⁴ The higher-order thinking associated with wonder involves the subject considering broader frameworks to find connections between different kinds of things and how they fit into a larger whole, which consequently “imparts meaning to otherwise separate objects” (2006b, p.377).²⁵ Important for Fuller, experiences of wonder prompt the subject to construct realms of possibility, e.g., to consider metaphysical or fictional possibilities of the past, present, or future

²¹ For textual support, see Fuller 2006a, pp. 101, 134 (brief duration); 2006b, pp.366, 380 (positive valence—*joy* in particular); and 2006a, pp.41, 100 (intrinsic value). Though Fuller endorses Nussbaum’s view of non-eudaimonism in 2006b, pp.383-4 (also see 2006a, p.95), he also seems to (inadvertently) improve upon this view in 2006a, pp.50, 41, 63, 99-100. Also see my discussion above of Nussbaum. Along similar lines, Fuller holds that the inquiry following wonder is “nonegoistic” (2006a, p.15).

²² Fuller 2006a, pp.2, 157 and 2006b, pp.365, 383. These citations reflect how Fuller’s article (2006b) is in many ways a condensed version of his book (2006a)—they were published only about five months apart.

²³ Fuller 2006a, pp.8, 15, 37, 41, 126, 136, 148, 150 and 2006b, pp.370, 377, 379. Fuller tends to emphasize the first type and ignore the second (see, e.g., 2006b, pp.373, 378 and 2006a, pp.15, 37, 81, 126). Still, this is only a minor problem because both types of phenomena prompt ‘higher-order’ thought, a significant feature of wonder that is also the most important for supporting his central thesis (see 2006a, pp.150, 63, 81).

²⁴ Fuller holds that this type of inquiry is distinct from the abstract thinking associated with curiosity—he characterizes curiosity in 2006a, pp.125, 156.

²⁵ Also see Fuller 2006a, pp.9, 13, 38, 81, 85, 88, 125-6.

(2006b, p.375; 2006a, pp.126, 154).²⁶ These realms of possibility point to wonder’s role in spirituality and religion. What lies at the edges of possibility cannot be tested by science; instead, we turn to theological traditions. An even stronger connection between wonder and spirituality is suggested when Fuller describes occasions where the best or only way to explain inexplicable phenomena is by granting the existence of “some ultimate presence or causal agency [e.g., God] that might account for otherwise inexplicable phenomena” (Fuller 2006b, p.378).²⁷

While this higher-order thinking—what Fuller describes as “[t]he most salient feature of wonder”—is certainly present in some cases of wonder, his indication that this is a prototypical characteristic can be challenged (2006b, p.378). Potential issues arise when we consider intuitive cases of wonder where the initial experience prompts engagement and inquiry that is particular in scope and does not lead the inquirer to seek dramatically deeper patterns in the universe or a theological sense of ‘something more.’ For example, experiencing wonder in response to the mathematics of fractals or Bong Joon Ho’s *Parasite* (2019) often prompts the subject to focus on and analyze certain aspects of the object—such as the degree of self-similarity, fractional dimensions, or infinite roughness of fractals, or the staircase theme in *Parasite*—to gain a deeper understanding or appreciation of the object of wonder.²⁸ If Fuller follows Ben-Ze’ev’s terminology that “A typical case is...one that *exhibits the significant features* of the given emotional category and has but a few distinctive features that are not shared by category members,” then the aforementioned experiences of wonder that do not exhibit Fuller’s significant feature of higher-order thought will count as *atypical* cases (Ben-Ze’ev 2001, p.9, my emphasis). Though I sympathize with Ben-Ze’ev’s point that refuting typical characteristics of

²⁶ In contrast, curiosity concerns “conceptual categories connected only with the actual” (2006b, p.379).

²⁷ For a summary of these points, see Fuller 2006a, p.14 (also see p.15).

²⁸ This roughly reflects how Fuller describes the sort of inquiry associated with curiosity (see Fuller 2006a, pp.125, 156).

an emotion-type like wonder is much more difficult than refuting a theory that presents necessary and sufficient conditions, the conclusion that these sorts of cases are atypical nevertheless strikes me as counterintuitive (Ben-Ze'ev 2001, p.9). Even though Fuller's prototypical characteristic regarding higher-order thought does in some sense account for examples like our wonder towards fractals or *Parasite*, his account neglects—or at least mischaracterizes—these cases of wonder.²⁹

The foregoing discussion highlights some weaknesses of the views of Hepburn, Nussbaum, Tobia, Fisher, and Fuller. I also indicated some of the ways in which we can make improvements upon these characterizations of wonder. In the next section, I offer a modified characterization of wonder—one that avoids the pitfalls and draws upon the strengths of these views about wonder.

§2

Before discussing my refined set of features of wonder, some methodological points are in order; they operate in the background of this chapter (and, to some extent, later chapters as well). There are many places in my previous discussions where intuitions play a role. For example, I introduced intuitive cases of wonder at the outset to help motivate the question of what wonder is and appealed to common intuitions in providing counterexamples to theories that

²⁹ Another issue with Fuller's account is that there are several moments where he seems to leave behind the prototype framework introduced in the first chapter of his book. For example, he states at the outset of Chapter 6 that "Wonder, like all emotional experiences, has cognitive elements. [Wonder] *presupposes* a discrepancy between previous cognitive expectations and some new event. This discrepancy produces the 'astonished mingled with perplexity or bewildered curiosity' that defines wonder" (2006a, p.81, my italics). Surprisingly, this passage comes right after mentioning 'prototypical characteristics' of wonder; his claim that wonder *requires* a new event that breaks previous cognitive expectations is in tension with not only his claim about the two types of stimuli that excite wonder (see my fn.23 above), but also the inherent looseness of prototype theories. As Ben-Ze'ev notes, writers offering a prototype theory use language like 'usually', 'often', or 'typically'—*not* 'presuppose' (2001, p.9).

Fuller's tenuous commitment to a prototype approach is reflected not only in his essay (2006b)—which never mentions or suggests a prototype theory of wonder—but also in Evans's criticism of Fuller. Evans says that wonder "need not" be the way that Fuller describes, suggesting that he is providing a few counterexamples (e.g., the mathematics of fractals) to some *necessary* condition offered by Fuller (Evans 2012, p.132).

(at least seem to) propose necessary and sufficient conditions for wonder. These philosophical moves fit into a long tradition of philosophers relying on language users being pretty reliable in classifying and identifying phenomena to develop a theory of that phenomenon (Nussbaum 2001, pp.8, 10). These skills are part of being an effective communicator and participant in a language community, and they seem to correspond to common intuitions and practices of applying the concept.³⁰ Due to this competence of language users, a theory of a concept such as wonder should retain a core range of phenomena that reflect these common intuitions and practices (p.10).

However, our intuitions are not always clear or held confidently (Boyd and Nagel 2014, p.120), and sometimes there are good reasons for a theory to deviate somewhat from common intuitions and practices, such as being able to explain aspects of the phenomenon or illuminate its nature (Nussbaum 2001, pp.8, 9, 11).³¹ These insights point to a promising philosophical method in developing an account of wonder: John Rawls's method of reflective equilibrium. We work back and forth, making adjustments to fit a theory of a concept with intuitions about individual cases and vice versa, with the aim of reaching an equilibrium between the two (i.e., reaching an acceptable coherence among them).³²

³⁰ Put another way, effective communicators follow conventions in playing Wittgensteinian language games, and these conventions seem to reflect the common-ness of common intuitions. Also, it is worth noting that not everyone is a competent language user in this sense (e.g., those who are just beginning to learn the language). While the skill to classify and identify phenomena, like any other skill, admits of degrees, it seems that 'common' intuitions and practices are rough enough notions that it does not require us to draw precise lines regarding who is competent and who is not.

³¹ As I indicated above, it is important for a theory to not deviate too far from how the concept is used in ordinary language, otherwise we should question whether the theory actually explains the thing that we set out to investigate (Nussbaum 2001, p.10).

³² 'Coherence' refers to not only consistent beliefs, but also a situation in which "some of these beliefs provide support or provide the best explanation for others" (Daniels 2015, p.712). Moreover, this method aims for a 'wide' reflective equilibrium, where we work with leading alternative theories of wonder as well; we aim for a wide set of beliefs about wonder to cohere (Daniels 2020, §3). I should note that Rawls's method was originally used in ethical theorizing to offer justification for a theory but can be applied to other sorts of philosophical inquiry.

There are a couple of further points to make here about reflective equilibrium, both of which interact with the Wittgensteinian aspects of my method for characterizing wonder. First, by looking at the contemporary wonder literature, we get a sampling of contemporary practices and intuitions regarding individual cases of wonder; however, in considering these intuitions and practices in working towards reflective equilibrium, it is important to remain alert to the possibility that our sample is biased or otherwise missing important data in how the concept is used in ordinary language. Accordingly, my account of wonder must be *open-ended* in the sense that, if new data about intuitions or practices emerge, I need to consider how it impacts my views—e.g., I might need to either provide new counterexamples (in §1) or revise my characterization of wonder (e.g., in §2) that reflect this new data.³³ Moreover, I should explain the types of data with which I am concerned. Following Wittgenstein, I do not try to provide a timeless conception or essence of wonder.³⁴ Instead, as I suggest above, my focus is on developing a characterization of wonder that reflects *contemporary* linguistic practices and intuitions.³⁵

The second point about reflective equilibrium is that the adjustments made in this process can take different forms. While theorists providing necessary and sufficient conditions for a concept might adjust their theory in ways that reject an intuitive case (ruling it ‘out’) or include a counterintuitive case (ruling it ‘in’), my Wittgensteinian approach handles intuitions differently: my theory offers reasons for us to be either *disinclined* or *inclined* to apply the concept of

³³ I thank Anthony Laden for raising these issues regarding reflective equilibrium.

³⁴ See *PI* §108; Vasalou 2013, p.34 and 2015, pp.4, 28. Also see Lloyd 2018, p.208. For discussions on how the meaning of wonder has shifted in various ways over the course of its long history, see, e.g., Vasalou 2015, Rubenstein 2008, Daston and Park 1998, and Lloyd 2018 (e.g., pp.2, 205).

³⁵ I should note that contemporary intuitions and practices sometimes have roots in the past (e.g., the cases themselves might come from the distant past, such as Theaetetus’s wonder in Plato’s eponymous dialogue).

wonder. This is a result of how I structure my characterization of wonder, which I describe below.

I draw upon Denis Dutton’s cluster account of art (which is a type of Wittgensteinian family resemblance view) with respect to the structure of my characterization of wonder.³⁶ Dutton provides a list of *characteristic features* of art—what he calls recognition criteria (2006, p.368)—which include features concerning the object or the subject’s experience. He explains that these features are what we tend to turn to when considering whether an object is justifiably called art; they are relevant to our justification for applying the concept ‘art’ to an object. The possession of these features count toward the object falling under the concept ‘art’ and we are inclined to make this attribution. Conversely, when characteristic features are missing, this counts against the object falling under the concept ‘art’ and we are disinclined or resistant to apply this concept to the object (2006, pp.375-6).³⁷ Dutton’s framework does not intend to provide tools to definitively rule whether certain cases are ‘in’ or ‘out.’ Instead, it can help us understand what makes hard cases hard—it preserves the hardness of these cases. We can readily translate these ideas to characterizing wonder.³⁸ Drawing on §1 and making some necessary refinements to oft-cited and important features of wonder in the literature yields tenable

³⁶ For this understanding of Dutton’s work in relation to Wittgenstein, see Adajian 2016, §3.1.

³⁷ For similar ideas, see Weitz 1956, p.33—Weitz similarly develops a theory of art inspired by Wittgenstein’s ideas.

³⁸ To be clear, I do not adopt every aspect of Dutton’s approach. For example, sorting out the relative weighting of certain features does not seem fruitful in understanding the nature of wonder. Instead, I take the features of wonder to form a *homeostatic cluster* (see my p.26 below for more on this point). Furthermore, whereas Dutton suggests that certain sets of characteristic features of art are jointly sufficient for something being ‘art’ (2006, p.375), I do not hold that a case displaying all (or a subset) of the characteristic features wonder is *guaranteed* to be an experience of wonder—see Weitz 1956, p.34 for a view similar to mine. I also follow Weitz’s views that 1) if an object does not display any of the characteristic features, we would not apply the relevant concept, and 2) most similarity conditions are present when we do (justifiably) apply the associated concept (1956, pp.33, 34). For some of these points, also see my Chapter 2, pp.31-2, 37 below.

characteristic features of wonder—what I call typical characteristics of wonder (TCs).³⁹ These features can be organized into three groups: as referring to the subject’s *attitude*, the *object* of wonder, or what wonder *yields*. I discuss each in turn.

Drawing on the (at least suggested) views of Fuller, Hepburn, and Nussbaum, one TC concerning the subject’s attitude is that the state of wonder itself is relatively short-lived, but longer in duration than, say, surprise or astonishment.⁴⁰ To fill out this TC, we can map this relatively short-lived state of wonder onto Peter Goldie’s notion of an ‘emotional episode,’ which is distinct from a Goldiean ‘emotion.’ He explains that the former will be “relatively short-lived” (in the realm of minutes or seconds) whereas the latter “may last for years” (Goldie 2000, p.104). The Goldiean emotion of wonder refers, then, to the disposition to have certain thoughts and feelings (associated with the state of wonder) towards an object of wonder, which the subject might return to throughout their life (similarly, ‘I’ve loved my spouse for years’ refers to the disposition to have loving thoughts and feelings towards my spouse). Goldiean emotions do not require the constant presence of certain thoughts and feelings. This TC also provides some support for the remaining TCs concerning the subject’s attitude, as the latter *permeate* the subject’s state of wonder.

The next TC—which is often suggested in the literature, e.g., by Fuller, Nussbaum, Fisher, and Hepburn—is that the subject’s experience remains positively valenced, e.g., one of

³⁹ For an example of using ‘typical’ in a Wittgensteinian approach, see Warburton 2003, p.67. Also, I think that Wittgenstein’s analogy of fibers of a thread is more useful in clarifying what I mean by ‘typical’ than by drawing on his more famous analogy of ‘family resemblances’ (see *PI* §67). Further, the thread analogy does not face Maurice Mandelbaum’s objection about family resemblances: that family members have a biological genetic connection (see Warburton 2003, pp.83-4).

⁴⁰ See Fuller 2006a, p.101; Hepburn 1980, p.3; and Nussbaum 2001, p.73 (also see Vasalou 2015, p.28).

pleasure or delight.⁴¹ This TC has intuitive pull: when encountering a harrowing natural disaster, for example, one hesitates to call the response to such terrible things ‘wonder.’ Instead, we might call it ‘awe’ or use a similar concept that involves pain or displeasure.

While Hepburn, Tobia, and Nussbaum indicate that the next characteristic is a necessary condition of wonder, I follow Fuller’s suggestion that the feature is typical (i.e., a TC): the experience of wonder remains object-directed and -absorbed, meaning that the subject’s attention is at least primarily focused on the object of wonder (where the ‘object’ is that to which they are directing their attention).⁴² I say *at least primarily* because if the subject’s attention becomes too divided among multiple and unrelated objects, or their focused attention is pulled in various directions, then the experience cannot be considered ‘object-directed and -absorbed.’ It is also worth noting here that the subject’s attention toward an object in some cases of wonder might be best explained in a way akin to Richard Wollheim’s ‘twofoldedness’—where a subject viewing, say, a Delacroix painting attends simultaneously “to what is represented and to the representation, to the object and to the medium” (Wollheim 1980, p.213). For example, in fleshing out the intuitive case of existential wonder noted earlier, the subject might have a sort of twofolded seeing, where their attention remains directed toward both a concrete thing (e.g., a pen) and the abstract thought (the fact of existence); here, the latter is seen through the former.

Drawing on Hepburn and Tobia’s work, another TC of wonder is that the subject has an interrogative attitude of a generalized (and sometimes muted) form.⁴³ This is an intellectually engaged attitude similar to, but distinct from, curiosity; following Hepburn, there is a difference

⁴¹ See Fuller 2006a, p.153 and 2006b, p.380; Nussbaum 2001, pp.54, 189-91, 237, 277-8, 297; Fisher 1998, pp.2, 83; and Hepburn 1980, pp.1, 5-6, 14-6, 20-1. Cf. Tobia 2015, pp.5, 12 and Prinz 2013b, p.6. For empirical support for the positive valence of wonder, see Fingerhut and Prinz 2018, p.116.

⁴² See Hepburn 1980, p.6; Tobia 2015, p.9; Nussbaum 2001, p.73; and Fuller 2006a, pp.46, 49, 99 and 2006b, p.383.

⁴³ See Hepburn 1980, pp.4, 14, 16 and Tobia 2015, p.17. Also see Parsons 1969, pp.85, 90, 92.

between the interrogative attitude of wonder and curiosity insofar as the former can survive analysis or explanations regarding the object of attention whereas the latter cannot (Hepburn 1980, pp.4-5; also Tobia 2015, p.23). Furthermore, this questing and questioning aspect of wonder takes a generalized form in the sense that the object of wonder engages the subject intellectually in an *indeterminate* way. While in the state of wonder, the subject does not think of specific questions or engage in specific lines of inquiry. Further, in this interrogative stance, the subject responds to the object in an open, receptive way as opposed to taking on what Hepburn describes as a closed-off, ‘I’ve seen it all!’ attitude (1980, p.15).⁴⁴

The final TC that refers to the subject’s attitude brings together aspects of the views of Nussbaum, Tobia, and Fuller, each of which by itself is not adequate: the subject remains aware of the seeming final value of the object while being minimally (or not in any way) aware of the seeming instrumental value the object has to a particular person.⁴⁵ Like the previous TC, we see generalized forms of engagement here: the subject has only a *general, vague sense* of the object’s seeming final value—that is, the subject does not have a solid grasp on how or why the phenomenon seems to have value as an end. Relatedly, it is important to emphasize that the object *seems* valuable to the subject; whether it has actual value is not relevant here.⁴⁶ It is also worth highlighting that, in following Tobia, an object of wonder with seeming final value can seem either intrinsically or extrinsically valuable to the subject. For instance, Abraham Lincoln’s pen might be an object of wonder for the subject and seem to have extrinsic final value; it seems

⁴⁴ Also see Rubenstein 2008, p.8. I develop these ideas in Chapters 2 and 3.

⁴⁵ See Nussbaum 2001, p.54 and my pp.5-6 above; Tobia 2015, pp.8-12; and Fuller 2006a, pp.41, 50, 63, 99-100. For empirical support, see Fuller 2006a, p.41.

⁴⁶ I find plausible Tobia’s view that whether an object has *actual* value is important in determining what objects are *worthy* of wonder (see Tobia 2015, fn.8). I return to this topic in Chapter 4.

valuable because of its relation to Lincoln (Tobia 2015, p.10).⁴⁷ In sum, during the state of wonder, the subject typically sets aside the personal plans and projects which normally influence how they judge the value of—and relate to—objects, directing their awareness instead toward the final value of the object.

The previous TC can also be interpreted as concerning the object of wonder: that the object seems finally valuable.⁴⁸ For the other TC regarding the object of wonder, I follow the suggested view of Fuller (and, to some extent, Tobia): objects of wonder are typically experienced as extraordinary.⁴⁹ There are two main points to make here. First, I need to explain what I mean by ‘extraordinary.’ The extraordinary is that which deviates from the norm in a significant and agreeable way. ‘The norm’ here captures a standard range of a category (a kind of thing), what is valued in the category, what is statistically common, or the conventions associated with it.⁵⁰ The term ‘significant’ in my characterization of the extraordinary carries a pair of meanings: 1) that the deviation from the norm is in some way important, notable, or matters to the subject and 2) the deviation is ‘significant’ in degree, i.e., to a great extent (and,

⁴⁷ For these distinctions, Tobia draws on the work of Christine Korsgaard (and G.E. Moore). Korsgaard explains that *intrinsic* value is “a property that is independent of my interest in promoting it or yours...[intrinsic] values would exist in a world devoid of creatures who see and respond to reasons” (Korsgaard 1993, pp.27-8). With intrinsic value, people *discover* or *recognize* this fact that the object is valuable (pp.34, 40). In contrast, *extrinsic* value is value conferred by humans: “Some valuable things clearly get their value from their relation to people.” Korsgaard explains that chocolate likely has value in this way: “chocolate gets its value *from* the way it affects us. We *confer* value on it by liking it” (p.35, italics in original). The suggestion here is that chocolate is finally extrinsically valuable. Also see Lopes 2018, pp.56-7 for examples of objects possessing extrinsic final value (such as keepsakes).

⁴⁸ This interpretation is helpful for developing my view about the formal object of wonder (qua emotion). Relatedly, the two TCs regarding the object of wonder discussed here will be relevant in Chapter 4.

⁴⁹ See, e.g., Fuller 2006b, p.378 and Tobia 2015, p.8. However, I should note that Tobia seems to both ignore the phenomenon of seeing the ordinary as extraordinary and conflates ‘extraordinary’ with ‘unexpected.’

In contrast, Fisher indicates that *all* objects of wonder are experienced by the subject as extraordinary (see, e.g., Fisher 1998, p.55).

⁵⁰ I return to this notion of norms in Chapter 4. My notion of norms comes primarily from Walton 1970.

perhaps, in a dramatic way).⁵¹ Finally, I include ‘agreeable’ in my characterization because it seems to be part of the meaning of ‘extraordinary.’ When we use ‘extraordinary’ in describing a negative experience, we say something like ‘The movie was extraordinarily bad,’ changing the word’s linguistic role in the sentence—here, to something synonymous to ‘very.’ If we take a different approach to express this thought by saying, ‘The movie was extraordinary’ and incorporate this statement into a list of complaints about the movie (filling out the context of the utterance), it comes off as a bit odd to most listeners’ ears.

These aspects of the extraordinary are inclusive enough to accommodate the variety of wonder, from Socratic puzzles and existential wonder to our wonder towards natural phenomena like the starry night sky.⁵² At the same time, this conception sets aside cases that we oftentimes resist calling wonder, such as one’s experience of a merely odd object.⁵³

The second main point regarding this TC is reminiscent of my earlier discussion of final value: what matters here is how the object is interpreted by the subject—whether they experience it as extraordinary. To flesh out this idea, I adopt the notion of a ‘formal object’ from the philosophy of emotion literature, where fright, for example, has the formal object “facing an immediate, concrete, and overwhelming physical danger.”⁵⁴ There is no particular object, such as a tiger or a clown, that is frightening for all people, but there is the common evaluation made by

⁵¹ I include two conditions here because of the following sort of case: I leave the house a few minutes late in traveling by car to a job interview but, fortunately, I experience slightly lighter traffic than usual (i.e., deviating from the norm). This deviation from the norm matters a great deal to me; it matters that I get to the interview on time. But this minor deviation and its importance to me is *not enough* to say that traffic, or arriving to the interview on time, was ‘extraordinary.’ The basic point here is that small deviations can matter to a person.

⁵² An object being unexpected or new to the subject does not itself make an object extraordinary. Yet, an element of surprise can intensify or make more dramatic one’s experience of an extraordinary object (for similar ideas, see Smith 1980, p.34). Relatedly, I agree with Robert Plutchik that there is a sense of unexpectedness to *any* emotional episode, but this weak sense of ‘unexpected’ is not very informative in characterizing wonder or other emotions (see Fuller 2006b, p.366).

⁵³ A well-known example of the merely odd (as opposed to the extraordinary) is G.E.M. Anscombe’s case of a person who leaves a saucer of mud on their doorstep at noon each day (see Sherry 2013, p.348).

⁵⁴ This is one of Richard Lazarus’s core relational themes (see Prinz 2004, p.16).

the subject while experiencing that emotion. In the case of wonder, the formal object is something that seems extraordinary and to have final value. Moreover, a subject can shift how they interpret the object. For example, if I live near the Grand Tetons, I can still experience these mountains as *extraordinary*—even though I see them every day—because I can focus on the norm of American landscapes or geology. I think of rolling hills, or grassy plains, or maybe mountains covered in pine, but not many of these geological formations are as dramatic as the Tetons. Shifting how we group things in our mind influences what we experience as extraordinary—we can do this with mountains, eclipses, the existence of our own hands, childbirth, etc.

These points play a significant role in cases of wonder in which the phenomenon of *seeing the ordinary as extraordinary* occurs. We can put ourselves in a better position to have this type of experience by means of a variety of methods.⁵⁵ For example, the subject might have the propensity to experience a sort of religious wonder when they interpret the (normally ordinary) objects of the world as God’s creations.⁵⁶ We might also use meditation, which can break us from our habitual ways of relating to the world. We can go from our default, which often serves our practical purposes and ends, to a heightened aesthetic concern or attention to our surroundings, seeing things anew. Another form of training that can help put us in a position to see the ordinary as extraordinary is studying philosophy, science, the arts, or other fields. When we listen to a philosophy podcast, look at something under a microscope, or learn about a certain genre of art, we often begin to look more closely and notice details and nuances of the work of

⁵⁵ That is, there are ways to make ourselves more disposed to wonder, but we do not have complete control over occurrent experiences of wonder. I follow Fisher’s view that (occurrent) wonder is an unwilling response (see 1998, p.40). In Chapter 4, I discuss an *excellent* disposition to wonder (what I call virtuous wonder).

⁵⁶ For support, see Hepburn 1980, p.12 and Daston and Park 1998, pp.323-4. The notion of ‘seeing as’ in the philosophy of art literature is relevant here (e.g., one can see the duck-rabbit picture as a duck).

art, the specimen, etc. that we were not aware of before. Studying such areas can lead to new (personal) discoveries that open the subject's awareness to new phenomena, which might be objects of wonder for them.⁵⁷ When employed over the long-term, these methods, which make us more sensitive to our surroundings and dispose us to wonder, seem to foster in us an increased openness and receptivity to new forms of value. Relatedly, in considering cases where the object of wonder is new to the subject and cases where an object is seen for the first time as extraordinary, it seems that wonder sometimes—but not typically—expands the subject's circle of concern (their conception of eudaimonia). I hesitate to include this as a TC of wonder because this feature does not seem to count towards or against an experience being one of wonder. Many experiences in which the subject's circle of concern is not expanded—e.g., when a newly experienced object was already considered by the subject to be valuable to a flourishing human life, when the subject returns to an object that remains fascinating and extraordinary to them, etc.—do not seem to have marks against them as being ones of wonder.⁵⁸

In contrast to the idea that wonder sometimes yields an expanded circle of concern, my final TC of wonder—which draws on the work of Tobia, Fisher, Nussbaum, and Fuller—captures a central feature of wonder with respect to how it tends to function in our lives: wonder prompts the subject to inquire about the object of wonder.⁵⁹ As I intimated earlier, while the state

⁵⁷ One method rarely discussed in the wonder literature is the use of recreational drugs. For brief discussions of this method and its relation to wonder, see Parsons 1969, pp.95-6; Fuller 2006a, p.134; and Pedersen 2019, p.191.

⁵⁸ Along similar lines, Nussbaum holds that the imagination—especially in working together with the closely related emotions of compassion and wonder—helps us broaden our circle of concern (in the context of ethical treatment of other human beings). For Nussbaum, wonder is only *part* of the picture in expanding one's circle of concern (see 2001, pp.65, 322, 55).

⁵⁹ See Tobia 2015, p.22; Fisher 1998, pp.41, 43; Nussbaum 2001, pp.54, 135, 237, 337, 135-6; and Fuller 2006a, p.126, 156 and 2006b, pp.370, 377 (also see 2006a, pp.113). For empirical support, see Izard and Ackerman 2000, p.257 and Fuller 2006a, pp.97, 41, 12. Also, the typical narrative structure of wonder highlighted in this TC can serve to distinguish wonder from other experiences and emotions, such as the Kantian sublime. For this method of drawing distinctions, see Goldie 2000, p.92 (also pp.33, 85). For similar ideas, see my fn.13, 14 above.

of wonder itself consists of a generalized interrogative attitude, wonder prompts an inquiry in which the subject explores specific questions and lines of inquiry regarding the object. The subject might pursue a search of causality, agency, intentionality, or purpose. Specific questions and lines of inquiry might also be pursued to discern more precisely the final value of the object. Furthermore, this intellectual engagement can take a variety of forms, e.g., asking critical questions about a specimen under a microscope, searching for more things like the singular object of wonder, trying to imagine ways in which an ancient artifact was created, or acts of creative expression. In any of these versions of inquiry, the state of wonder serves as a persistent motivating force, and the receptivity and openness of the initial experience lives on during the subject's inquiry.

There are also a variety of ways in which the inquiry associated with wonder ends. In cases where inquiry includes a negative valence (e.g., frustration), the subject might bring this stage to an abrupt end by simply giving up. In cases where no frustration or similar affects are involved, the subject might lose interest and the inquiry stage dissipates, or they become distracted and their inquiry ends more abruptly. Alternatively, a line of inquiry might lead to a resolution, at which point the subject might encounter a new (related) object of wonder. This situation reflects one of Fisher's insights and relates to my earlier discussions of seeing the ordinary as extraordinary and studying philosophy, science, the arts, etc., peeling back the layers within some area of study to become aware of details we did not notice before: the inquiry stage sometimes reveals a new object of wonder, ultimately creating a *chain* of alternating experiences of wonder and inquiry.⁶⁰

⁶⁰ See Fisher 1998, p.89. Also see p.179. The chain of alternating wonder and inquiry only occurs sometimes since a chain requires a certain amount of success and perseverance with the inquiry. Many inquiries associated with wonder only consist of one or two specific questions that are briefly contemplated, and the inquirer never reaches a resolution.

There are a few further points to make about my set of TCs. First, as I noted at the outset of the chapter, the foregoing discussion captures my *initial* characterization of wonder; I will make further revisions to some TCs in Chapters 2-3. Second, many of these TCs are closely related, and I take my set of characteristics to form a what Dominic McIver Lopes calls a *homeostatic cluster*: “they tend to co-occur because the presence of some promotes the presence of others” (Lopes 2018, p.212). For example, the final value TC seems to promote the positive valence and object focused TCs, and the interrogative attitude TC promotes the inquiry TC. Third, I suggested at the outset of this section (§2) that even though an experience exhibiting all the TCs described above has a lot counting in its favor, this does not *guarantee* that the experience is appropriately called one of wonder. There may be additional features that push the experience beyond the penumbra of the concept (a case that displayed no TCs, though, would not be justifiably called wonder).⁶¹ Fourth, even though my Wittgensteinian approach holds that the boundaries between wonder and similar experiences such as curiosity, awe, the sublime, astonishment, amazement, etc. are *blurry*, that does not preclude us from identifying important differences between these concepts.⁶² Furthermore, maintaining that the borders of concepts like wonder are blurry is not a weakness of a theory but, rather, captures a feature of such concepts. As John Searle puts it, “It is a condition of the adequacy of a precise theory of an indeterminate phenomenon that it should precisely characterize that phenomenon as indeterminate” (Searle 1983, p.78). Fifth and finally, my set of TCs point to an idea that has not received serious

⁶¹ Also see my Chapter 2, p.32 and my fn.38 above.

⁶² Also see my fn.59 and pp.8, 19 above as well as Evans 2012, p.127 (Cf. Vasalou 2013, p.33). Nevertheless, my dissertation does not take up the project of explicitly sorting out the conceptual terrain with *all* these neighboring concepts. My point here is that my Wittgensteinian approach allows for such projects.

attention in the wonder literature: *wonder is (characteristically) a type of experience of beauty.*⁶³

In the final section of this chapter, I begin fleshing out this idea.

§3

The TCs discussed in §2 fit within prevalent contemporary conceptions of beauty, where the experience of beauty is characterized in terms of pleasure and the subject focusing on the object, contemplating its features, for its own sake. For example, we see glimmers of the object focused, short lived, positive valence, and final value TCs in Roger Scruton's view that "we call something beautiful when we gain pleasure from contemplating it as an individual object, for its own sake, and in its *presented form*" (2009, p.26).⁶⁴ Further, it seems that the interrogative attitude, inquiry, and extraordinary TCs can also fit within this characterization of beauty, picking out a type of experience of beauty. In Chapter 2, I illustrate how drawing on Alexander Nehamas's account of beauty is particularly illuminating in theorizing about the nature of wonder.

Initial plausibility of my claim about the relation between wonder and beauty also has some support in the wonder literature. There are a handful of theorists who either briefly suggest or come close to the view that wonder is (characteristically) a type of experience of beauty. Briefly discussing these views—the primary task of this section—provides some context and brings into relief how my claim is different from some neighboring ones in the literature.

One of the views closest to my own is that *beauty elicits wonder*. For example, Fisher states that all objects of wonder are (truly) beautiful, and Nussbaum suggests that paradigmatic

⁶³ Some theorists treat 'beauty' quite broadly, as synonymous with 'aesthetic goodness' or 'aesthetic excellence' (e.g., see Lopes 2018, p.128). In contrast, I am interested in beauty in a narrower sense, where beauty is a specific aesthetic attribute; it is but one kind of aesthetic goodness (see Levinson 2011, p.191 and Scruton 2009, p.16 for this distinction).

⁶⁴ Scruton is interested in 'intellectual beauty,' i.e., what is presented to the mind (through the senses); we appreciate an object's intellectual significance through the senses (see 2009, pp.25-6). For a similar characterization (but put in terms of necessary conditions of beauty), see Levinson 2011, p.191.

objects of wonder are beautiful (Fisher 1998, pp.121, 19, 35; Nussbaum 2001, p.297).⁶⁵ Mark Girod holds that beauty in science elicits wonder (2007, p.41), and Ronald Dworkin sometimes suggests in his 2013 book, *Religion Without God*, that objects of wonder in nature are beautiful (see, e.g., pp.46, 50). However, these theorists only briefly state or suggest this view, and they do not speak to the relation between the *experiences* of beauty and wonder (e.g., whether they fall into a genus-species relation).

Some theorists provide a bit more discussion and support for this sort of view. For example, Thomas Dubay and Catherine L’Ecuyer make a connection between wonder and beauty through the Scholastic notion of *transcendentals*—true, good, and beautiful are three properties of beings. L’Ecuyer explains that children wonder at being (they wonder at the mere fact that a thing exists) and, thus, “one of the properties of ‘being’ of a thing that triggers wonder in children is beauty” (2014, p.3). However, if the link between beauty and wonder is made through transcendentals (properties of being), then this holds up only for what I described earlier as existential wonder. While being or existence is an important aspect of any object of wonder, *being itself* is not always the focus of our wonder. In addition, since the transcendentals of beauty, goodness, and truth accompany one another, beauty (qua transcendental) involves the goodness of the object, namely, that it conforms to ideals. As Dubay explains, a beautiful tree is one that “conforms to the ideal of treeness” (Dubay 1999, pp.45-7). Like my point above about existential wonder, this understanding of beauty is rather restrictive. Overall, the ties to Scholastic transcendentals are relevant for *some* instances of wonder and beauty, but not for others. This approach does not furnish a *characteristic* connection between wonder and beauty.

⁶⁵ Along these lines, Fisher describes wonder as an ‘aesthetic state’ (p.39). However, he is often not clear about what he means by ‘aesthetic’—i.e., whether he means it in a strong sense, on a par with the sublime, or as merely referring to the senses. I return to this type of view below.

Ruth A. Wilson similarly indicates that beauty triggers wonder: “Beauty seems to play a special role in awakening our sense of wonder” (2010, p.24). But rather than turning to transcendentalists, she draws on John Keats’s idea that beauty is truth to ultimately argue that wonder is a way of knowing the world (p.24). However, Wilson’s views need some modification, as Hepburn and Tobia rightly indicate that wonder sometimes involves *misperceiving* the object of wonder (Hepburn 1980, p.3; Tobia 2015, e.g., p.15). Similar to my point above about transcendentalists, Wilson’s connections between wonder, beauty, and truth are present in some cases of wonder but not others.

Wilson, along with some other theorists like Rachel Carson and Philo Hove, also take a step further with respect to the idea that beauty triggers wonder: they suggest that a sense or experience of wonder comes with an instinct or capacity to perceive beauty. Wilson suggests that a sense of wonder comes with (or perhaps helps the subject develop) a capacity to see beauty, and Carson suggests that being full of wonder or having a sense of wonder refers to a “clear eyed vision, a true instinct for what is beautiful” (Wilson 2010, pp.24-5; Carson 1956, p.46). Along similar lines, Hove holds that “things revealed in the light of wonder are shown to have intrinsic beauty and worth” (Hove 1996, p.454). While these brief claims or suggestions are left largely unexplored and unexplained, I develop some of these ideas in Chapter 4.⁶⁶

Aside from the view that beauty triggers wonder, there are also theorists who briefly indicate or suggest the following view: wonder is a type of aesthetic experience (see, e.g., Gillis 2015, pp.59, 62; Jakobson and Wickman 2008, p.61).⁶⁷ One version of understanding wonder in

⁶⁶ While these theorists tend to use ‘wonder’ and ‘sense of wonder’ in rather loose ways and oftentimes synonymously, I highlight in Chapter 4 how there are important distinctions to draw here.

⁶⁷ In contrast to the other educational scholars cited above, Walsh-Piper makes an especially bold (and I think untenable) claim: that *all* aesthetic experience has wonder as its foundation (1994, p.110).

There are also closely related views in the literature. For example, Cain Todd describes wonder (or ‘the sense of wonder’) as an aesthetic value and as an aesthetic quality (2013, pp.71-2). However, he does not talk about the experience of beauty (and perhaps not even the experience of wonder).

this way is holding that it is an *aesthetic emotion*. Richard Dawkins and Klaus Scherer both describe wonder in this way, but they do not make clear what relation wonder has to the experience or aesthetic value of *beauty* in particular (Dawkins 1998, p.x; Scherer 2005, p.706).⁶⁸ In contrast, Dworkin suggests a genus-species relation between wonder and beauty, similar to my proposed view. However, his scope is narrower than mine: he indicates that the natural beauty that he is interested in exploring (namely, cosmic beauty and the beauty of laws of physics) is broad enough to include or cover the emotions of wonder, rapture, and awe (2013, p.50). Further, he does not develop or support this point; he instead focuses on the role of beauty in science.⁶⁹

As I have illustrated in this section, there are a number of theorists who briefly indicate or suggest either my view that wonder is characteristically a type of experience of beauty or something in the neighborhood. This provides some initial plausibility for my view. However, none of these theorists have seriously taken up this idea. As I show in proceeding chapters, exploring and developing this idea is worthwhile, as it ultimately helps us better understand the nature and value of wonder.

⁶⁸ See my fn.63. It is worth noting that Fingerhut and Prinz (2018, 2020) describe wonder as an aesthetic emotion, but they suggest that wonder also regularly occurs outside of non-aesthetic contexts (see, e.g., 2020, p.223). Their recent work focuses on wonder's role in instances of positive aesthetic appreciation of artworks. In contrast, Scherer suggests that wonder (along with other emotions like awe, admiration, fascination, and rapture) are aesthetic emotions in a more robust sense: there are no instances of these in non-aesthetic contexts (see Scherer 2005, p.706). While his taxonomy between utilitarian and aesthetic emotions is problematic insofar as it leaves out the possibility of, say, aesthetic disgust (see Korsmeyer 2011), he seems to be on the right track with respect to wonder—or so I will argue later in the dissertation.

⁶⁹ In other passages (e.g., pp.10-11), Dworkin treats beauty and wonder (of nature) as synonymous. This reflects, I think, his lack of concern about being conceptually careful with 'wonder.'

Also, I should note that there are some theorists who offer a smattering of views about the relation between wonder and beauty (or aesthetic experience more broadly). For example, Yannis Hadzigeorgiou makes claims aligning with the different views covered in this section, but he offers little support for or discussion of these claims. See, e.g., Hadzigeorgiou 2014, p.42; 2016, pp.42, 52-3, 150, 152; 2020, pp.198-9. Ultimately, he seems to hold that wonder has "an aesthetic dimension," though he does not clarify or develop this view.

II. WONDER AND BEAUTY

Whereas the previous chapter explored significant features of wonder and ended with the suggestion that the experience of wonder is typically a type of experience of beauty, this chapter develops this view, starting with clarifying what I mean by ‘beauty.’ I adopt a Nehamasian conception of beauty (making at least two modifications).¹ In Section 2, I highlight the relationship between this conception of beauty and my conception of wonder and, in Section 3, I address a possible worry concerning this relationship and my characterization of beauty. In Sections 4 and 5, I begin to illustrate how conceptualizing things in this way illuminates the nature and value of wonder. The remaining chapters of the dissertation will further illustrate this point.

§1

There are two methodological points to make at the outset of my discussion of beauty. First, like my approach to characterizing wonder in Chapter 1, there are a few *characteristic* features of the experience of beauty—i.e., typical features, not necessary or sufficient conditions.² These features are relevant in labeling our experiences as ones of beauty. The absence of any of them counts against the experience under consideration being appropriately called one of beauty, and their presence count in its favor. (However, even though an experience exhibiting all the typical characteristics has a lot counting in its favor, it does not *guarantee* that the experience is appropriately called one of beauty, as there may be additional features that push the experience beyond the penumbra of the concept).³ Second, I distinguish—in a rough way, in

¹ The conception of beauty I adopt here is also similar in important respects to Roger Scruton and Jerrold Levinson’s views of beauty (see Scruton 2009, pp.31, 26 and Levinson 2011, p.191), as well as Sherri Irvin’s notion of ‘aesthetic exploration’ (see Irvin 2017).

² In this chapter, I am interested in the *experience* of beauty—what it is to *find* something beautiful—rather than the ontology of beauty—what it is to *be* beautiful (see Nehamas 2010, p.205 for this distinction). The same goes for my discussion of (the experience of) wonder in Chapter 1.

³ See Dutton 2006 for similar ideas. Also see Chapter 1 above.

the spirit of blurry boundaries—irreducible *types* of pleasures and experiences of beauty, appealing to two grounds of differences among them: *intentional* grounds, i.e., in terms of the features of the objects on which the response is directed or focused, and the *thoughts* accompanying the experience.⁴ I turn now to the characteristic features of the experience of beauty.

The experience of beauty has two main components. First, it features a kind of *pleasure* in response to the appearance of the object: the experience involves a receptive and absorbed attention to the object. This attraction to and appreciation of the object in the experience of beauty is due to the subject's vague sense both of the object's final value and that this object has *more* of value to offer than only it can provide; the pleasure is one of *anticipation*, not of accomplishment (Nehamas 2007, pp.144, 76, 99-101; Scruton 2009, p.31).⁵ Along these lines, this vague sense of there being more of value also elicits in the subject an indeterminate desire to learn more about the object, one which later becomes a more determinate motivation: to better understand and appreciate what makes the object beautiful, what makes it distinctive and finally valuable (Nehamas 2007, pp.84, 99, 105-6; Scruton 2009, p.31). The subject responds to the object in these ways in virtue of the object's appearance, not in virtue of its seeming instrumental value.⁶

There are a few insights we can draw from this notion of a desire to learn more and characterization of the pleasure of anticipation. First, since the subject's vague awareness of the

⁴ I draw on Levinson 2011, p.204 for this method of distinguishing irreducible types of beauty and extend it to typing pleasures.

⁵ For more on pleasure being described in terms of *attraction*, see Korsmeyer 2011, p.172. For the notion of appreciation as a perception of value, see Olsen 2014 (also see Lopes 2018, pp.34-5 and Scruton 2009, p.6). It is worth noting that not every object that is experienced as valuable will elicit this sort of response—filing taxes every April seems like a good example. (For similar ideas, see Brady 2018b, p.190 and 2018a, p.53 as well as Shusterman 2006, p.219).

⁶ See Levinson 2011, p.191 for similar ideas.

object's final value sparks a desire to learn more about it, this suggests that they attend to and engage with the object for its own sake.⁷ (Having a desire to learn more does not necessarily conflict with the idea of engaging with something for its own sake—think of genuine curiosity, where the subject is motivated to pursue knowledge for its own sake).⁸ Further, these conceptual connections between the vague perception of value, appreciation (roughly, a perception of value that involves an affective response), and wanting to learn more for its own sake suggests that this engagement with the object is not regarded by the subject as an activity of drudgery.⁹ Second, in wanting to make the object a part of their life, the subject is open and willing to change themselves (e.g., their desires, plans, or way of seeing the world), and such changes might be required when they are drawn to and engage with unanticipated paths of inquiry (Nehamas 2007, pp.63, 70, 84). These ideas suggest that vulnerability is involved, as the subject does not know where they will be led nor how they will change in the process of inquiry. The desire to learn more and openness also suggest that intellectual humility is involved in the experience.¹⁰ Given this overall picture, the experience of beauty is characteristically also one of *love*.¹¹

⁷ For similar ideas, see Scruton 2009, p.18. To be clear, I do not characterize the type of pleasure or attention associated with beauty in terms of motivation. Still, motivation is an aspect to consider in the overall experience of beauty (and this, I think, addresses George Dickie's famous worries about the 'aesthetic attitude'—see Dickie 1964, p.60).

⁸ So, the desire to learn more in this case does not feature a prominent desire to learn certain information that specifically figures into how the object will benefit the subject and their personal projects. For more on genuine curiosity, see Morton 2010, p.391 and Mišćević 2018, pp.37, 44, 49. Also see *Metaphysics* 982b and Llewelyn 1988, p.174 for Aristotle's idea of pursuing knowledge for its own sake.

⁹ For this suggestion, see Daston and Park 1998, pp.316, 355. Also see Nguyen 2020, p.116 and Scruton 2009, p.26. In contrast, if we view an activity as only instrumentally valuable, then the activity itself might be viewed as one of drudgery. This point has implications for Chapter 4, where I note the educational value of wonder. I will return to the notion of appreciation in Chapter 3, §3.

¹⁰ It seems that humility is also involved insofar as the subject in wonder is not focusing on their own projects and plans; there is a diminishment of the self (see Evans 2012, p.130 and Hepburn 1980, p.15 for similar sentiments; also see Whitcomb et al. 2017, p.527). I return to the topic of humility below (see my p.52).

¹¹ I draw on Nehamas's reinterpretation of Plato's love (*erôs*): the subject has a desire to understand the object of love and, accordingly, wants to devote part of their life to it (to understand what it is that provokes their love) (Nehamas 2007, pp.72, 76, 105, 120, 126).

As I intimated, the subject's experience of beauty (which includes the pleasure of anticipation and a vague desire to learn more) typically leads to the activity of *inquiry*, the latter of which follows on the heels of and is motivated by the former. I also suggested above that the experience of beauty itself cannot be characterized in the same way as the activity of inquiry, as the two differ in terms of the form of desire involved—the former involves a vague desire whereas the latter characteristically features a more determinate one. Nonetheless, this activity of inquiry is associated with and influenced by the experience of beauty, as the initial experience is in many respects kept alive during inquiry.

Though I will elaborate upon aspects of this characterization of beauty in the remainder of this chapter (and Chapter 3), there are three important points to highlight straightaway. First, while I describe the characterization above as 'Nehamasian' since it draws on many aspects of Nehamas's view, there are some important differences between the two. The most noticeable difference is the role that *attitudinal pleasure* plays in the characterization of beauty above. Drawing on Gilbert Ryle's work, the pleasure featured in my Nehamasian view is described in terms of the subject's absorbed, receptive attention and attraction to the object rather than sensations and feels. In contrast, Nehamas's discussions of pleasure are cursory and this feature is placed at the margin of his account.¹² Instead, his characterization of beauty features a different, more long-term, state: happiness.¹³ Another difference is that whereas Nehamas seems to provide individually necessary—but not jointly sufficient—conditions for the experience of beauty, I opt for an approach that features *typical* characteristics. Finally, Nehamas is also often

¹² For characterizing pleasure in terms of an absorbed attention, see Ryle 1954, pp.142-3 (also p.136) and Korsmeyer 2011, p.172. For Nehamas's mentions of pleasure, see 2007, pp.52-3, 75-6, 102, 131.

¹³ Nehamas associates the promise of happiness (issued by the appearance of the object) with the feeling that one's life in general will somehow be better (see 2007, pp.62, 127). This suggests that he is interested in something deeper and more long-lasting than a mere emotional episode of being happy. Since his view is Platonic in some important respects, it is plausible that he has *eudaimonia* in mind here, which is not a mood nor affective state (see Meinwald 2016, p.94).

unclear whether his account concerns a wide or narrow interpretation of ‘beauty.’ In contrast, I am interested in ‘beauty’ in a narrow sense, where the term refers to *one type* of aesthetic goodness or aesthetic value rather than a wide conception of ‘beauty’ that refers to aesthetic goodness in general.¹⁴ As I will soon illustrate, this Nehamasian characterization—with its element of mystery—highlights distinctions between beauty and other kinds of aesthetic value and experience such as the sublime.¹⁵ Notwithstanding, this narrow conception captures a great variety of beauty that we find all around us, including natural objects like sunsets and wildflowers, non-human animals, persons (young or old), abstract forms like an arabesque or geometrical object, necklaces, various types of artworks (including architecture, music, and literature), and ideas. This narrow conception also captures artworks of what some call ‘difficult beauty,’ such as Chopin’s *Prelude in E Minor (Op.28 No.4)* or Britten’s *War Requiem*.¹⁶

The second thing to note straightaway about my Nehamasian conception of beauty is that, as I noted above, the experience of beauty (in the narrow sense) has an element of *mystery*, where the object draws us in—it is magnetic. The *attraction* in the experience of beauty stands in

¹⁴ This common distinction is discussed, e.g., in Bosanquet 1923, p.84; Beardsley 1981, pp.505-6, 509; Scruton 2009, p.16; and Levinson 2011, p.191. Ultimately, Nehamas seems to be concerned with ‘beauty’ as aesthetic goodness in general (see 2007, pp.78, 86, 89, 95, 136-8).

¹⁵ I follow many philosophers who—in the tradition of Kant and Burke—draw some sort of distinction between beauty and the sublime. However, there are some who describe the sublime as a type of beauty (see, e.g., Bosanquet 1923, pp.84-5).

On a more general level, it is important to acknowledge that all these standout aesthetic experiences (e.g., Nehamasian beauty and the sublime) do not capture the full extent of what Yuriko Saito calls our ‘aesthetic lives.’ Saito highlights how many of our everyday activities are influenced by and involve aesthetic *considerations* and *preferences*, many of which do not constitute experiences that stand out from the flow of daily life (Saito 2007).

¹⁶ For more on ‘difficult beauty’ and examples of it, see Korsmeyer 2005, p.51. One might worry that including some objects that we find strange, challenging, or disgusting—e.g., the New Jersey Turnpike—under the category of ‘beauty’ makes the view *too inclusive*. However, stretching our intuitions about beauty in this way has gained some support among contemporary aestheticians. For example, Nehamas’s example of John Merrick seems to be one of ‘difficult beauty’ (see 2007, p.59). For potential examples from the artworld, see p.96. Stretching common intuitions about beauty in this respect is also, as I just noted, reflected in Carolyn Korsmeyer’s work (see Korsmeyer 2005 and 2011). Further, it is natural for various artworks to be described (by viewers or critics) as ‘strangely beautiful’ or ‘hauntingly beautiful;’ such phrases communicate that the artwork does not elicit a straightforward, accessible, easy pleasure, but that it nonetheless elicits an absorbed attention and attraction on the part of the viewer. I thank Samuel Fleischacker for raising this worry and the example of the New Jersey Turnpike.

contrast to both being *repelled* in response to the ugly and a *mix* of being repelled and attracted in the case of the sublime.¹⁷ The mysteriousness in the experience of beauty also helps distinguish it from kitsch and the pretty. It seems that clear and intuitive cases of the pretty and kitsch *do not* characteristically involve the vague sense that the object has something more of value that only it can offer, but the subject does not yet grasp what that is. Instead, the pretty and kitsch characteristically provide an immediate, easy, straightforward, comfortable, and accessible pleasure, and they consequently are not able to sustain the subject's attention for as long or as intensely as the pleasure of anticipation in the case of beauty.¹⁸ Still, these distinctions between (narrow) beauty and other aesthetic values like the ugly, the sublime, kitsch, and the pretty are not sharp ones; there will be hard cases that lie in gray areas.

The third and final point to make straightaway about the Nehamasian view of beauty is that experiences of beauty (and wonder) are not limited to the handful of characteristics described above. There will always be additional features present in the experience (with varying degrees of prominence and importance). Some additional features might push the case under consideration toward the penumbra or to neighboring concepts—as I mentioned above, the possibility of such additional features prevents us from *guaranteeing* that an experience that has all of the typical features of beauty is appropriately called one of 'beauty.' For example, if an experience has the feature of displeasure in addition to pleasure (where pleasure follows on the heels of displeasure, or the two are mixed together in perhaps rapid alternation), then the experience will likely be more comfortably called sublime rather than one of beauty. Other additional features will narrow things down, picking out a subgroup from the class of experiences we call beauty. While such features are not typical of the general category, they can

¹⁷ For the ugly, see Nehamas 2007, pp.152, 60. For the sublime, see Kant 2000, p.129 (§23) and Budd 2002, p.14.

¹⁸ Korsmeyer 2005, pp.55-8, Lorand 1994, p.403, and Higgins 2000, pp.90-2 draw similar distinctions.

be typical of a sub-category. For example, the additional feature of ‘having thoughts centered on design’ picks out a type of experience of beauty that is a characteristic response to artifacts. Further, the accompanying thoughts of this experience distinguishes it from other types of experiences of beauty, such as those in response to natural objects (which characteristically involve different sorts of thoughts).¹⁹ The latter kind of additional features will contribute to my view regarding the relation between wonder and beauty.

§2

After providing a characterization of the experience of wonder and of beauty, I can now explore the relationship between them. To begin, it is important to recognize that most of the typical features of the experience of beauty and of wonder are *shared*—though, some are highlighted more in one concept than in the other or appear in a slightly different form. In the case of beauty, the subject has a vague sense both of the final value of the object and that it has more of value to offer than only it can provide, and this elicits a pleasure of anticipation and a vague desire to learn more about the object. Further, this experience prompts the subject to inquire about the object. All of these typical features are, in some form, found in my characterization of wonder.²⁰

¹⁹ This idea can be clarified with a perhaps simpler case involving houses. While the feature ‘single-story’ is not a typical feature of the general category ‘house’ (many houses have two or more stories), it is a typical feature of a *type* of house and helps pick out a subgroup of houses: ranch-style houses. Other additional features are a necessary condition for a subgroup. I am not concerned with the latter here, but they do exist: the feature ‘blue’ is not a typical (or necessary) feature of houses in general, but it is a necessary condition for one type of house, namely, blue houses.

²⁰ As I explain below, the interrogative attitude feature (discussed in my characterization of wonder) is captured in the pleasure of anticipation and the vague desire to learn more associated with beauty (see my pp.51-3 below). As I suggested earlier, the points made about vulnerability, humility, and love are things we can draw from the core characterization of beauty.

One might worry that I am guilty of gerrymandering my view of beauty, altering it to *make sure* that it coincides with my view of wonder. Regardless of whether this is a fair accusation, the more important point is that my project offers what I hope are (for most philosophers) simply *plausible* conceptions of beauty and of wonder, and that conceptualizing wonder as a type of experience of beauty brings out some heretofore underappreciated aspects of wonder, helping us to better understand the nature and value of this experience. I thank Samuel Fleischacker for raising this worry.

Further, my characterization of wonder includes one more typical feature that is not a characteristic feature in the Nehamasian conception of beauty: the subject experiences the object as extraordinary. As I discussed in Chapter 1, the extraordinary is that which deviates from the norm in a significant and agreeable way (where ‘significant’ is understood both in terms of degree and importance). One might initially think that the notion of particularity indicated in the characterization of beauty entails that the subject experiences the object as extraordinary. But a subject being attracted and attending to an object’s particularity—to the object itself and its distinctiveness—does not entail extraordinariness.²¹ To illustrate, consider the following sort of case. It is not uncommon for a subject to be attracted and attend to the particularity of an individual flower, aesthetically appreciating it and finding it beautiful, but *not* have a sense that the flower deviates from the norm to a great extent or in a dramatic way (whether the norm here refers to, say, the subject’s current worldview or mental structures, or what they think is statistically common or as a standard for the family of flower). Perhaps the flower holds the subject’s attention because it deviates from the norm in some *small, nuanced* way that *matters* to the subject, and the subject has a vague sense that the object has more of value than only it can offer.²² (As I indicated earlier, the latter feature helps draw a rough distinction between an experience of beauty and one of the pretty or kitsch). Even if an individual flower seems to have the same appearance as another flower nearby, the subject in the experience of beauty does not have (or, at least, seriously consider) the thought that the nearby flower would do just as well.²³

²¹ I use ‘particularity’ and ‘distinctiveness’ interchangeably.

²² It seems plausible that one can have a rather intense experience of beauty without experiencing the object as extraordinary; the intensity of the experience (whether of beauty or wonder) seems roughly proportionate to the seeming *value* of the object. For this idea, see Nussbaum 2001, p.56.

²³ Alternatively, the object of beauty might be the abstract category ‘rose’ or ‘lily,’ and the flower(s) the subject attends to represents or is a manifestation of the class of flora; the subject has a twofold seeing, where they see the abstract entity through the concrete object (see Wollheim 1980, p.213 for the notion of twofold seeing). Also see my Chapter 1, p.19.

If the subject's thoughts focus on the fungibility of the flower or on its instrumental value (perhaps it has medicinal properties), they are not in the state of mind associated with the experience of beauty.²⁴ In general, there are several non-extraordinary objects that hold and are worthy of our aesthetic attention, and that we find beautiful.

While many things that are experienced as distinctive are not also experienced as extraordinary, it seems that distinctiveness is typical of (if not necessary for) experiencing an object as extraordinary. If an object is experienced as extraordinary (whether it is a single entity or a single *group* of things, say, the oeuvre of an artist), the subject experiences the object as having at least one feature that indicates to which class of things it belongs, but also as having one or more aspects that make it distinctive compared to other objects of the class. For example, many visitors to the Sagrada Família perceive it as one-of-a-kind in many (but not all) respects, and this contributes to them experiencing it as extraordinary—as deviating from the norm of architecture, Roman Catholic churches, whatever, in a significant and agreeable way.

Overall, this clarification regarding particularity and the extraordinary shows that the general categories of beauty and wonder considered here are not conceptually *coextensive*, as wonder has a typical feature that is not so for beauty.

Most important for my purposes, the feature of experiencing the object as extraordinary—in conjunction with the typical features of beauty—narrows things down, picking out a *type* of experience of beauty. This additional feature can distinguish (in a rough manner) a type of beauty from other types in virtue of the two grounds of difference noted at the outset of the chapter: intentional grounds and the accompanying thoughts of the experience. Experiences

²⁴ For these sorts of views about fungibility and the state of mind associated with beauty, see Scruton 2009, pp.19-20, 27-8 and Lopes 2018, pp.55-8. For similar ideas concerning other contexts (namely, love and wonder), see Velleman 1999, pp.363-74 and La Caze 2013, p.14, respectively.

of beauty that feature the extraordinary can be distinguished from other types of beauty on intentional grounds: in contrast to other types of beauty, subjects respond to or focus on the object's extraordinariness. Experiences of beauty that include an experience of the extraordinary might also be distinguishable insofar as the thoughts involved are different from other types of beauty: the subject has thoughts about how the beautiful object is significantly and agreeably different (in at least one respect) from other objects of the class. By appealing to these grounds, we can conceptualize the experiences of beauty that involve the additional feature of the extraordinary as a type of experience of beauty. Further, this type of beauty—which has all of the typical features of beauty, plus the experience of the extraordinary—shares all of the features that are characteristic of wonder. Accordingly, these two concepts—i.e., wonder and the type of beauty involving the extraordinary—are co-extensive, and we can justifiably label this type of beauty *wonder*. Put simply, the type of beauty that characteristically includes the extraordinary shares the same set of typical features with my characterization of wonder. (Nevertheless, since these two concepts have blurry borders, there will be some hard cases of wonder that we are disinclined to call instances of beauty).²⁵

This conclusion about the relation between wonder and beauty shapes my project of showing how bringing a Nehamasian conception of beauty into conversation with my view of wonder illuminates the nature and value of the latter. First, the view that wonder is a type of beauty clarifies what I am primarily interested in illuminating for my project. There is an asymmetry here. If we uncover a new insight about wonder, it will not necessarily apply to the concept of beauty as a whole. But if we uncover insights about beauty (in general), it will impact

²⁵ It is worth noting that these hard cases of wonder that fall outside the realm of beauty are *understood in terms of* the typical characteristics of wonder (and their lack thereof). Accordingly, I describe the relationship roughly as wonder being a *type* of experience of beauty rather than hold that, roughly, the two concepts merely overlap.

how we characterize wonder in general. Accordingly, by looking more closely at the experience of beauty, we can better understand the characteristic features of wonder. The relation between the conceptions of beauty and wonder presented here *guide* how I approach my project methodologically.

Relatedly, this conclusion about the relation between wonder and beauty points to the sorts of connections with which I will be primarily concerned. There are likely many insights to be gained about wonder by considering other conceptions of beauty or comparing it with other sorts of experiences—whether they are close or distant conceptual neighbors of wonder—just as a poet can make some illuminating connections by employing a metaphor, bringing together two things that are not normally brought together or connected conceptually. In contrast to investigating looser, perhaps metaphorical, connections in order to gain insights about wonder, I am primarily concerned with tighter, more straightforward connections between the concepts of wonder and beauty, with how we can understand the nature and value of wonder by looking at it in terms of—as a type of—beauty.

§3

I should address a likely concern about my Nehamasian view of beauty before discussing how conceptualizing wonder as a type of experience of beauty illuminates the nature and value of wonder. One might worry that the characterization of beauty above cannot account for beautiful ideas, including the ones that are the objects of our wonder in a philosophical inquiry (Plato and Aristotle both famously note the importance of wonder in philosophizing). As I just suggested, I am concerned here more precisely with ideas that are *expressed* in some way, whether in conceptual artworks, novels, philosophical conversations or writings, scientific

principles, mathematical representations or theorems, or even inner thoughts that dawn on us seemingly *ex nihilo*.

To illustrate how the characterization of beauty presented above accounts for beautiful ideas, the toughest hurdle to clear seems to be the role of an object's *appearance* in the experience of beauty. Does an expressed idea have an appearance, and is this what we respond to in an experience of beauty? There are two related points to make in providing an affirmative answer, one concerning perception and the other concerning what constitutes an expressed idea's appearance—I take up each in turn.

First, there has been a long tradition of support (going back to Aristotle) for the view that there are beautiful ideas and, along these lines, James Shelley notes that “we have regarded [works of] literature as aesthetic as long as we have had a concept of the aesthetic” (Shelley 2003, p.374).²⁶ At the same time, there is a long tradition of regarding aesthetics as dealing with appearances and a kind of perception (p.371). But how can we account for beautiful (expressed) ideas, as they are not directly perceptible by the five senses? One way to resolve this is to adopt Frank Sibley's broad notion of perception. Sibley explains that we are *struck* by the presence of aesthetic properties in things, such as the beauty of an idea developed in a literary work: we “*feel* the power of a novel, its mood, its uncertainty of tone...the crucial thing is to see, hear, or feel” (Sibley 1965, p.137).²⁷ Being ‘struck’ refers to our immediate, first-hand experience of aesthetic features; we experience the properties directly (Shelley 2003). Put another way, the subject *perceives* these properties in the sense that they do not *infer* them from the testimony of others or

²⁶ Also see Shelley 2003, pp.376-7 and fn.25. For more on beautiful ideas in various contexts, see Scruton 2009, p.24; Ivanova 2017; Tobia 2015, p.7; and Girod et al. 2003, p.575. Cf. Eaton 2005, p.50. A good example of a beautiful idea might be Anselm's rich and fascinating ontological proof. Gould describes it as an instance of ‘true glamour,’ a term closely related to beauty—see Gould 2005, p.244.

²⁷ Though Sibley uses some metaphorical language here, it does not contradict my view above that I am not focusing on metaphorical *connections between* wonder and beauty.

from applying general rules for the relevant aesthetic property. We see similar views in the work of Francis Hutcheson, who holds that we are sometimes *struck* by the beauty of expressed ideas (e.g., powerful yet economical theorems) and that the pleasure experienced is ‘sensible’ rather than ‘rational’ because of its immediacy—we do not exercise our reasoning to experience beauty.²⁸

Along these same lines, I adopt a broad notion of *appearance* in the characterization of beauty above, one which reflects our broad notion of perception: ‘appearance’ refers to any aspects of the object that the subject is aware of by attending to the object (Nehamas 2007, p.63). There are at least two advantages to including a broad notion of appearance in a characterization of beauty. First, what might be described as ‘inner’ and ‘outer’ features (or, ‘non-physical’ and ‘physical’) are often blurred in our experiences of objects, and a broad notion of appearance does not try to patrol this elusory border.²⁹ For example, as we get to know a friend, their appearance changes. Their character and other so-called inner, non-physical properties are manifested in their appearance. Likewise, a painting’s appearance might be somehow different to us after we learn more about the context in which it was created. Second, as I will illustrate below, the notion of an expressed idea having an appearance helps capture the impact that framing and presenting an idea has on our aesthetic experience of it.

These broad notions of perception and appearance at least sketch in what sense a subject perceives beautiful ideas (among other sorts of objects), but I have not yet said what *constitutes*

²⁸ For further discussion of Hutcheson and Sibley regarding ideas, see Shelley 2003. To clarify, we might use some reasoning to reach a beautiful conclusion, but the beauty of that conclusion is immediate and, in Hutcheson’s words, ‘sensory.’

I should clarify that my use of ‘perception’ here is different from my discussion of perception in Chapter 4, which is understood as a type of skill.

²⁹ For more on the idea of the inner and outer blurring together and being difficult to distinguish, see Nehamas 2007, pp.60, 68-9, 98 and Scruton 2009, pp.23-6. I assume that narrow conceptions of ‘appearance’ refer only to so-called ‘physical’ properties.

an expressed idea's appearance. I hold that the appearance of an expressed idea amounts to *how it is presented* to the mind; the appearance is its *presented form*.³⁰ Whether you are listening to an academic presentation, your high school geometry teacher's lecture on one of Euclid's theorems, viewing a Petersen graph, experiencing a work of conceptual art, reading a poem, etc., the *way* an idea is articulated, framed, introduced, depicted, elaborated, and what connections are made all can matter in our aesthetic experience of the expression of it. If an idea is poorly presented (e.g., poorly introduced, framed, or developed), the subject might not catch a glimmer of its final value or get a sense that the object has more of value than only it can offer.³¹ As I explained earlier, having a vague sense that there is something more of value elicits a vague desire to learn more about the object. Further, inquiry in the case of beautiful expressed ideas can include making new conceptual connections, re-framing the idea itself, reinterpreting or searching for more layers of a theme that is developed in a novel, etc. Engaging with an expressed idea in such ways can be an endless project in trying to better understand and appreciate what makes it distinctive and valuable. Furthermore, engaging with it can change us—e.g., how we see the world, or what we think is important. Most of us can think of a time when an idea changed us in such ways.

While what I have said about beautiful expressed ideas applies to a variety of settings (e.g., literature, mathematics, etc.), it is worth discussing beautiful ideas expressed in philosophy. Philosophers and laypersons alike probably think of the young Theaetetus and Plato's famous words—"philosophy begins in wonder"—when recalling a clear, paradigm case of the type of

³⁰ For similar ideas, see Sauchelli's discussion of a 'vehicular medium' (which was first introduced into the philosophy of art literature by David Davies) (Sauchelli 2016) and Scruton 2009, pp.23-6.

³¹ For examples of how the expression of an idea can influence our experience of it, see Korsmeyer 2011, p.126 (also see Sauchelli 2016, p.4). For similar sentiments regarding different formulations of laws, see Root-Bernstein 1997, p.52. For this idea in the context of mathematics, see Starikova 2017 and Rieger 2017.

beauty that is my topic here: wonder. While I do not (and need not) accept every aspect of Plato's characterization of wonder, Plato's example of wondering at what was once familiar but now strange is still important to philosophizing today. The views of wonder and beauty laid out above ought to be able to account for such a case that many today think of as intuitively one of wonder.³²

Plato's young Theaetetus experiences wonder when he suddenly realizes that his initial definition of knowledge—which he at first takes to be a self-evident and common view—is untenable. Here, the object of wonder is the idea that *an everyday assumption is actually not tenable* or, more specifically, that *the assumption that knowledge is perception is actually not tenable* (this expressed idea is supported and framed by Socrates's observation that, if Theaetetus's definition were correct, then all men and perceiving animals would be no wiser than any other, and that all philosophical discussion would be made pointless since truth would be completely subjective) (*Theaetetus* 161d-162d; Rubenstein 2008, pp.3-4). How can this expressed idea elicit an experience of beauty and, more specifically, one of wonder? First, it is easy to see how the realization that things are not what they initially seem captures and attracts a subject's attention. Theaetetus is drawn into the philosophical discussion after the experience of wonder, showing more enthusiasm for the search for an answer to the question 'What is knowledge?' than before (187c; also 155c, 200d). Further, it is plausible that he engages with the expressed idea for its own sake rather than for the sake of some further end, such as making other Athenians look foolish. Even if Theaetetus uses this idea as a mere tool in the future, he is

³² There are also philosophical ideas that might elicit an experience of beauty, but not one of wonder. Perhaps an undergraduate student being introduced to the ontological distinction of types and tokens has an experience of beauty; the idea can explain a wide variety of phenomena in a simple and elegant way. In first encountering the idea, they have a desire to learn more about the idea, and they later inquire into what applications it has, what its limitations are, etc. While philosophers might see the distinction as a mere tool (a means to some end, such as defending or challenging a philosophical view), someone who is simply taking an introductory philosophy course might be attracted to and appreciate the distinction for its own sake.

not primarily focused on its instrumental value while in the state of wonder itself. It is also plausible that he has a vague sense of the expressed idea's final value and that it has more of value to offer than only it can provide. The idea gives Theaetetus a sense that the concept of knowledge is rich, one that has more of value to offer, and this elicits a desire to learn more about it (155c, 187b-c, 200d). Further, Theaetetus (and readers of the dialogue) can investigate or engage with this expressed idea in a variety of ways. Theaetetus, for instance, pursues further conceptual analysis of knowledge itself, providing two more definitions (187b, 201d). Plato's dialogue also suggests that the expressed idea can prompt the subject to investigate *why* many people hold this naïve view of knowledge (and if there is anything that is right about it, something that can be salvaged), or what other things people are generally certain of but should not be.³³ Furthermore, the pursuit of such inquiry might change the subject in a variety of ways. For example, Socrates suggests at the end of the dialogue that Theaetetus will be more careful about what he is certain of, be more humble, and not take things for granted (210c). It is also plausible that young Theaetetus, along with contemporary readers of Plato, become more interested in philosophy as a discipline. Theaetetus seems to admire the methods of Socrates—the way in which he makes the familiar strange for his interlocutors—and, when he grows older, might implement these in his own teaching to share such wondrous ideas with others.³⁴

The discussion above illustrates how Theaetetus' experience is one of *beauty*. But is it, more specifically, a clear case of *wonder*? Though it will not provide a definitive answer, it is

³³ For one error theory that Socrates offers, see *Theaetetus* 162d. Also see 191a. For examples of other things that one might be certain of but should not be, see Theaetetus's initial confidence in the 'other-judging' view of false judgment that Socrates later challenges (189c-d, 190e) and his confidence in Socrates's account of false judgment that is later refuted (195b, 196c).

³⁴ For evidence of young Theaetetus being attracted to Socratic methods, see 155c-e. For the idea that young Theaetetus is like Socrates, see 155d (also see 143e-144e for a discussion of Theaetetus's character traits). For Socrates's pedagogical role in Athens (his role as a 'spur,' a tool used for teaching horses how to jump), see Marshall 2017, pp.167-8, 171.

important to ask, Does Theaetetus's experience also have an element of the extraordinary? It is not unusual for commentators to describe Platonic dialogues as making the familiar strange or, importantly, making the ordinary *extraordinary*.³⁵ In *Theaetetus*, Socrates himself describes the process of coming to the aforementioned idea as unearthing "extraordinary stuff."³⁶ Since Theaetetus's experience displays all of the typical characteristics of wonder, it has a lot counting in its favor for being appropriately called one of wonder. And this is what we should hope for with such an important and intuitive case of wonder. The views of wonder and beauty presented here can account for beautiful and wondrous expressed ideas, including the intuitive and influential example from Plato.

§4

In a nutshell, understanding wonder as a type of experience of beauty in the Nehamasian sense (looking at wonder through the lens of beauty) yields new insights about wonder and its value. It reveals things that have heretofore been underappreciated or gone unnoticed in the wonder literature. There are aspects of the characterization of beauty presented above that illuminate my picture of wonder.

First, the type of pleasure characteristically involved in the experience of beauty helps elucidate both the *kind of pleasure* involved in experiences of wonder and *why* such experiences are pleasurable. Many theorists in the extant wonder literature describe the experience of wonder

³⁵ For examples of these sorts of notions and terms used interchangeably, see commentators on Heidegger such as Rubenstein 2008, pp.4, 8 and Llewelyn 1988, p.185.

³⁶ *Theaetetus* 163a (Burnyeat/Levet translation (1990, p.287)). Another common translation for the Greek ἄτοπα here is 'strange.' Though ἄτοπα might have connotations of a more neutral or negative experience, it seems that it can still fit with my characterization of *pleasure* (see pp.2-4 above and pp.19-20 below). In taking a similar approach to 'agreeable' (in my characterization of 'extraordinary,' discussed on p.9 above) as I do with pleasure, it seems that ἄτοπα fits with my conception of extraordinary. Additionally, some contemporary commentators treat 'strange' and 'extraordinary' (in this Platonic context) as synonyms (see my fn.35 above).

as one of pleasure, joy, delight, or positively valenced affect.³⁷ Some take things a step further, trying to characterize the *type* of pleasure (e.g., Alexander Rueger describes it as a pleasure different from knowing something; it is a pleasure in something ineffable and inscrutable) (Rueger 2013, p.206). Rueger, along with Derek Matravers, also suggest *why* the subject experiences delight or an affect-pleasure (e.g., pleasurable *sensations*): it is a result of experiencing the object as valuable or significant. Though these views regarding pleasure are in the right ballpark, the rich picture of pleasure offered in the characterization of beauty in §1 offers new insights and captures nuances of the experience of wonder.

As I mentioned earlier, the pleasure in the experience of beauty is attitudinal: the subject has a receptive and absorbed attention to the object. The pleasure is *receptive* in the sense that the subject's attention to the object is open and welcoming. The attention is *absorbed* in the sense that the subject dedicates all their energy to the object; for the moment, the object is their whole world. Jointly, these two aspects distinguish cases of pleasure from similar cases where our attention is absorbed, but that we do not welcome (e.g., intrusive thoughts or obsessive thinking that torments us, and which we cannot stop thinking about. We are attracted to such thoughts, and they are our whole world at the moment, but we do not welcome them).

Further, the object itself—the particular thing that it is—is to what the subject attends and is attracted.³⁸ Since they are drawn to the object's particularity and the experience is one of *absorbed* attention, there is a prima facie expectation that there is *little room* for them to have an instrumental stance or relation toward the object in which they think about how the object can

³⁷ Matravers 2013; Sherry 2013; Parsons 1969; Vasalou 2013 and 2015; Rubenstein 2008; Robinson 2012; Fisher 1998; Nussbaum 2001; Evans 2012; Carson 1956; Fuller 2006a; and Lazarus 1991. It is worth noting that Tobia 2015 characterizes wonder in terms of a positively valenced *affect* (i.e., positive feelings and sensations), which is different from the *attitudinal* pleasure I adopt. For a discussion of the weaknesses of Kevin Tobia's view, see Chapter 1. In contrast, Robert Fuller suggests an attitudinal pleasure when he explains that wonder is an emotion of enhanced rapport (rather than an emotion of avoidance) (see 2006b, p.366 and 2006a, pp.60, 88).

³⁸ For similar ideas, see Scruton 2009, p.20.

benefit their own projects and plans. Relatedly, as I noted earlier, when the subject is in the mindset of beauty, they do not consider the object fungible, i.e., that something similar would do just as well. Nevertheless, in cases where the object's utility is of some importance with respect to the kind of object that it is, the subject being aware of the object's use in a primarily *general, non-self-referential* way is important in such experiences of beauty. More precisely, in works of architecture and utilitarian objects like knives, the object's function is *integrated* or *absorbed* into its aesthetic value (Scruton 2009, p.22). If we cut out its function, we not only face problems with properly categorizing the object (and, accordingly, having an appropriate aesthetic response to it), we also lose a dimension of the object's aesthetic value. Regardless of whether the object has some utility or not, the subject appreciates the object on its own terms and responds to the final value of the object.³⁹ Furthermore, drawing on the grounds of differences noted earlier for typing pleasures (i.e., intentionality and accompanying thoughts), this response to the final value of the object distinguishes the pleasure involved in the experience of beauty from other sorts of pleasures, e.g., those associated with winning the lottery. In the latter case, the subject responds to and focuses on the instrumental value of all that cash (and maybe winning a new sports car instead would do just as well).

Finally, the pleasure involved with beauty is forward-looking, it is one of *anticipation*. Based on the subject's experience of the object (including their vague sense of its final value), they have a less-than-certain suspicion, hunch, sense, or feeling that it has more of value to offer that only it can provide, something to which they will be attracted and with which they will be

³⁹ Yuriko Saito explains that we can aesthetically appreciate the way in which all of the sensuous aspects of a knife converge and work together to facilitate the ease of use (2007, p.27). Further, considering the *interrelation* between the functionality and aesthetics of such items seems to be an important part of appreciating them "on their own terms" (Saito 2007, p.129).

engaged.⁴⁰ For the moment, they are attracted to these vague thoughts or images of the future in their mind and the prospect of learning more about the object. So, during the experience of beauty, the subject has a receptive and absorbed attention to the object in two respects, both of which concern the object *itself* (the primary focus is not on the ways in which the object might benefit the subject's own projects and plans).⁴¹ This element of anticipation distinguishes (on intentional grounds) the pleasure of beauty from types of pleasures that do not have this element. For example, we can imagine a scenario in which a subject enjoys a cherry-flavored Dum Dum, and their response is directed toward the seeming final value of the treat, but they do not have a vague sense that the treat has more of value to offer than only it can provide. (Another person might sense that such a treat *does* have more of value to offer and have an experience of beauty).⁴² In sum, this picture of pleasure in the experience of beauty elucidates the kind of pleasure characteristically involved in wonder. It also captures *why* wonder is characteristically pleasurable: the subject has a receptive and absorbed attention and attraction to the object itself because of their vague sense both of the object's final value and that it has more of value to offer than only it can provide.

⁴⁰ Though this suspicion or feeling is not one of *certainty*, it seems odd to describe this sense or suspicion in terms of *probability*. The subject has a belief that the object has more of value to offer, one that does not seem to be qualified by thoughts like 'I believe there is a 17% chance that the object has more of value to offer.' Still, even if there is a small probability (and we can justify thinking in terms of numbers), the subject can be engaged with the possibilities here (see Friedman 2019a, fn.27).

Also, these vague senses and suspicions fit well with Goldie's view of emotion, which features *recognition* rather than beliefs (see Goldie 2000, pp.22, 47).

⁴¹ In support of this view, Nehamas suggests that focusing too much on how the beautiful object can benefit our plans and projects goes against the open-endedness of the experience; we do not know what our projects and plans will be, and we are willing to change them in the course of the relationship with the beautiful object (see Nehamas 2007, p.58). Along these lines, the subject *hopes* to engage with and learn more about the object; the object of hope here is not experiencing pleasure itself (see Nehamas 2007, p.55). In other words, the subject in wonder is not characteristically a pleasure-seeker.

⁴² Even if the subject does not have an experience of *beauty* while consuming a Dum Dum, it seems that this activity still involves aesthetic considerations and preferences and is part of their *aesthetic life* (see Saito 2007 and my fn.15 above).

Next, the characterization of the pleasure and vague desire associated with beauty elucidates both *in what sense* and *why* the subject in the state of wonder typically has an interrogative attitude. Though Howard Parsons's 1969 essay paints a rich and plausible picture of the interrogative attitude associated with wonder, and Ronald Hepburn makes some other important contributions about a decade later, looking at wonder through the lens of beauty offers some further insights and connections regarding the interrogative attitude of wonder. As I just suggested, conceptualizing wonder in terms of beauty yields many ideas that are similar to those of Parsons and Hepburn. On my Nehamasian view of beauty, the subject has an initially vague desire to learn more about the object, which is elicited by the subject's vague sense both of the object's final value and that it has more of value to offer.⁴³ They do not yet have *specific* questions, but do have an interrogative attitude, an intellectual engagement of a generalized form. This engagement not only involves a vague desire to learn more, but also attraction and a receptive and absorbed attention. Further, the pleasure of anticipation indicates that this interrogative attitude is forward-looking; the subject thinks about or imagines some of the sorts of things they might discover about the object, though such thoughts are hazy at the moment.

Whereas the picture above looks quite similar to Parsons's (and, to some extent, Hepburn's) characterization of the interrogative attitude and explains why the subject has this attitude, there are new insights to be gained by understanding wonder in terms of beauty (Parsons 1969, pp.87-9, 96; Hepburn 1980, pp.3-5, 16-7). Looking at wonder through the lens of beauty helps flesh out Hepburn's brief discussions about vulnerability and humility. He notes that wonder involves vulnerability insofar as we are not sure whether our wonder is foolish (i.e., whether we have misperceived the object of wonder) (1980, pp.3-4). With respect to humility, he

⁴³ For similar sentiments in the wonder literature, see Vasalou 2015, p.18 and Parsons 1969, pp.89, 96.

notes that both wonder and humility involve an openness, not seeing things simply in terms of one's own projects, and not having an 'I've seen it all' attitude. Along these lines, he suggests that wonder can guide the role of humility in moral issues (1980, pp.15-6). But there is more to say here. The connections noted earlier between the desire to learn more and the subject having intellectual humility and letting themselves be vulnerable in the case of beauty fleshes out the notion of *openness* associated with the wondering subject's interrogative attitude (see Chapter 1). The subject displays intellectual humility in the sense that they are open and willing to change themselves, e.g., their desires, plans, beliefs, and way of seeing the world. They do not have a know-it-all attitude. Along these same lines, they put themselves in a vulnerable position, as they do not know where paths of inquiry will lead nor how they will change in the process. Overall, the notion of the desire to learn more associated with beauty highlights how openness, intellectual humility, and vulnerability conceptually connect in the cases of wonder and beauty.⁴⁴

Furthermore, my approach yields a connection that provides some conceptual clarity to the initial picture of wonder I provided in Chapter 1. Whereas the pleasure and interrogative attitude TCs were initially treated as separate features, the recent discussion shows that the interrogative attitude consists of both of the main components of the experience of beauty: the pleasure of anticipation and the vague desire to learn more. The pleasure is *part of* the interrogative attitude.

In addition to elucidating the pleasure and interrogative attitude features of wonder as well as their relationship, my Nehamasian picture of beauty also brings out important insights about the *inquiry* prompted by the initial experience of wonder. While the extant wonder literature provides helpful examples of modes of inquiry and plausible views about when inquiry

⁴⁴ Related to the idea of vulnerability, Fingerhut and Prinz 2018 provide empirical support for the idea that the person in wonder is "tolerant of uncertainty" (p.116).

ends (both of which I will soon discuss), looking at wonder through the lens of beauty puts a finer point on a common and rough idea in the literature: that the inquirer's aim is to somehow better understand the object. On my view, the aim of the subject's inquiry—which is a refinement of their initially vague desire to learn more about the object—is *to better understand and appreciate what makes the object distinctive and finally valuable*, to clarify what was hazy in the initial aesthetic experience.⁴⁵ This desire and aim guides and motivates the subject's inquiry. And while Anders Schinkel, Marguerite La Caze, and Parsons put a slightly finer point on the rough idea of striving to better understand the object—acknowledging some connection to striving to more deeply understand the object's *value*—my view also incorporates the important ideas of appreciation and particularity.⁴⁶

Furthermore, I suggested earlier in noting the unanticipated paths of inquiry that the openness, intellectual humility, and vulnerability present in the experiences of wonder and beauty also live on and play an important role in the activity of inquiry itself. The subject is open to new and unexpected paths of investigation, displaying humility and being vulnerable. Through this unpredictable process, their desires, plans, beliefs, or way of seeing the world often change. In addition, in cases where the inquirer continues to be absorbed in and drawn to the object itself

⁴⁵ Put another way, the aim is to better understand and appreciate what makes the object *special*. Also, I will use 'better understanding' and 'deeper understanding' synonymously; even though there is such a thing as a 'more nuanced' or 'broader' understanding, it seems that many theorists and laypersons alike use the dead metaphor of 'deeper' to capture any sort of improvement in understanding (see, e.g., Roberts and Wood 2007, p.78).

⁴⁶ See Parsons 1969, pp.90, 88, 92 and La Caze 2013, p.17 (also p.19, which describes wonder as leading to appreciation). Parsons 1969 and La Caze 2013 suggest that uniqueness has to do with the initial response of wonder or the experience of wonder itself (see Parsons p.86 and La Caze p.19). Parsons also suggests that the inquirer (in the case of wonder) is focused on the final value of the object, though it is unclear whether the aim of the inquiry is to better understand what makes the object finally valuable; he seems more interested in describing the aim of inquiry as a search for *meaning* (see p.96). The view closest to my own with respect to the aim of the inquiry is found in Schinkel 2017, pp.549-50. While Schinkel draws an analogy between love and wonder and indicates that the subject aims to better understand what makes the object of wonder intrinsically valuable, he does not talk explicitly about distinctiveness or particularity, nor is appreciation part of the aim of the inquiry—rather, appreciation of the final value of an object seems to be simply part of the experience of wonder or else a downstream effect or by-product of wonder (see Schinkel 2019, p.307).

and its final value, it seems that—despite any challenges they might face over the course of their inquiry—they will not think of inquiry as an activity of drudgery; they will see value in the engagement itself.⁴⁷

Along similar lines, I suggested at various points that by engaging with objects of beauty or wonder in the aforementioned ways, the subject thereby makes these objects a part of their life. Often, the subject has a *long-term* relationship with what they find beautiful or wondrous.⁴⁸ The activity of inquiry—which aims at a deeper understanding and appreciation of what makes the object distinctive and valuable—is theoretically endless, since gaining a better understanding involves exploring the many relationships between the object of beauty or wonder and other things (Nehamas 2007, pp.121, 124, 110). Since things can resemble one another in all sorts of ways, this process of creating a web of connections can go on forever (pp.105, 122-7). Relatedly, there is no clear point at which the inquiring subject obtains what we might call an *absolutely* deep or *complete* understanding or appreciation of an object; there is always more digging to do.⁴⁹

Of course, the inquiry associated with a beautiful or wondrous object can be returned to at various times throughout the subject's life, and this is what we would expect in the normal course of daily life. The activity of inquiry will often be interrupted by practical distractions such

⁴⁷ See my pp.33-4, 52 and my fn.9 above. It seems possible that an inquirer could lose their absorbed attention and attraction to the object's final value, all while holding onto this characteristic aim. For example, they might become frustrated and not appreciate the activity of inquiry itself.

It is important to acknowledge that some of these features might be present (in some form) in only the early stages of a long-term inquiry. The qualities of an inquiry can change over time. I return to this idea in Chapter 3, p.76.

⁴⁸ For similar ideas, see Scruton 2009, p.19. For an example of a long-term relationship, see Nehamas 2007, pp.106, 110 (and his Chapter 4 in general) about his relationship with Manet's *Olympia*. For this suggestion in the wonder literature, see Parsons 1969, p.99. For empirical support for long-term engagement with objects of wonder, see Fuller 2006a, p.37 and Hadzigeorgiou 2020, pp.200-1.

⁴⁹ For similar sentiments with respect to wonder, see Willmott 2018, pp.24-5, 30-1 (also see p.34) and Fisher 1998, pp.80, 89, 175.

as doing chores, sleeping, etc. Aside from such distractions, inquiry ends—either temporarily or permanently—when the subject no longer experiences the object as having more of value to offer that they have yet to uncover. Relatedly, inquiry ends when the subject feels *ordinary certainty* that they have intellectual mastery over the object—that is, they feel that the possibility of error regarding this mastery cannot really be entertained or taken seriously; they do not feel the slightest real doubt about it, though they acknowledge in the back of their mind that they are not infallible and thus cannot be absolutely certain.⁵⁰ For them, there is no longer any reason to continue inquiring about it.⁵¹ Of course, these feelings and attitudes being warranted is doubtful since the subject can always strive for a better understanding of the object and learn more about it.

Two recent ideas discussed above—the role of humility in inquiry and the (theoretical) endlessness of inquiry—jointly provide some reinforcement for Hepburn’s distinction drawn between curiosity and the inquiry typically following wonder (and, for me, beauty) which I introduced in Chapter 1. He holds that the subject in the former never rests anywhere and sees the object as something to be possessed, as a “tick on the tourist’s place-list,” whereas the latter dwells in the object and they do not see the object possessively; it remains ‘other’ and unmastered.⁵² Because 1) intellectual humility is involved in both the experience of wonder and the inquiry that follows it, and 2) there is no clear point at which we reach the goal of inquiry, the subject does not have thoughts about—let alone a desire for—intellectually *mastering* the

⁵⁰ For similar ideas regarding ordinary certainty, see Hookway 2007a, pp.10-3, 20 and Friedman 2019b, p.89. As I suggest above, ordinary certainty can apply to a variety of epistemic goods, such as full belief, understanding, or knowledge. For the idea of feelings of mastery or certainty closing off inquiry, see Rubenstein 2008, p.8 and Staniforth 2018, pp.14, 219.

⁵¹ In other words, it is irrational to inquire about something you are certain about. For a discussion about the justifications for closing an inquiry, see Friedman 2019a and 2019b.

⁵² See my Chapter 1, p.19 and Hepburn 1980, p.4 for this Heideggerian view (for some similar views from the history of philosophy, see Daston and Park 1998, pp.307-8). For a similar view about wonder, see Fisher 1998, p.137. I will return to this distinction in Chapter 3.

object.⁵³ They are aware of their intellectual limitations, and the aim of the inquiry does not seem to have a definite endpoint. In contrast, the curious subject has the desire to come to some definitive conclusions and ordinary certainty about the object to which they attend. Once the relevant knowledge is attained, their curiosity is slaked and they move on to the next thing.⁵⁴ On this picture, there can be one or more episodes of curiosity that take place *within* the broader inquiry associated with beauty and wonder, but the latter has a more open-ended aim than that of curiosity.

This theoretically endless process of creating a web of connections in developing a better understanding and appreciation of what makes the object special can be played out in a variety of ways. Bringing together my views about beauty and wonder with the wonder literature yields a variety of modes. In many, if not all, of these modes of inquiry, the subject in some respect rearranges their mental structures (i.e., how they categorize and think about the relationships between things).⁵⁵

The possible endlessness of inquiry is highlighted in cases where resolving a line of investigation prompts a new one, e.g., where conclusions prompt more questions. Jesse Prinz

⁵³ For similar ideas, see Willmott 2018, p.122 and Vasalou 2015, p.184. There are some people who struggle to set aside or not focus on *intellectual mastery*. For example, Nate Staniforth talks about his own experience of interacting with a reporter who insisted on finding out how one of his magic tricks was pulled off. When he did not comply with the demand and tried to explain why he would not tell her, she got fed up and finally said ‘I’m just going to Google it.’ To Staniforth, the reporter missed the point of the trick; it was a mere tool to remind the audience about the mysteriousness of the world and things we do not (or cannot) know (see Staniforth 2018, pp.61-3, 170). To Staniforth, this desire for mastery opposes the attitude involved with wonder. Also, the idea that the subject does not have thoughts about *intellectual mastery* seems educationally significant, and I will return to this point in Chapter 4.

⁵⁴ Relatedly, I think there is something right about Anders Schinkel’s view that it is odd to pair ‘big questions’ with curiosity: “No one says ‘I am curious to know the nature of God’ or ‘I am curious to know the meaning of life’” (Schinkel 2017, p.543). My distinction above provides some support for this intuition. For the idea that knowledge slakes curiosity, see Morton 2010, p.392 (cf. Kvanvig 2013, p.170 and Ross 2020, p.109 regarding ‘satisfactory understanding’ as an aim for curiosity).

⁵⁵ This idea of rearranging mental structures is found in Smith 1980, pp.39-43, Parsons 1969, p.91, Fuller 2006a, p.83, and Keltner and Haidt’s 2003 article on awe (cf. Kristjánsson’s critique of Keltner and Haidt in his 2017, p.131).

suggests this phenomenon when he explains, “scientific discoveries are often more wondrous than the mysteries they unravel” (Prinz 2013a, p.3).⁵⁶ Another form of inquiry that amounts to a potentially endless project is gaining a deeper understanding and appreciation of an object’s specialness by searching for more things of its kind. To better understand the particularity (and value) of the object under consideration, the subject identifies commonalities and differences between it and other things. For example, a subject hears a musical work that belongs to a genre that they were heretofore not exposed to, they have an experience of wonder, and they go on to search for other composers and works within that newly discovered genre.⁵⁷ By listening to more music in that genre and making connections and comparisons, they can better understand and appreciate what makes the first work they heard distinctive and valuable. However, it is also possible that, after listening to more music of that genre, their heart sinks as they realize that the artwork that inspired wonder is a dime-a-dozen. A similar type of inquiry from the fine arts is searching for new layers of interpretation in a beautiful or wondrous artwork. Even after experiencing it first-hand several times, the subject can still make new connections and find new interpretations. And this process can happen not only for, say, a music listener, but also for a performer: performing a musical composition in different ways brings out different ways in which the composition is distinctive and (finally) valuable.⁵⁸ A related mode of inquiry is *creating* art. We can apply R.G. Collingwood’s idea that creating an artwork can clarify for the

⁵⁶ For similar thoughts about scientific inquiry, see Vasalou 2015, p.108; Moore 2005, p.270; Sherry 2013, p.344; Frierson 2010, p.295; and Fisher 1998, p.89. For a chain or series of wonder experiences, see Schinkel 2017, p.545; Parsons 1969, p.89; Staniforth 2018, p.231.

To be clear, I do not mean to suggest that all scientific discoveries (or even ones that prompt further inquiry) involve beauty or wonder. For more on the role of beauty in scientific inquiry, see Ivanova 2017.

⁵⁷ As some of these examples suggest, the experience of beauty or wonder sometimes has ‘gateway value;’ it gets the subject interested in new genres, artworks, academic disciplines, etc.

⁵⁸ Louis Armstrong famously said, “Never play anything the same way twice.”

artist their initially vague feelings; here, the vague feelings concern what makes the object special.⁵⁹

Alternatively, a long-term inquiry might contain a variety of activities (including the ones just noted). An inquiry might include acts of imagination, which can help the subject better *appreciate* the object under consideration (as well as their own cognitive limitations).⁶⁰ For instance, they might pick up a fossil of a trilobite that lived 500 million years ago and try, but fail, to imagine the age in which it lived. Another activity that is oftentimes part of inquiry—one that was suggested in our discussion of young Theaetetus and can be gleaned from Nehamas’s account of beauty—is *sharing* our experiences with others. Oftentimes, we want to share objects we find wondrous or beautiful (Nehamas 2007, pp.73, 75).⁶¹ We often want to converse with our students, family, friends, colleagues, etc., trying to get them to appreciate the object in the ways that we do, and this dialogue sometimes makes up part of the activity of inquiry following wonder; we engage in a sort of *social inquiry*. In other words, talking with our friends, teachers, etc. can help us better understand and appreciate what makes the object special. Overall, the

⁵⁹ For a reading of this aspect of Collingwood’s theory of art, see Warburton 2003, p.49. For the idea of creating art as a method of inquiry following wonder, see Parsons 1969, pp.98-100 (this idea is also suggested in Lloyd 2018, p.210 and Prinz 2013a, p.11). For the idea of artistic creation and expression as a form of inquiry, see Young 2005, p.140. Contributing to a song by singing along can also be a form of *appreciation* (see Lopes 2008, p.207).

⁶⁰ For examples, see Dawkins 1998, p.9 and Rubenstein 2008, pp.199 (fn.13). To be clear, consciously initiating an imaginative act only *puts the subject in a position* to have an emotional response; they do not have complete control over whether and in exactly what ways they have an emotional response. I discuss the notion of appreciation in more detail in Chapter 3.

⁶¹ The idea of sharing in the case of wonder is educationally relevant—a point I will return to in Chapter 4.

I do not hold that the experience of beauty or wonder *typically* prompts the desire to share one’s experience because, whenever we consider a case in which a subject does not want to share their experience with others, it does not seem to count against the case being appropriately called one of wonder. Conversely, if the subject wants to share, this does not seem to count in favor of the case being one of wonder. Whether a person shares their experience seems largely determined by their personality or character traits that concern how they relate to others. Also, it seems that the vulnerabilities involved in wonder would oftentimes be a reason not to share the experience.

Along these lines, while I think there is something right about Staniforth’s observation that, generally, adults do not talk about wonder, we often *do* talk about and share wondrous *things*. For example, we share with our friends and family pictures of amazing things that we saw while on vacation (see 2018, p.115). In such cases, we tend to share the *objects* rather than our reaction, as the latter indicates and puts us in a vulnerable position.

open-endedness and potential endlessness of inquiry, in its various manifestations, is illuminated when framed in terms of the experience of beauty.

This picture of inquiry, illuminated through the lens of beauty, can also provide a way to reconcile a conflict between Socratic and Aristotelian wonder.⁶² Socrates holds that the subject in wonder should keep inquiry unresolved, to maintain uncertainty, and to remain open to mystery (Rubenstein 2008, p.12; Vasalou 2015, p.184).⁶³ In contrast, Aristotle holds that wonder prompts a search for causal explanation (i.e., a form of inquiry), and if such an explanation is found, this eliminates wonder and thereby puts the subject in an improved state, i.e., one of mastery and knowledge. For Aristotle, wonder is a sign of ignorance and a state we should escape as quickly as possible (*Metaphysics* 982b; Rubenstein 2008, pp.12-3; Vasalou 2015, pp.6, 173).

On my view, since the inquiry following the state of wonder is theoretically endless and has no clear endpoint, it seems unreasonable and misguided for the subject to try to quickly come to final, definitive conclusions that eliminates wonder (as Aristotle recommends). These features of inquiry make Socrates's view look more plausible. However, Aristotle is right to urge the pursuit of learning and to hold that the subject should strive to come to conclusions *in some sense*. With these things in mind, the best way forward is to qualify Socrates's view. A subject might resolve some aspects of their inquiry, but these prompt further questions or things to explore. In this case, the subject comes only to what I call *intermediate* conclusions. The subject might rather, or additionally, come to *tentative* conclusions. Here, the subject is vigilant and keeps the conclusion in the back of their mind, remaining alert to information that they come

⁶² These two views of wonder influence thinkers later in the history of philosophy. Adam Smith's view of wonder is Aristotelian in some important respects (see Smith 1980, p.40; Vasalou 2013, p.51; and Schliesser 2005, p.727), whereas Heidegger holds a Socratic view (see Heidegger 1994, pp.148-9).

⁶³ Along these lines, the historic Socrates is often described as a 'negative' figure, as he does not provide positive and definitive views or answers to the questions he poses (see MacTaggart 2017 (unpublished)). For an alternative reading of Rubenstein—where Socratic wonder concerns "*knowledge* that understands itself to be fatally uncertain, provisional, and open-ended"—see Willmott 2018, pp.19, 23 (my emphasis).

across (perhaps in other lines of inquiry) that might challenge the tentative conclusion. Rather than holding this conclusion with confidence and ordinary certainty, they remain willing and ready to reconsider and revise it.⁶⁴ In either case, the subject can remain open to mystery while still exploring and coming to some *intermediate* or *tentative* conclusions. In sum, looking at wonder through the lens of beauty can reconcile (or at least bring some illumination to) these opposing views regarding wonder.

§5

Though I have been focusing on particular aspects of the experience of beauty, I noted that the characterization of beauty as a whole points to the idea that the experience of beauty is also one of love. Since wonder is characteristically a type of beauty, we can make the further connection that *the experience of wonder is also one of love*. This connection reinforces the idea that wonder sparks in the subject a desire to better understand and appreciate what makes the object special and, accordingly, to devote part of their life to it.⁶⁵ This view has not been seriously considered in the wonder literature. Martha Nussbaum and La Caze hold that wonder serves as an antecedent to or preparation for love,⁶⁶ and a couple of theorists have noted some shared features between love and wonder, e.g., that both experiences involve engaging with the object for its own sake or having an awareness of the object's final value.⁶⁷ Both Nussbaum and La Caze discuss the role that wonder and love play in morality, and the aforementioned

⁶⁴ See Morton 2010, p.394 for similar ideas about tentative conclusions.

⁶⁵ See my fn.11 and pp.24-5 above.

⁶⁶ See La Caze 2013, pp.58, 13, 17 (cf. p.25) and Nussbaum 2001, pp.54-5. Similarly, Kathleen Dean Moore's reading of Carson suggests that the feeling of loneliness in an experience of wonder leads to love (2005, p.268). Moore's interpretation also highlights connections between beauty, the mysterious, love, and the object not being possessed. However, she does not make the further connections to the subject's desire to learn more about object, nor to the experience of wonder prompting inquiry.

⁶⁷ See Tobia 2015, p.17 and Schinkel 2017, p.549. Schinkel also notes how in both wonder and love, the object remains unmastered, and that in trying to understand the wondrous or the beloved, we keep alive the experience of wonder or love.

connection prompts questions about the moral aspects of wonder—a topic I turn to in Chapter 4.⁶⁸ But first, it is worth taking a closer look at the notion of *inquiry* (in the case of wonder) and related notions, as it has been relevant to many discussions in this chapter. While my Nehamasian picture of beauty fills out this aspect of wonder to some extent, there is more to say. Mining the concept of inquiry—which will be a primary aim of Chapter 3—will provide more insights into wonder’s nature and value.

⁶⁸ See Nussbaum 2001, p.217 and La Caze 2013. For interesting insights into the relationships between wonder, love, and morality, see Velleman 1999, which focuses on love and morality (especially pp.362-74). Many of Velleman’s remarks resonate with Nehamas’s accounts of beauty and love.

III. INQUIRY

In Chapter 2, I argued that the experience of wonder is a type of experience of beauty and showed how the two main components of the experience of beauty—the pleasure of anticipation and the vague desire to learn more—illuminate several aspects of the experience of wonder. For instance, these two components of beauty elucidate aspects of the subject’s interrogative attitude. Further, these two components play a role in interactions between the experience of beauty or wonder and the activity of inquiry: 1) they typically motivate and lead the subject to inquire about the beautiful or wondrous object, and 2) they in some respects live on during the activity of inquiry. I explained that, in the transition from the state of wonder or beauty to the activity of inquiry, the initially vague desire and aim to learn more about the object becomes a more refined and determinate motivation: to better understand and appreciate what makes the object finally valuable and distinctive. Looking at wonder through the lens of beauty also suggests that the inquiry associated with wonder is an open-ended and theoretically endless one, and that oftentimes the inquirer has a long-term relationship with objects of wonder or beauty. In both the initial state of wonder and inquiry, the experience involves vulnerability, intellectual humility, and openness.

There are two primary and related reasons for taking a closer look at the activity of inquiry associated with wonder—hereafter, ‘w-inquiry.’ First, the experiences of beauty and wonder both typically prompt the subject to inquire, and to properly understand these experiences, we need to have a good grasp on what they yield. Looking at wonder through the lens of Nehamasian beauty in the previous chapter gave us some initial insights about the nature of w-inquiry, and I aim to expand upon those insights in this chapter by looking at features of inquiry in general and highlighting how w-inquiry differs from other sorts of inquiry. Second,

exploring *w*-inquiry in detail highlights some important differences between the initial state of wonder and *w*-inquiry, but also brings out deep connections between them. Clarifying the nature of *w*-inquiry and its relationship to the initial state of wonder will help elucidate in what sense the experience of wonder “lives on” during *w*-inquiry. Overall, the insights about *w*-inquiry as well as its deep connection to wonder in this chapter will have implications for my discussions about the value of wonder in Chapter 4. For example, clarifying the nature of *w*-inquiry lays groundwork for my project in Chapter 4 of distinguishing between good and bad *w*-inquiry, which is wrapped into my investigation of whether having a sense of wonder can be an intellectual, aesthetic, or moral virtue.

In §§1-4, I flesh out the nature of *w*-inquiry and highlight how this type of inquiry is distinct from others. These sections lay groundwork for not only Chapter 4, but also for the remainder of this chapter. In §5 I draw comparisons between the state of wonder and *w*-inquiry and, in §6, clarify the thought that wonder lives on in *w*-inquiry. These two sections lead to my conclusion about the deep connection between the state of wonder and *w*-inquiry in §7.

§1

In Chapter 2, I uncovered some important insights about *w*-inquiry by looking at things through the lens of beauty, but there is more to say here that will be relevant later in the dissertation. To draw out some of the features of *w*-inquiry, provide some context, and guide the discussion, we can take as our starting point the following characterization of inquiry (in general): *Inquiry* is an activity in which the subject encounters a problem and engages with it by exploring a principal question and working with information in order to find something out. Inquiry aims at epistemic goods that somehow improve the inquirer’s epistemic standing, such as truth, knowledge of various kinds (e.g., know-how, propositional knowledge, phenomenological

knowledge), and understanding.¹ We will find these features in some form in w-inquiry, as the latter is a type of inquiry. Furthermore, to show how w-inquiry is distinctive, I draw some comparisons between w-inquiry and other types of inquiry, namely, instrumental inquiry (i-inquiry), inquiry associated with genuine curiosity (c-inquiry), and, in Section 3, inquiry associated with Nehamasian beauty (b-inquiry). Roughly speaking, i-inquiry is pursued at least primarily for the sake of some further non-epistemic end, whereas c-inquiry aims to acquire epistemic goods at least primarily for their own sake.²

Before discussing three interrelated features of w-inquiry that point to how this type of inquiry is different from others (in §2), it is worth unpacking in this section a few aspects of the general characterization of inquiry introduced above that apply to not only w-inquiry but other kinds of inquiry as well. Unpacking these clarify aspects of the activity and the inquirer's experience, whether in w-inquiry or other sorts. To begin, the subject works with information—that is, they gather (e.g., elicit, remember, organize), test, and evaluate meaningful data (Floridi 2019 and Adriaans 2020). Some philosophers claim that the activity of inquiry consists of working with *beliefs*, e.g., Robert Stalnaker characterizes the activity of inquiry as “the enterprise of forming, testing, and revising beliefs” (1984, p.*ix*). But there are at least two kinds

¹ This characterization of inquiry includes a few more details than some other views of inquiry, such as Nicholas Smith's simple, naïve account: “inquiry is the activity that has the aim of answering a question” (Smith 2020). But this teleological characterization is designed to simply distinguish the activity of inquiry from non-inquiry activities; it does not capture inquiry's phenomenology or ‘the inquiring frame of mind.’ In contrast, I am interested in both inquiry as an activity and as a subjective experience (see Smith 2020). Smith admits that “a maximally rich account of any human action plausibly involves something about the mental states of actors” (p.192). Further, he seems to agree with Jane Friedman that the psychology of inquiry includes having *suspended judgment* on the question that the subject inquires into (p.188). ‘Suspended judgment’ refers to being uncertain about the answer to the question (which, as I will soon discuss, is quite similar to my notion of a problem). For similar, relatively simple, views of inquiry, see Hookway 2007a and 2007b as well as Baehr 2011, p.18.

² For discussions of ‘genuine’ or ‘intellectual’ curiosity, see Morton 2010; Brady 2018b; Yiğit 2018, fn.2; and Mišćević 2018. It seems that inquiries associated with non-epistemic emotions are often instrumental in nature, e.g., Adam Morton notes that “If you are afraid you want to know how to get away, and if you are angry you want to know how to hurt” (Morton 2010, p.396). While Morton suggests that wanting to know how to escape is an instance of curiosity following fear, it is not *genuine* curiosity; the inquirer wants to know merely for the sake of, say, avoiding bodily harm.

of cases that highlight simultaneously how this sort of view is too restrictive and the benefits of employing the notion of information in characterizing inquiry, including w-inquiry. The first kind of case draws on the idea from the general characterization above that inquiry can aim at a variety of epistemic goods. An inquirer might have an epistemic aim to acquire a *skill*, a form of knowledge-how (Gaultier 2017, p.4962; Montero 2016, pp.55-6, 66; Small 2014, pp.100, 104). For example, a teenager might want to acquire driving skills, where this epistemic good is a mere means to independence and mobility (getting to school, soccer practice, or wherever else). Studying for the driving test and getting experience behind the wheel is part of an i-inquiry. The aim of acquiring a skill can also be part of a w-inquiry. After watching a pianist's wondrous performance of Liszt's works, the viewer thinks to themselves 'I want to do that!' The experience motivates and prompts their engagement in the practice of piano playing (taking lessons, practicing at home, etc.), which is part of the broader w-inquiry. But pursuing the acquisition of skills, whether in an i- or w-inquiry, does not consist of working solely with *beliefs*; working with this propositional attitude is, at best, only part of the story (Small 2014, fn.4). A more inclusive notion such as 'information'—roughly, meaningful data—better captures what is going on during inquiry. Supporting both of these points, philosophers Benoit Gaultier and Michael Devitt both indicate that cultivating a skill can be thought of as a process of working with information that cannot be expressed propositionally—e.g., kinaesthetic information obtained through proprioception (Gaultier 2017, pp.4964-5; Devitt 2011, p.328).³ Along similar lines, Stephen Grimm suggests that the aim of *understanding*—one of the aims

³ It is worth noting that some philosophers have challenged the idea that propositional knowledge is tied essentially to linguistic expression. See, e.g., Gregory Currie's convincing example of Fred Astaire's dancing style in 2020, p.79. However, Currie later explains that skill acquisition is not propositional (see p.100).

characteristic of w-inquiry, and which is sometimes an aim in i-inquiry and c-inquiry—involves something more than working with and acquiring beliefs (Grimm 2011).⁴

The belief-centered picture of inquiry also does not account for cases where researchers *accept*—but do not believe—things that allow them to make progress in their inquiry. Eric Schwitzgebel explains that, “the scientist often does not think that some particular theory on which her work depends is the literal truth, and thus does not believe it, but they nonetheless *accept* it as an adequate basis for research” (Schwitzgebel 2019, §2.5, my italics; also Hookway 2007b, p.357). Assuming that this can happen in i-inquiry and when scientists have experiences of curiosity or wonder and are prompted to conduct scientific inquiry, cases involving acceptance show that we ought not characterize inquiry exclusively in terms of forming and working with beliefs.

Moreover, the notion of ‘acceptance’ in inquiry—which can be part of working with information—adds nuance to an idea (introduced in Chapter 2) about the subject rearranging their mental structures; it highlights how *tentative* the rearrangement sometimes is. And this is the case not only with w-inquiry, but also other types as well; in pursuing epistemic goods that we do not yet possess, it is often the case that one’s mental structures need to be adjusted, perhaps many times, during inquiry. The ideas of tentativeness and rearranging one’s mental structures also reflect a more general insight suggested by Jaakko Hintikka: that ‘belief’ and ‘knowledge’ are too stable or solidified sorts of states to accurately capture what is going on *during* an inquiry. The goal of inquiry in an i- or c-inquiry is often a solidified belief, where the inquirer comes to a feeling of ordinary certainty, but things are more malleable during the inquiry, and this is why Hintikka characterizes inquiry in terms of working with *information*

⁴ For a discussion of curiosity (and the associated inquiry) aiming at a satisfactory *understanding* of a given topic, see Kvanvig 2013.

(Hintikka 2007, pp.25-6).⁵ Along these lines, the notion of acceptance also illustrates one way in which an inquirer can come to a *tentative* conclusion; they can accept but not fully believe a proposition (see Chapter 2).

A further feature of inquiry that can be drawn from the above discussion is that, in working with information, the subject likely acquires a variety of epistemic goods, some of which can be conceptualized as *by-products* of the inquiry. As the inquirer explores various questions and sorts through information, looking for bits that are most relevant to their epistemic aim(s), they also incidentally acquire information that is not as relevant (but nevertheless related) to their central focus. Sometimes these by-products ultimately end up improving their epistemic standing or playing a significant role in the inquiry, e.g., sparking a new inquiry.⁶

Finally, there is a feature suggested by many aspects of the characterization of inquiry above: the subject is *actively engaged*. Terms in the general characterization of inquiry like ‘activity,’ ‘working,’ ‘exploring,’ and ‘aims’ all reflect the idea that inquiry is not passive.⁷ The importance of effort, taking initiative, and active engagement in the concept of w-inquiry is reflected in the following case that, intuitively, does not involve inquiry:

A tourist visits the Palace of Justice in Brussels with a tour group. As they walk inside for the first time, they are amazed by the interior’s grandeur and size. But instead of wandering about to explore the massive space or asking the tour guide some questions, they have a *passive* response. They casually listen to the tour guide, look only where the guide points, walk to where the guide suggests, and take pictures from the spot that the guide recommended for a photo-op. Here, the tour guide guides the vast majority of how the tourist experiences the space.

⁵ Jane Friedman captures the uncertainty and malleability of inquiry with her notion of ‘suspended judgment,’ where the subject is not certain about the answer to the question that they are inquiring into (see my fn.2 above).

⁶ The idea that we often acquire epistemic by-products in the activity of inquiry is relevant in Chapter 4 where I note the educational value of wonder. Along similar lines, inquirers sometimes also incidentally acquire non-epistemic goods, e.g., money.

⁷ As we will see in Chapter 4, this point has implications for the educational value of wonder. Moreover, as I suggest above, inquiry is an *intentional* activity (rather than a reflex or instinct)—for support, see Smith 2020, p.182.

While paying attention does require some amount of initiative and effort, the tourist's interaction with the Palace of Justice is largely passive. The relevant information they acquire about the Palace comes largely from the tour guide's comments, instructions, and recommendations. It seems that the subject's experience of wonder prompts casual listening and a passive receiving of information rather than *inquiry*. Further, this would be the case even if they had the sorts of desires or aims characteristic of w-inquiry introduced in Chapter 2; simply having an aim does not entail doing the activity. (As I have indicated in previous chapters, even if the typical feature of wonder prompting inquiry is missing from this case, it does not entirely prevent us from appropriately calling it one of wonder; lacking this feature only counts against it being called one of wonder). If we adjust the case in ways to make the visitor's response and interaction with the architecture more active and effortful on their part, then we are more inclined to call it inquiry, e.g., if they ask the tour guide follow-up questions about the Palace or even if they take the initiative to work their way up to the front of the tour group to be able to hear the soft-spoken tour guide and to learn more about the extraordinary architecture.

Cases of c-inquiry and i-inquiry also require that the subject take some initiative and be actively engaged. A curious student who wants to understand a central theme of a novel attends relevant lectures or asks their friend about it to acquire the epistemic good (here, a satisfactory understanding).⁸ A subject who wants to know the weather forecast for that day (for the sake of deciding which mode of transportation to take to work) pulls up a reputable website on a smartphone to find out. These three cases (and variations of the first) provide at least some preliminary support for the idea that the notions of initiative, effort, and active engagement are important in the concept of inquiry.

⁸ Also see my fn.4 above.

§2

There are three interrelated features of w-inquiry that point to how it is distinct from other types of inquiry: the subject encountering a problem, having an epistemic aim, and exploring a question. I take up each in turn in the next three sections (§§2-4) with the aim of both providing a detailed picture of w-inquiry and to show how this type of inquiry is different from others. To begin, I suggested in the general characterization of inquiry that the activity is initiated in part by the subject encountering *a problem*. I mean ‘problem’ in a Deweyan sense, that is, as something that perplexes and challenges the subject’s mind so that it raises subjective feelings of uncertainty or ignorance (Dewey 1933, pp.12-3).⁹ While I feel ignorant or uncertain of many things about the distant future, such as the weather twenty days from now, many of these do not count as a problem; they do not perplex me or have the bite of a challenge (perhaps because they are not sufficiently interesting to me). My discussions in Chapter 2 suggest that, in the case of w-inquiry, the central problem encountered by the subject concerns *what makes the object distinctive and finally valuable*, the features that are responsible for the object’s specialness. In contrast, the principal problem encountered in an i- or c-inquiry are more variable—they could, but need not, concern the value or distinctiveness of an object. The earlier example of c-inquiry might concern the problem of how a central theme is expressed in various passages in a novel, and the problem associated with the i-inquiry (also noted above) concerns identifying the likely weather conditions for the day. Still, since some i- and c-inquiries might involve a problem identical to the characteristic one of w-inquiry, we might initially think that w-

⁹ One modification I make to Dewey’s view is removing the notion of ‘belief’—I do so for reasons presented above in §1. Also, I use ‘perplexes’ in a weak sense here, i.e., as a difficulty in either grasping something clearly or thinking decisively—a complicated matter. For reasons that I soon discuss, I also avoid Dewey’s use of ‘unsettled,’ which suggests that the matter was previously ‘settled’ for the subject.

inquiry is a *type* of i- or c-inquiry. However, as I will soon discuss (below and in §§3 and 4), there are some further contrasts that make this sort of view untenable.

While the principal problem characteristic of w-inquiry is not typical of other sorts of inquiry like i- and c-inquiry, I indicated in Chapter 2 that these different types of inquiry can interact, e.g., episodes of curiosity can occur within the broader w-inquiry. This is the case because, oftentimes, inquirers encounter other problems that conceptually fall under the principal problem. For example, I suggested in Chapter 2 that young Theaetetus encounters the principal problem about what makes the following (wondrous) idea distinctive and valuable: that the everyday assumption that knowledge is perception is actually untenable. His mind is also perplexed and challenged by problems subsumed under the principal one, e.g., the problems about what knowledge is and whether he holds other untenable assumptions. Along these lines, there are multiple layers of problems in at least some cases of c-inquiry (e.g., when reading a Wikipedia entry, we might become gripped by other problems, following hyperlinks to other entries). We can imagine examples of i-inquiry with this structure as well. Consider a subject who encounters a principal problem concerning when a particular store closes (they want to purchase an item). Along the way, other problems connected to the principal arise, ones concerning the current time, what modes of transportation are available, etc.

In addition to the principal problem and others that conceptually fall under it, the inquirer—whether in a w-inquiry or other kind—also sometimes encounters problems of a different sort: what I will call *procedural* problems. In a w-inquiry, the subject might encounter problems concerning the process of the investigation itself rather than the object's value or particularity. The inquirer might feel challenged by practical or methodological problems like how to get a better view of the object of wonder, where to obtain a book to learn more about the

object, or whether talking with an expert would be better than reading a book. But sometimes w-inquirers do not experience these sorts of challenges because, e.g., there are many plausible ways to go about the inquiry (and so they do not run into practical roadblocks), their inquiry is rather short, etc. These points also apply to i- and c-inquiry. The student who pursues research merely for the sake of completing their term paper may encounter procedural problems about where to find relevant information. A curious child wanting to know the name of a dinosaur that they see in a children's book might face procedural problems of getting their parents' attention to ask about it.

With respect to the notion of encountering problems, it is worth noting that, though there are cases where the subject is confident about some matter before encountering a relevant problem in an inquiry (e.g., the case of young Theaetetus and his initial views about knowledge), there are also cases that do not involve feelings of ordinary certainty or confidence beforehand.¹⁰ For example, in w-inquiries associated with first-time experiences of objects, it seems inappropriate to say that the subject feels certain about the object and its distinctiveness and value before they even hear about it or experience it first-hand. The characterization of inquiry introduced in §1 accounts for these different sorts of attitudes and mental states before encountering a problem associated with some type of inquiry.

While layered problems and the various possibilities regarding the subject's mental state before encountering problems apply across different types of inquiry, there are differences to note here with respect to how a subject responds to their encounter with problems. Most types of inquiry (including w-, c-, and i-inquiry) involve openness, intellectual humility, and vulnerability, but these can come in different forms. In Chapter 2, I explained that the w-inquirer

¹⁰ For the confident attitude of young Theaetetus, see *Theaetetus* 162d. For more on the notion of 'ordinary certainty,' see my Chapter 2, p.55.

does not have thoughts about, let alone a desire for, intellectually *mastering* the object. The intellectual humility here concerns different sorts of limitations than in the case of curiosity. In c-inquiry, there is typically a recognition of a gap in knowledge or understanding, but the missing epistemic goods are perceived by the curious subject as within their grasp.¹¹ This difference shows how it is a mistake to understand w-inquiry as a type of c-inquiry.

As we will see in §§3 and 4, the notion of encountering a principal problem is closely related to the subject's aim and them exploring a question. Furthermore, this notion of encountering a problem will help us draw a distinction in §5 between the state of wonder and w-inquiry.

§3

As I just noted, there are close connections between encountering a problem and the subject's aim. One connection is that the principal problem described above reflects the characteristic aim of w-inquiry introduced in Chapter 2: to better understand and appreciate what makes the object distinctive and finally valuable. Another connection is that we can see how the bite of the problem, the call for the subject to engage, points them to the characteristic aim of w-inquiry.¹²

The characteristic aim of w-inquiry (as it was introduced in Chapter 2) can be fleshed out a bit further in four respects. The first helps provide a clearer picture of w-inquiry, whereas the latter three additionally point to how this type of inquiry is distinctive—I take them up in turn. The first aspect of the characteristic aim of w-inquiry to flesh out concerns the idea that inquiry (in general) has an *epistemic* aim; the subject aims to find something out. The inquirer aims for

¹¹ Along these lines, Michael Brady associates curiosity with the subject's belief that the epistemic good is "within [their] grasp" (see 2018b, p.187).

¹² For similar ideas about problems and aims, see Hookway 2006, p.98.

epistemic goods that somehow improve their epistemic standing, i.e., things that improve the breadth, depth, or accuracy of the subject's true beliefs, knowledge, understanding, or information.¹³ Even though there is no clear endpoint at which the subject has a full understanding or appreciation in w-inquiry, the subject can nevertheless improve their epistemic standing by making some progress with this project, e.g., by arriving at intermediate or tentative conclusions. However, while aiming to improve one's epistemic standing by gaining a better understanding of what makes the object distinctive and finally valuable is clearly epistemic (understanding is commonly considered an epistemic good), one might doubt that *appreciation* of an object's value or distinctiveness is properly epistemic. To address this worry and to highlight some important aspects of the characteristic aim of w-inquiry, I take a closer look at the concept of appreciation below.

Appreciation is a perception of value, where the subject both *recognizes* the goodness of the object and *enjoys*—i.e., either takes pleasure in or has a positive emotional response to—the object's goodness. The subject immerses themselves in the object. Appreciation stands in contrast to a cold recognition of an object's value.¹⁴

What I have heretofore not made clear is that w-inquiry sometimes involves an aim that places more emphasis on a better appreciation rather than on a better understanding, or vice versa. For example, the inquirer can aim to have a more immersive experience or a stronger

¹³ For the idea that inquiry can aim at several different kinds of epistemic goods, see Streeter 2006, p.125; Watson 2018b, p.296 (who cites Inan 2012); and Hookway 2007b, p.357 (also pp.362-3). For the idea of inquiry aiming to improve epistemic standing, see Watson 2018b, p.305 and 2018a, p.156. It is worth noting that improving epistemic standing could include *getting rid of* something (e.g., a belief that the subject discovers is inaccurate in some way).

¹⁴ I largely draw upon Olsen 2014, the *OED*, and Lopes 2018, pp.34-5,160-2 for this conception of appreciation. The view I adopt here is closer to Lopes's thin conception of appreciation than his thick conception. The latter seems to involve even *more* cognitive activity and epistemic goods such as know-how (e.g., perceptual skills) and propositional knowledge (e.g., background knowledge about the object or its context) than the thin conception. My point here is that appreciation is epistemic even when it is thinly conceived. Further, I do not want to provide too thick of a conception of appreciation, as it would exclude young children from being able to appreciate an object.

attraction or emotional response to the object (a *better appreciation*, but not necessarily a better understanding). Alternatively, they might aim to *better understand* what makes the object special while simply keeping alive or reawakening the attraction and emotional response to the object's distinctiveness and value.¹⁵ Notwithstanding, aiming for one usually brings the other with it. For instance, gaining a deeper appreciation of an object's distinctiveness or value typically involves something like understanding—a web of background knowledge that allows the subject to grasp the relationships between various aspects of the object and to other things.¹⁶ The aim for a deeper appreciation involves epistemic goods.

Even if the inquirer is not aiming for a *deeper* appreciation, the aim of simply preserving some degree of appreciation for what makes the object distinctive and valuable is still *epistemic* because of its affective component. In *w*-inquiry, the inquirer is not after a cold understanding of what makes the object distinctive and valuable but, rather, one that has an affective component, and the latter amounts to their understanding these aspects of the object *in a new way*, on a deeper level. Affective responses can improve the subject's epistemic standing in virtue of knowing, understanding, believing, etc. something in a deeper way.¹⁷ Furthermore, the affective

¹⁵ However, these aims regarding appreciation are not something that the subject has complete control over; they cannot *will* themselves to feel joy or other emotions. There are strategies, though, that help *put them in a position* to have an emotional response.

¹⁶ See my Chapter 2, pp.24-7 for a discussion of 'better understanding' and pp.28-9 for the idea that sometimes inquiry aims at gaining a *better appreciation* of the distinctiveness or value of an object.

Stein Haugom Olsen and Julian Dodd both seem to exclude the possibility of young children appreciating things when they suggest that appreciation *in general* requires a rich web of background knowledge about the object of appreciation (see Olsen 2014 and Dodd 2014). On my view, having a rich background knowledge of, say, fine wines or classical music might be important for gaining a *deeper* appreciation for such things, but it is not required for appreciation in general. If appreciation in general requires a web of theoretical knowledge, something that young children seem to lack, then we come to the counterintuitive result that young children cannot appreciate anything.

¹⁷ Rick Furtak suggests that emotions can help us know the object (of the emotion) in a better, deeper, more full way (2018, p.584). For similar ideas about how we can improve our epistemic standing, see Carroll 2003, who discusses art's ability to improve our epistemic standing by 1) reminding us of something we already know (p.377); 2) making what is known more clear or explicit (p.378); 3) helping us re-explore what we already know, or know it in a deeper way (p.381); and 4) helping us see the significance of something we know (p.380). It seems that affective, emotional responses can play an important role in some of these.

component is not simply ‘added on’ to the previous understanding, knowledge, or belief. Peter Goldie nicely illustrates this point in his discussion of Michael Stocker’s ice case. In this scenario, the subject initially recognizes the dangers of walking on ice. But after they fall on the ice and hurt themselves, they feel fear toward it and believe (or understand, know, whatever) *in a new way* that the ice is dangerous.¹⁸ Here, the *content* of their belief that the ice is dangerous, the whole way of experiencing the ice, is somehow different from before the incident (Goldie 2000, pp.59-60).¹⁹

The second point to flesh out about the aim of w-inquiry not only clarifies what happens in w-inquiry, but also highlights how the characteristic aim of w-inquiry is distinctive; the characteristic aim is different from not only that of c-inquiry and i-inquiry, but also b-inquiry. I explained in Chapter 2 that experiences of beauty with a perception of the extraordinary (what I labeled ‘wonder’) can be distinguished from other experiences of beauty on intentional grounds or in terms of the thoughts characteristically involved. Accordingly, we can expect that part of the aim of w-inquiry is to better understand and appreciate what makes the object not only valuable and distinctive, but also extraordinary. The w-inquirer—unlike the b-inquirer—characteristically aims to better understand and appreciate what makes the object not only beautiful but also extraordinary.²⁰ The rather specific aim characteristic of w-inquiry stands in

¹⁸ Goldie talks about ‘thoughts’ (and ‘recognition’) rather than ‘belief,’ as the latter—if made into a requirement for emotion—makes ‘emotion’ too intellectual (see 2000, p.47). While I agree with him on this point, it is important to acknowledge that if the subject has something stronger than a mere recognition (say, a belief or propositional knowledge that the ice is dangerous), this does not discount the case from being one of a Goldiean emotional episode.

¹⁹ These points challenge Stein Haugom Olsen’s view that appreciation and understanding are two separate modes of apprehension, that appreciation includes an *experience* of value whereas understanding does not (see Olsen 2014).

²⁰ I explained in Chapter 2 (§2) how the extraordinary and distinctiveness can come apart. We might alternatively characterize the aim of w-inquiry as concerning a *thick* conception of ‘distinctive,’ one that includes not only particularity but also extraordinariness (also see my p.80 below).

contrast to the more general aims of i- and c-inquiry. In the latter two, the subject aims to acquire epistemic goods that they lack or believe that they lack (Watson 2018a).

The third detail to draw out here regarding the aim of w-inquiry is that even though the epistemic aim of w-inquiry is the *central* aim, the inquirer might have additional aims in engaging with the problem—they might have, e.g., practical or moral aims as well.²¹ For example, a w-inquirer might pursue scientific research largely for its own sake, but also in part for the sake of saving people's lives (Roberts and Wood 2007, pp.173-4; Evans 2012). Alternatively, a w-inquirer might acquire additional motivations during their inquiry. In either case, the central epistemic aim is not pursued as a mere means to some further non-epistemic end, as is the case with i-inquiry. In w-inquiry, the subject pursues it at least primarily for its own sake.²² This connects to my view in Chapter 2 that the subject in the state of wonder is attracted to the object itself and values the experience of engaging with it (namely, learning more about it) for its own sake. Since the experience of wonder is one where the subject has an absorbed attention that is object-focused and is drawn to the object's particularity and final value—and w-inquiry has the central aim of finding out more about these aspects of the object—there is *little room* for them to have an instrumental stance toward or relation to the object, e.g., thinking about how engaging with the object benefits their own projects or conceiving it as fungible.²³ However, while this seems to be the case for at least the early stages of a w-inquiry,²⁴ non-epistemic motivations might enter into the picture somewhere along the way which either end the inquiry (temporarily or permanently) or transform it into an i-inquiry. For example, a researcher might

²¹ Since this central epistemic aim of w-inquiry does not have a clear endpoint, it likely outlasts many of the additional aims that are peripheral to the w-inquiry (some of which might get resolved). The view that at least one of the central aims in inquiry is *epistemic* is suggested in Hookway 2006 (for similar ideas, see Yiğit 2018, fn.2).

²² For a stronger version of my view, see Lloyd's discussion of Aristotelian wonder (Lloyd 2018, p.25 and *Metaphysics* 982b).

²³ Also see my Chapter 2, p.49.

²⁴ For empirical support, see Izard and Ackerman 2000, p.257 and Fuller 2006a, pp.12, 41, 97, 99-100.

initially be intrinsically motivated to research octopuses after having an experience of wonder with one but, after a few years of research, their central, or perhaps only, motivation to continue inquiring is to get paid and complete their book—the research is a means to a non-epistemic end.²⁵

These points should not be confused with the idea that there are often practical considerations that impact *how* the subject conducts their inquiry—whether it is a w-, b-, c-, or i-inquiry. If they have a lot of time and resources for pursuing an inquiry (e.g., if they have access to high-end scientific equipment in a laboratory), the investigation will likely look different from an inquiry conducted by someone who has little resources or time. Drawing on my discussion above about problems, we can see how practical considerations might create procedural problems for the subject. Tough procedural decisions sometimes need to be made during any kind of inquiry. I will touch upon related practical considerations when discussing good and bad w-inquiry in Chapter 4.

The fourth and final detail worth noting here regarding the aim of w-inquiry is that I have been treating (and will continue to treat) the *goal* and *purpose* of w-inquiry as aligned. While I think that this is usually the case, there seem to be cases of w-inquiry where the target and the reason for engaging in the w-inquiry come apart—something that does not seem possible with i-inquiry. In his recent book on games, Thi Nguyen explains that some game play involves a

²⁵ I suggest in Chapter 2 that a long-term w-inquiry can be broken up by various activities (e.g., sleep). Along these lines, if the subject has motivations for engaging with the object in ways that conflict with their aims in w-inquiry, they may take up these alternative ways of engaging with and perceiving the object by ‘taking a break’ from their w-inquiry. Also, as I intimate above, some motivations for engaging with an object will not, or only minimally, conflict with the central aim of w-inquiry. For example, if a student initially engages with a film simply for the sake of writing a paper for their film course, but then they have an experience of wonder near the beginning of the film, their w-inquiry may include engaging with aspects of the film that the teacher also wants them to focus on and discuss in their paper. Here, the central epistemic aim of w-inquiry and the practical or educational aim *mesh*. Writing a paper about a film you found wondrous might help you make progress in better understanding and appreciating what makes the film special.

disposable goal—i.e., one that the subject does not care about for the long term. Here, the subject temporarily adopts a goal for the sake of the means: the activities involved in playing the game. Another sort of activity that is often engaged in for fun is trying to figure out how a theatrical magic trick is pulled off. Jason Leddington describes the *aporia* involved in the experience of theatrical magic as a fun *aporia* (Leddington 2020).²⁶ Bringing these two research projects together, we can imagine cases where a subject experiences a fun wonder during a magic show and, in wanting to better understand and appreciate what makes the performance of a trick special, they want to find out how it was pulled off. But this intellectual challenge to figure things out is what the subject values, not the goal of actually uncovering the magician’s secrets (this goal is disposable). We can also imagine other audience members who likely do not experience wonder, and whose purposes and goals align. They do whatever they can to find out how the trick was done—they might corner the magician after the show and demand that the magician reveal their secrets. This type of audience member corresponds to Nguyen’s example of the Charades player who cares only about winning and whose aggressive and competitive game play makes the game a miserable experience for everyone else playing (Nguyen 2020, pp.1, 6-9).²⁷

The possibility of this motivational inversion in the case of wonder is not a problem for my view, as I noted in Chapter 2 that the subject does not view w-inquiry as an activity of drudgery (whereas this might be the case with i-inquiry, where the epistemic goods are a mere means to some valued end). With w-inquiry, the subject sees the value in the intellectual activity

²⁶ I hold that many cases of wonder do not involve *aporia* and, similarly, many instances of *aporia* are not experiences of wonder. More specifically, I think that while zetetic *aporia* can often be conceptualized as an experience of wonder, the same is not true of cathartic *aporia*. For more about these two types of *aporia*, see MacTaggart 2017 (unpublished).

²⁷ Professional magician and author Nate Staniforth tells a story not so different from my example (Staniforth 2018, pp.61-2). I consider some other morally insensitive examples of wonder and w-inquiry in Chapter 4.

itself, and this is true whether they care simply about the activity or about both the activity and the goal.

§4

An inquirer engages with a problem and pursues an epistemic aim by *exploring a question*, which involves working with information and sometimes *asking* questions as well.²⁸ In the case of many c- and i-inquiries (among other types), a principal question—more specifically, what it represents: a request for information—captures the mental content of the inquiry, that is, what the subject’s inquiry is about and that to which their thinking is directed.²⁹ The principal question reflects the epistemic aim of and principal problem encountered in the inquiry. To illustrate, we can find a different principal question for each token of a c- or i-inquiry: What’s the name of this dinosaur? How is the theme developed in this novel? or What’s the weather forecast today? Furthermore, like a principal problem, in exploring a principal question, the subject will likely explore several interconnected questions that conceptually fit under the principal question, and these operative questions help them make progress on the latter.³⁰ In addition, we can

²⁸ For similar views about the subject *having* or *exploring* questions rather than *asking* them, see Hintikka 2007 (e.g., pp.83, 70-1, 19, 23, 90); Whitcomb 2010, p.672; Mulligan 2018, p.252. To hold that the subject typically or always *asks* a question makes inquiry a linguistic enterprise and too restrictive. Though in this section I focus primarily on w-inquiry, it seems that many types of inquiry *need not be linguistic*. For suggestions of non-human animals like cats, dogs, rabbits, and ravens inquiring, see Curren 2018, p.476; Friedman 2019a, p.298; Morton 2010, p.398; Dewey 1933, p.13; and Izard and Ackerman 2000, p.257. Further, for the idea that animals can enjoy discovery for its own sake, see Koestler 1964, p.266. In contrast to theorists who highlight the abilities of non-human animals, Hookway 2008 characterizes inquiry in terms of *asking* questions (p.4), and Friedman 2019a seems to suggest something similar (p.299).

While I do not have time to explore the topic here, I do characterize inquiry in a way that leaves open the possibility that some non-human animals can experience wonder and pursue inquiry (albeit not as sophisticated as human inquiry). For a brief discussion of Jane Goodall’s observations of apes experiencing wonder, see Prinz 2013a, p.10. For a similar suggestion regarding dogs, see Sherry 2013, p.348.

²⁹ For a similar view, see Friedman 2013 (e.g., p.168). As I suggest above, ‘thinking’ does not necessarily involve language. I also suggest that the subject does not direct her attention to a mere linguistic entity, the string of words that make up an interrogative (also see my fn.17 above). For more about types of questions that *do not* request information (such as request questions like ‘Would you mind turning off the radio?’ or rhetorical questions), see Llewellyn 1964, pp.70, 78-9.

³⁰ See Hintikka 2007 for similar ideas about principal and operative questions (e.g., p.90). In contrast, I hesitate to describe the problems that conceptually fit under the principal problem as ‘operative,’ as they do not seem to help the subject make progress on engaging with the principal problem.

understand explorations of operative questions as *expressions of* the principal question and aim of the inquiry.³¹ This applies to not only i- and c-inquiries, but also w-inquiries. Operative questions for young Theaetetus might include, What is knowledge? and What other assumptions do I hold that are actually untenable? These express the principal question and characteristic aim of w-inquiry.

However, there are three aspects of exploring a principal question that distinguish w-inquiry from other kinds discussed in this chapter. First, as I suggested above, each instance of an i-inquiry or c-inquiry can have its own principal question, whereas b- and w-inquiry has a characteristic one which reflects the characteristic epistemic aim and principal problem discussed earlier: *What features make this object distinctive and finally valuable, and how do these features relate to each other and to other objects?*³² Second, drawing on insights from §3 above, ‘distinctive’ in this principal question is different in the case of b-inquiry and w-inquiry; the latter includes the notion of the extraordinary in the notion of ‘distinctive.’ Finally, while there are some i- and c-inquiries in which the principal question captures only roughly the mental content of the inquirer (e.g., a student uninterested in a historical topic who pursues an i-inquiry to better understand that topic for the sake of doing well on their final exam), this is *characteristically* the case with b- and w-inquiry. This final point is worth further developing.

Even though the principal question above and the characteristic aim of w-inquiry are closely connected, we can only *roughly* capture the mental content of the inquirer when they

³¹ As I suggest here, we can additionally conceptualize the w-inquirer as having operative (epistemic) aims, and that such drives can be thought of as *expressions of* the aim to better understand and appreciate what makes the object distinctive and finally valuable. Further, it is worth noting that even if the subject does not consciously reflect on certain aims or questions, we can still *explain* the inquirer’s activities in terms of the principal aim and question (for similar ideas, see Zagzebski 1999, p.108).

³² I use the plural ‘features’ in this formulation, but it is important to note that it could turn out that there is only *one* feature that makes the object special (in this case, the subject would inquire about the relation of that feature to other things, or what relation it has to other aspects of the object). I use ‘features’ because it suggests a more open-minded attitude for the inquiry than to say ‘feature.’ For a similar interrogative, see Nehamas 2007, p.84.

explore this sort of principal question. There are two reasons for this, both of which concern the typical aim of b- and w-inquiry. First, the aim to *better* understand what makes the object distinctive and finally valuable is difficult to capture in an interrogative. To illustrate, if we add the qualification ‘all’ to our principal interrogative—applied either to the features that make the object special, or to the number of relations between features of the object or to other objects—this makes the inquiry too ambitious and reflects the aim of *intellectual mastery*. Conversely, if we instead add ‘some’ to the interrogative, we end up with too weak of an aim in the inquiry. The subject could justifiably close the inquiry after finding just a couple things that make the object special and making a couple connections to other things. Not including either of these qualifications gets us closer to capturing the open-endedness of b- and w-inquiries (as well as select instances of i- and c-inquiries, such as the example above of the history student cramming for their exam).³³ Second, we face similar difficulties in capturing the aim of appreciation in our interrogative above. It is hard to capture in words the difference between a cold understanding and one that has an affective component. This point is illustrated in the ice case from earlier. Goldie explains that after the subject falls on the ice, they feel fear toward it and believe (or understand, know, whatever) *in a new way* that the ice is dangerous. The emotional response to the ice is epistemically relevant and the content of their belief that the ice is dangerous is somehow different from before the incident, but in a way that is not capturable in an interrogative (Goldie 2000, pp.59-60).

Despite these limitations in capturing the mental content of w- and b-inquiries (along with some i- and c-inquiries), considering the role of questions in w-inquiry can illuminate a few

³³ These points apply, to some extent, to instances of c-inquiry where the aim is a ‘satisfactory understanding’ of a topic (see Kvanvig 2013, p.170). In this case, however, we might be able to specify the relevant connections that need to be made by the subject for them to attain a ‘satisfactory’ understanding. Including a long list of the relevant connections, however, makes for a cumbersome interrogative for the c-inquiry.

ideas introduced in Chapter 2. First, looking at this aspect of w-inquiry clarifies (or at least gives us an additional way to see) my point that the feelings of intellectual mastery and ordinary certainty (and closing an inquiry on these grounds) are not likely warranted in a w-inquiry. It is doubtful that the subject justifiably comes to feel ordinary certainty about a *complete* answer to this principal question. This is due in part to the phrase ‘how do these features relate to each other and to other objects?’ which roughly captures the aim of *understanding* the object (understanding involves grasping how aspects of the object and other things relate).³⁴ As I noted in Chapter 2, making connections between the object and other things is a theoretically endless project.³⁵ Approaching this idea from the closely related notion of *problems*, we can say that the bite of the problem and the feelings of uncertainty generally linger in w-inquiry. Along these lines, since there are usually several operative questions that conceptually fall under and connect to the principal question and addressing or considering each question takes some time, we can readily see how w-inquiry can often become a long-term project.

The role of principal and operative questions also highlights a second possible way in which the inquirer experiences lingering uncertainty. Feeling ordinary certainty about answers to operative questions constitute intermediate conclusions, but if we do not feel certain about them, then they can be conceptualized as tentative intermediate conclusions. So, the inquirer can experience two sorts of uncertainty simultaneously: one regarding the endlessness of inquiry and one regarding the things that they already explored. Still, tenuous answers to operative questions

³⁴ For this common view regarding understanding, see Grimm 2011 and Huovinen 2011, pp.129-30 (also see Kvanvig 2013, p.170 for a somewhat similar view). Also see my Chapter 2, pp.55-6 for my discussion of ‘better understanding.’

³⁵ For similar sentiments, see Elson 2016 on ‘vague projects’ and Hookway 2007b, p.357 for examples of such projects. This idea is also suggested in Friedman 2019b, p.88. As I noted in Chapter 2, there is also no clear point at which the subject reaches an *absolutely* deep or full appreciation of what makes the object distinctive and valuable.

help the w-inquirer make some progress in answering the principal question (though, as I just noted, reaching a complete and confident answer to the latter is doubtful).

The role of questions in w-inquiry will be illuminating in later discussions as well, e.g., in Chapter 4 when I discuss the ethical dimensions of w-inquiry. Though inquirers do not always *ask* questions, they sometimes do. Ethical issues can arise when considering *how* a w-inquirer asks questions, especially when the object of wonder is another person. For instance, asking a person whom you find extraordinary leading questions (e.g., questions that are phrased in a way to simply reinforce stereotypes or your assumptions) displays insensitivity and might be morally problematic. This might be the case even if the inquirer is open to any answer that the extraordinary person provides, including answers that reject the presuppositions in the leading question. Other times, the way in which we ask questions and engage with the other person—our tone of voice, the way we phrase a question, the types of questions and follow-up questions we ask—expresses or shows our care and compassion for them (La Caze 2013, pp.56-7). But, most important for this chapter, the role of questions in w-inquiry will highlight a crucial distinction between the interrogative aspects of the state of wonder and w-inquiry—a distinction that I will discuss in the next section.

§5

The insights from §§1-4 will assist us in two related ways in the remainder of the chapter. They will draw out important comparisons between the state of wonder and w-inquiry, which will in turn help highlight the deep connection between the two, one that I characterize as the former metaphorically *blooming* into the latter—wonder does not *prompt* inquiry in a thin sense, where one simply leads to or causes the other.³⁶

³⁶ I am not interested here in how w-inquiry ends, including how it might sometimes transition to an i-inquiry (see my pp.76-7 above).

After discussing the interrogative attitude and other aspects of the experience of wonder, as well as providing a detailed characterization of w-inquiry, we can now take stock of the similarities and differences between wonder and w-inquiry and say more precisely in what respects the former ‘lives on’ during the latter. To begin, there are a handful of important differences between wonder and w-inquiry, most of which are differences in *form* or *degree*. The one that is not a difference in form or degree, the one concerning questions, is perhaps the starkest difference—I will discuss it before turning to the others.

As I have briefly indicated before, unlike inquiry, we cannot associate any specific questions with the interrogative attitude of wonder that are meant to roughly capture the mental content of the subject.³⁷ One might be tempted to say that the question that represents the mental content of the interrogative attitude of wonder is, roughly, ‘What’s there to find out here?’ or ‘What’s of value here?’ However, by associating either of these questions with the interrogative attitude, the vague aim of ‘wanting to learn more’ is improperly construed. These interrogatives suggest that the aim of ‘wanting to learn more’ amounts to either 1) enumerating a list of things to learn about with respect to the object, or 2) coming to know (or understand, etc.) various facts about the object—perhaps specific facts about its significance, its history, etc. Both aims put too much direction and focus on what is the initial vagueness in the experience of wonder. Both suggest that the subject is already taking up and working through specific tasks that they have set themselves, and this is so even if we propose a rather general question like the two above. In the

³⁷ See §4 above and Chapter 2, pp.51-2.

interrogative attitude, there is a forward-looking intellectual engagement but no specific questions yet.³⁸

A helpful analogy in elucidating this important difference between w-inquiry and the interrogative aspects of the state of wonder is to consider two kinds of shoppers: a shopper who has a shopping list in-hand and one who is simply window shopping or casually browsing.³⁹ The mental content of the window shopper is analogous to the interrogative attitude of wonder. The subject is not looking for anything specific—they are casually browsing, remaining open to the possibilities—and there is no point at which they would be done shopping, besides losing interest in the activity. It is telling that when a store clerk asks a casual browser if they have any questions, it is natural for them to reply, ‘No, I’m just browsing.’ Further, there is something about the store that drew the shopper into its doors, yet they cannot say ‘I went to store x because I am looking for ϕ .’ In contrast, the shopper with the list has mental content analogous to that of the w-inquirer. There is a task at hand that guides the shopper’s thinking and actions (and, to take the analogy further, the w-inquiry shopping list would have some indeterminacy; a to-do list with the item ‘securing an excellent education for my child’ or some other vague project better captures the open-endedness of w-inquiry).⁴⁰ I use ‘guides’ because, in the case of w-inquiry, the inquirer is still somewhat open and receptive to other possibilities, that is, to items not on the

³⁸ We see this sort of engagement in Nehamas’s initial moment of beauty. He talks about how he ‘keeps looking’ at the object, which is “an effort to learn what can be known about [the object] from a distance” (2007, p.53). Initially, there is no effort to learn something *specific*; he does not keep looking in order to find out the object’s best feature, how certain features of an artwork interact or relate, etc.

³⁹ The situation of these two shoppers is described as *an analogy* because, even though we can imagine that the window shopper encounters a problem, the shopper with list-in-hand sometimes does *not* encounter a problem. I do most of my grocery shopping at my local Fortinos and so I am quite familiar with the store. I often feel ordinary certainty about where the food items on my list are located in the store, roughly how much each item costs, when the store is open, etc. Most people can think of at least a few shopping trips that are of this quality. Put simply, not every shopping trip (with a list) will be a form of inquiry.

⁴⁰ For the vague, long-term project of ‘securing an excellent education for one’s child,’ see Hookway 2007b, p.357. In contrast to the inquiry associated with beauty and wonder, *curiosity* has a determinate task and a clear endpoint—see Chapter 2, p.56.

shopping list.⁴¹ My shopping list is just a bunch of vegetables, but that ice cream looks pretty good...⁴²

Related to the role of questions, the notion of a ‘problem’ from §2 brings out a difference in form between the state of wonder and w-inquiry: the two involve different kinds of problems. In the experience of wonder, the subject is perplexed and challenged by their *initial impressions of the object*, and this corresponds to their vague desire to learn more about the object. In the state of wonder, they have only a vague sense of the object’s extraordinariness, final value, and that the object has something more of value to offer than only it can provide. It is not until w-inquiry that the subject encounters (i.e., becomes in some way aware of) the problem of *what makes the object distinctive and finally valuable*—that is, what features *contribute to* or are *responsible for* its distinctiveness and final value. These two problems are different but closely related; the former (general and hazy) problem naturally leads to the latter (more specific) problem. In learning more about an object that we vaguely sense is special, we are quite naturally drawn to explore the features that are potentially responsible for the object’s value and particularity. During the activity of inquiry, both problems are in play.⁴³

Another difference in form (which has been noted in this chapter and in Chapter 2) concerns the aims characteristic of the state of wonder and of w-inquiry. In the former, there is a

⁴¹ Tied to this idea is the notion that the inquirer has intellectual humility and allows themselves to be vulnerable (see Chapter 2, p.54).

⁴² Thinking about record stores and clothing stores are helpful in picking out different types of shoppers. At either type of store, we often find people who visit because they have a vague sense that the store will have something they will like, but there are also shoppers that come into the store knowing exactly what they want (the trip might last them all of five minutes). I think we can often find both types of shoppers at grocery stores, too. Even though the shopping-list variety is more common, we can think of a hungry person who goes to the store to browse the aisles, waiting for something to catch her eye.

⁴³ Bringing together this conclusion with my recent discussion about questions, we gain the insight that not all engagement with problems can be (roughly) captured in an interrogative.

It is worth noting that while Armstrong and Detweiler-Bedell 2008 provide some empirical support for the idea that uncertainty can be associated with attraction to an object, they note that the subject needs to have a “promotion focus” rather than a “prevention focus”—in the latter, uncertainty prompts avoidance. However, my point here is about uncertainty that has a tinge of value rather than harm or disvalue (see p.317).

vague desire or aim to learn more, whereas the latter involves the more refined and determinate aim to better understand and appreciate what makes the object distinctive and finally valuable. While this point is not a new one by now, it suggests a couple further differences. First, there is a difference in the *degree* of receptivity and openness between wonder and w-inquiry. Given the different aims of the two, it seems that the subject in the state of wonder will naturally be more open to possibilities with respect to the object of wonder than in w-inquiry; they are not pursuing any specific lines of inquiry which draw their attention toward certain things and away from others. Even though w-inquiries often take the subject in all sorts of unanticipated directions, the inquirer remains open and receptive to revising their tentative conclusions or overall project, and they look out for blind spots in their investigations, there is nevertheless a baseline openness and receptivity in the state of wonder that is inhibited in the activity of inquiry.

This difference between wonder and w-inquiry regarding the degree of openness and receptivity suggests a difference in form regarding the *way* in which the subject works with information. Based on my discussion in §1, it seems that, in the state of wonder, the subject will tend to *gather* information rather than rigorously test or evaluate it. Since the aim is simply to learn more, the information they collect and take an interest in is rather indiscriminate. Further, the rearrangements of their mental structures will often be tentative and change as they get an impression of various aspects of the object.⁴⁴ In contrast, the subject in w-inquiry will still have some openness to new possibilities, but their attention will generally be focused on a narrower set of stimuli and information, and will likely spend more time carefully testing, evaluating, and organizing it than in the initial state of wonder. This characterization reflects the refined aim typical of w-inquiry.

⁴⁴ While this is true of our experiences of wonder towards objects that are somewhat familiar to us, our mental structures are especially dynamic when the object of wonder is completely new to us.

A couple further differences between the interrogative aspects of the state of wonder and the activity of inquiry surface when considering the overall picture of w-inquiry from §§1-4. First, this picture of w-inquiry suggests that wonder and w-inquiry involve different kinds of attention. The interrogative attitude—which, as I noted in Chapter 2, includes an attitudinal pleasure of anticipation—involves an *absorbed* attention to the object, whereas this kind of attention is variable during the activity of inquiry. Put another way, the pleasure of anticipation—which is an important component of the state of wonder—does not typically *pervade* the w-inquiry (in at least its most robust sense). There is nothing in the characterization of w-inquiry that suggests that absorbed attention is a typical feature. Oftentimes the subject will have absorbed attention in the early stages of a long-term inquiry but not in the later stages.⁴⁵ The idea that the object of attention is our whole world for the *entire duration* of the activity of inquiry seems too strong. In cases where the subject aims in their inquiry to better appreciate the distinctiveness and value of the object, the *aim* might include something like the experience of being totally absorbed, being ‘in the moment,’ but it is possible that they do not fulfil this aim.⁴⁶ Nevertheless, w-inquiry involves some form of attention. As I noted in §1, the w-inquirer attends to the object and is actively engaged—this is an important part of the concept of inquiry. Put simply, wonder and w-inquiry sometimes involve different kinds of attention.

Overall, in considering the handful of differences above, we can add one more difference to our list. The state of wonder and w-inquiry involve different forms of *intellectual engagement* with the object.

⁴⁵ Also see my pp.76-7 above. Moreover, sometimes the inquirer might become frustrated and end the inquiry early (see my Chapter 1, p.25).

⁴⁶ It seems that ‘being in the moment’ is similar to ‘being immersed’ (see my p.73 above).

Aside from these differences, there are several features that roughly remain the same between the initial experience of wonder and w-inquiry, all of which were noted in Chapter 2 and surfaced in spots throughout this chapter: vulnerability and intellectual humility, attraction to and appreciation of the object, and engaging with it for its own sake.

§6

After reviewing these differences and similarities, we can clarify in what ways the initial experience of wonder ‘lives on’ during w-inquiry. The pleasure of anticipation is arguably kept alive, albeit in perhaps a modified and less intense form: w-inquiry involves appreciation, attraction, receptivity and openness, intellectual engagement, and is forward-looking, but the attention might not persistently be one of *absorption*. Notions conceptually connected to the pleasure of anticipation and desire to learn more (such as vulnerability, intellectual humility, and engaging with the object for its own sake) also live on during the activity of w-inquiry. Furthermore, the desire to learn, attraction, attention, problems, and forward-looking elements live on *at least in some form* during w-inquiry. These connections between wonder and w-inquiry highlight the sense in which the initial experience serves as a persistent motivating force during the activity of inquiry.⁴⁷

There is also a quite different sense in which the initial experience ‘lives on,’ one that seems to partially explain the motivating role that the experience of wonder plays during w-inquiry: *the memory* of the initial subjective experience stays with the subject (during inquiry or otherwise). We do not easily forget objects of wonder. As we will see in Chapter 4, this is yet another educationally relevant aspect of wonder.

⁴⁷ The spirit of this conclusion is similar to Fisher’s view about wonder’s role during inquiry (see 1998, p.41).

While I have discussed some ways in which aspects of the experience of wonder interact with the activity of inquiry, the discussions above also highlight an ongoing theme of this chapter regarding the transition and interaction between wonder and w-inquiry, one that began in Chapter 2: Even though the *mental state* of wonder or beauty and the *activity* of inquiry are different sorts of things ontologically, the phenomenological experiences of these are similar, making the transition between the state of wonder to inquiry a *smooth and natural one*.⁴⁸ As I recently highlighted, the phenomenological features remain the same or simply change in form or degree. More specifically, these changes in form or degree all reflect the notion of a transition from vagueness to something more determinate.⁴⁹ The subject's attention and interests are initially indiscriminate—they start out aiming to find *anything* out about the object rather than some (specific) thing—and is open to all the possibilities. As the experience progresses, their attention is drawn to certain features and away from others, namely, toward features that they suspect contribute to the object's final value and particularity. And this seems to be a very natural process. Along these lines, the starkest contrast between wonder and w-inquiry—the role of questions—goes unnoticed if we focus only on the phenomenology of wonder and w-inquiry (e.g., the role of problems, which only change form between wonder and w-inquiry). Accordingly, it makes sense why some theorists in the wonder literature conceptualize the inquiry as *part of* the (overall) experience of wonder.⁵⁰ And this sort of view is plausible, so long as we also recognize that there are different stages of the experience. There are important differences between the initial state of wonder and w-inquiry, and it is worth capturing these in

⁴⁸ Also see my fn.1 above.

⁴⁹ Put another way, these changes in form do not consist of two radically different kinds of aims, problems, attention, etc.

⁵⁰ For examples, see Smith 1980, pp.24, 26-7 and Sinclair and Watson 2001, p.41. Examples of theorists who lose track of this distinction include H.M. Evans (see 2012, p.130) and Robert Fuller (see 2006b, pp.370, 378 and 2006a, p.156).

some way conceptually. To highlight the many differences noted in this chapter, I do not describe the activity of inquiry as part of the ‘experience’ or ‘state’ of wonder (or beauty). In sum, the discussions above flesh out my brief indications in Chapter 2 about the differences between the state of beauty or wonder and activity of inquiry.

§7

The similarities and differences between wonder and w-inquiry discussed above help support and flesh out the rough and common idea in the literature that wonder *prompts* inquiry. My more nuanced view is that the state of wonder does not merely *cause* or *lead to* w-inquiry, the way that, say, fire causes smoke. Rather, wonder prompts inquiry in the sense that the former *blooms* into the latter. The seeds of inquiry are already planted—are already in some form present—in the state of wonder.⁵¹ Further, as the subject engages with the object of wonder, they gather information, and we can conceptualize their epistemic situation as one of *growth*. This growth starts at the initial moment of wonder and continues through w-inquiry.⁵² Even though there is a continuous process here, the blooming of a flower marks a notable transition, and the transition in our case is the rather smooth and natural one between wonder and w-inquiry.⁵³

Continuing with the metaphor, one might point out that a flower blooming marks a special change insofar as the plant *looks* noticeably different from before; a flower appears. Is there a perceptible difference (from a third-person perspective) between wonder and w-inquiry? While I am skeptical about stipulating a specific set of physiological responses *typical* of the

⁵¹ I would like to thank A.W. Eaton for suggesting this metaphor to me.

⁵² Another apt metaphor is a *writing prompt*. The relation between the teacher’s writing prompt and the student’s essay ideally has some deep connection. We can incorporate parts of the plant metaphor, too: The seeds of the student’s essay are, in some form, contained in the writing prompt itself. The student’s essay grows out of the questions or short quotations provided by the teacher.

⁵³ The plant metaphor is generally on a different timeline than wonder and w-inquiry. While a plant often takes several days to grow before it blooms, this is not usually the case for wonder and w-inquiry. Usually, the state of wonder is in the range of seconds, whereas the w-inquiry can span anywhere from a few seconds to several days, weeks, or years.

state of wonder or w-inquiry, it nevertheless seems that the two oftentimes look different on a general level.⁵⁴ Typically, the state of wonder is object-focused and the subject has an absorbed attention. When the object is extended, this absorbed attention often manifests itself in a stare or gaze, and perhaps the person leans in to get a better look or steps back to take it all in. In contrast, I earlier illustrated (in this chapter and Chapter 2) how inquiry involves various *activities*, many of which involve physical, intentional actions such as playing music, walking around a building, looking something up online, talking with someone, looking under a microscope, etc. Yet, this visual aspect of the metaphorical bloom has its limitations, as there is a lot of variability in how wonder and w-inquiry can look. When the object of wonder is an idea, for example, the state of wonder and w-inquiry often look quite similar. In both, the person might simply look absorbed in thought, thinking hard about something, or give onlookers the impression that they are daydreaming. Even when the wondrous object is extended, it seems that sometimes the state of wonder and w-inquiry will look very similar from a third-person perspective, especially when the inquiry is short-lived. Perhaps the inquiry is cut short (even temporarily) due to limited time or resources and all that the subject can do is to go on looking at the object and reflect on its qualities. It even seems possible that sometimes a subject's experience of wonder can be more physically active than their w-inquiry. Sight-reading Percy Grainger's *Lincolnshire Posy (Mvmt. 2)* in a rehearsal, a musician might have an experience of wonder. Their activities (playing their instrument) contribute to the object of wonder, and they are skilled enough that they can be absorbed in the music surrounding them, dedicating the vast

⁵⁴ Smith 1980 and Frijda 1986 have similar lists of physiological responses characteristic of the state of wonder (e.g., suspension of breathing and widening of the eyes or staring). However, I am skeptical that these responses are *typical* of wonder—it seems that they are only variable features, as they lack consistency across different sorts of cases. Further, while some emotion-types like disgust and anger plausibly have a characteristic facial expression (e.g., the gape face of disgust), other emotions like wonder and regret seem difficult to pin down in this respect (see Scarantino and de Sousa 2018).

majority of their mental energy and attention to all that is going on.⁵⁵ The music—with its extraordinary harmonic progressions—is their whole world at that moment. After rehearsal, their inquiry consists of sitting down and looking through the score or listening to a recording of the piece. So, there are many reasons to resist drawing a caricature in which the state of wonder looks a certain way and inquiry looks a certain, different, way.

Despite this limitation, the seeds, growth, and significant transition of blooming in the plant metaphor are much better suited to capture the deep connection here compared to some other metaphors of causal relations. Take, for example, our contrast case above of fire and smoke. We might say that the fuel changes form, yet the relation is not one of growth. Smoke is the fuel *left over* from incomplete combustion. The plant and fire examples show how there are different sorts of causal relations, and how using the plant metaphor puts a finer point on the *way* that wonder prompts inquiry.

Wonder prompts inquiry in the sense described above. But is there a normative claim to make here as well? What does a *good* w-inquiry look like? I will turn to normative questions like this in the next chapter. Exploring these issues will help elucidate in what ways wonder and w-inquiry are valuable.

⁵⁵ Being keenly aware of what is going on around us is a significant part of being a skilled musician; we need to be aware of what other musicians are doing for the sake of balance, tuning, and precision with attacks and releases.

IV. VIRTUOUS WONDER

In the previous chapters, I focused on the nature of wonder, w-inquiry, and their relationship. I also illustrated how we gain new insights about these when looking at them through the lens of Nehamasian beauty. In this chapter, I turn to the value of wonder. We can talk about value in a variety of ways. Some theorists suggest that *any* experiences of wonder are valuable insofar as they play an instrumental role in a child’s cognitive and moral development.¹ Some episodes of wonder might have moral value insofar as they prompt moral interactions, e.g., experiencing wonder toward a nonhuman animal prompts the subject to care for it (Moore 2005; Nussbaum 2001, pp.321-2; Tobia 2015, pp.17-9).² But, given the connections between wonder, beauty, and inquiry highlighted in previous chapters, there are important questions about wonder not only as a moral virtue, but also as an intellectual and aesthetic virtue. To lay the groundwork for both providing a characterization of *virtuous wonder*—i.e., the character virtue associated with wonder—and addressing these questions affirmatively, I focus upon a sort of normativity different from the ones noted above: fittingness.³

In Sections 1 and 2, I unpack this type of normativity, which is grounded in the subject’s response to value. For an experience of wonder to be fitting, it is important for the subject to respond to an object that is truly *wondrous*. Considering the properties of the object provides one standard to distinguish episodes of wonder that go well from those that do not. In Section 3, I describe the skill of identifying wondrous objects and indicate how one can acquire this

¹ Nussbaum holds that wonder plays an important role in the moral development of children (see 2001, pp.14, 55, 65-6, 217, 222, 322). Also see Fuller 2006b, pp.383-4 and Hepburn 1980, p.14 for similar ideas). Relatedly, Fuller explains that wonder, surprise, and curiosity are critical to the overall course of cognitive development in children (2006b, p.373). I return to these ideas later.

² I say *some* instances of wonder because wondering at, e.g., a Petersen graph or other mathematical object does not seem to have immediate moral implications.

³ Hepburn 1980 briefly discusses the normativity of wonder with his notion of “foolish wonder.” My chapter offers a fleshed-out view of Hepburn’s brief remarks.

competence. These insights from the first three sections are relevant in Sections 4-7, where I provide an account of *virtuous wonder*—i.e., the disposition to wonder in the appropriate ways. I provide a concise characterization of virtuous wonder, one which not only brings together previous insights about the normativity of wonder and the nature of this experience, but also helps us see how this character trait is an intellectual, aesthetic, and moral virtue, how it interacts with other virtues, and its concomitant vices. In Section 8, I focus on the value of wonder and virtuous wonder, which ultimately prompts questions about how we can cultivate this virtue—a topic I take up in Chapter 5.

§1

To understand the nature of and characterize the property ‘wondrous’—which serves as the benchmark for distinguishing between fitting and unfitting episodes of wonder—I follow Justin D’Arms and Daniel Jacobson’s account of response-dependent evaluative properties. Evaluative properties like shameful, funny, disgusting, and wondrous cannot be adequately explicated without appeal to their associated emotions of shame, amusement, disgust, and wonder (respectively) (D’Arms and Jacobson 2000a, p.747). To D’Arms and Jacobson, the relevant connection is not that an object possesses an evaluative property like ‘wondrous’ if and only if *most* people experience wonder in attending to it but, rather, the emotion is *merited*—i.e., there is a sufficient reason to feel the emotion toward the object. They use ‘fitting’ as the normative concept that is relevant to ascribing properties like ‘wondrous’ to objects; what it is for something to be wondrous is for the emotion of wonder to be fitting—the emotion fits its object (D’Arms and Jacobson 2000b, p.66; Jacobson 2011).⁴ For many response-dependent evaluative properties, including ‘wondrous,’ they emphasize that moral, prudential, and all-

⁴ While a response-dependence view of ‘wondrous’ in its simplest form is not normative (what is wondrous is that which elicits wonder), D’Arms and Jacobson add normativity with the notion of fit.

things-considered (ATC) concerns about feeling or expressing an emotion are not relevant to property ascription. So, a joke can be funny or a film can be wondrous even if it is ATC inappropriate to laugh, feel amused, stare, or feel wonder due to moral or prudential concerns.⁵ This important distinction between fit and other ways of evaluating the appropriateness of an emotional episode can even be embraced by value realists who reject the response-dependent approach to ‘wondrous.’⁶ For my purposes, the latter considerations—which capture other ways in which an emotional episode can be appropriate or inappropriate—are important in characterizing virtuous wonder (see §§4-7), but it is important to first understand the idea of fittingness.

There are two dimensions of fit—shape and size—and both are conceptualized in terms of a match between how the world is and the emotion’s evaluative presentation, the latter of which is roughly captured in characterizations of the emotion-type (D’Arms and Jacobson 2000b, pp.66-7).⁷ An example of an evaluative presentation is that my envy (roughly) portrays a rival of mine as having a desirable possession that I lack, and this circumstance is cast in a specific negative light (p.66). An emotion presents its object as having certain evaluative features—for envy, it is (roughly) a rival of mine possessing something desirable that I lack—

⁵ D’Arms and Jacobson reject the view that if it would be wrong or counterproductive to feel, say, amusement at a sexist joke, then amusement is therefore unfitting and the sexist joke is not ‘funny’ (see, e.g., 2000b, p.69). To conflate these two ways of evaluating an emotion is an instance of the moralistic fallacy. However, they acknowledge that some emotions and evaluative properties have a *moral shape* (e.g., outrage); here, moral considerations are relevant in ascribing such properties (see 2000b, p.82). For the idea that *feeling* wonder can be inappropriate, see my p.124 below where I discuss Leni Riefenstahl’s films.

⁶ This distinction between fit and other considerations is also compatible with a Smithian view where we turn to an impartial and well-informed spectator in determining fit. With the Smithian alternative, we could consider a spectator who is ideal either morally or aesthetically and, accordingly, distinguish between *morally* and *aesthetically fitting* responses (see Kauppinen 2018, §4.3). My example of experiencing wonder at Riefenstahl’s films (in §6 below) would be conceptualized as aesthetically fitting but not morally fitting. Even though my account of wondrous is compatible with a Smithian approach, Kauppinen 2018 highlights problems with including an ideal spectator in a conception of fit.

⁷ Their idea of *rough glosses* of emotions is quite similar to my Wittgensteinian approach to characterizing wonder.

and the emotional episode is fitting when this presentation is *accurate* (pp.65-6, 79).⁸ The emotion is unfitting or fitting in terms of *shape* when its object lacks or possesses the emotion's evaluative features and is unfitting or fitting in terms of *size* when the response is an over- or under-reaction or is not (pp.73-4). Applying these ideas to my characterization of wonder, this emotion roughly presents its object as having two evaluative features: the object 1) has final value—more specifically, it has something more to offer that only it can provide and 2) is extraordinary.⁹ Wonder is unfitting with respect to size, for instance, when the emotional episode is an over-reaction (perhaps because the emotion presents its object as more extraordinary than it actually is) and is unfitting with respect to shape when the evaluative presentation lacks at least one of the aforementioned evaluative features.¹⁰ The experience of wonder is fitting when the object actually is extraordinary and has more to offer that only it can provide, that is, when there are perceptual nonaesthetic or aesthetic features of the object that deviate from the norm in a significant and agreeable way and the object possesses aesthetic features—i.e., features that function aesthetically in the sense that they are non-fungible, lie beyond the most detailed

⁸ I do not think that D'Arms and Jacobson mean 'accurate' in a robust sense here, where the evaluative presentation must get every detail exactly right. Since D'Arms and Jacobson talk about the roughness of the evaluative presentations and evaluative features (see 2000b, pp.79, 66-7), it seems that *minor inaccuracies* in how the emotion presents its object are compatible with the emotional episode being fitting. I return to this idea in §2 below.

⁹ The idea that an object has more to offer that only it can provide suggests final value—that the object is not fungible. However, not all objects that possess final value have *more to offer* the subject, e.g., some keepsakes from our childhood or some simple pleasures we experience in consuming treats like cherry-flavored Dum Dums (see my Chapter 2).

¹⁰ With respect to size, the intensity of the subject's experience is roughly proportional to how valuable and how extraordinary the object seems to the subject (for similar ideas, see Nussbaum 2001, pp.54-6, 65, 319).

It is important to note that unfitting wonder is still an experience of wonder; I characterize wonder in terms of the subject's experience and how things appear. Relevant to my discussion below, Kendall Walton notes the properties that an object *appears* to possess when talking about a subject experiencing an object under incorrect categories (1970, pp.359-60).

description or fullest interpretation, and draw the subject in to further explore its particularity.¹¹

Put simply, an object is ‘wondrous’ when it has features that deviate from the norm in a significant and agreeable way and possesses aesthetic features.

§2

Considering the points above about what is wondrous, one might worry that the notion of extraordinary—which is a central part of fitting episodes of wonder—undermines the normativity of wonder: what counts as extraordinary is relative to the subject’s past experiences. Whatever deviates from those experiences in a significant and agreeable way (from the subject’s perspective) will be extraordinary. This suggests a response-dependence view of ‘wondrous’ that is normatively weak; while the subject’s experience is appropriate or inappropriate relative to their previous experiences, this picture is not amenable to a *shared standard*. But this worry can be addressed by fleshing out some details regarding fitting wonder. Drawing upon Kendall Walton’s influential article, ‘Categories of Art’ (1970), I show below that the emotion of wonder presents its object as having aesthetic features *under a category* and as extraordinary *under a category and norm*, where the norms and categories are shared by a community. For the evaluative presentation to be accurate—for the wonder to be fitting—it needs to present its object under correct categories and relevant norms *where the object is truly wondrous*. Put another way, fitting wonder presents its (wondrous) object accurately, and the object is truly *wondrous* under

¹¹ For this idea of ‘aesthetic features,’ see Nehamas 2007, pp.99-101, 120. Characterizing ‘extraordinary’ as that which deviates from the norm in a significant and agreeable way could apply to other sorts of features besides perceptual nonaesthetic and aesthetic features, e.g., the unusual origins or history of an object. However, it seems that since the experience of wonder is characteristically focused on the particularity and final value of the object, extraordinary factoids are not characteristically the primary focus here (e.g., that the painting was once owned by Leonardo di Caprio or that the tree is the oldest in the country). Nevertheless, as I discuss in my fn.13 below, learning about the object’s nonperceptual features (e.g., interesting historical facts about it) can influence what perceptual features we attend to and how we frame the object, both of which ultimately impact our aesthetic experience of it. Alternatively, one might wonder at extraordinary facts and perceive them as beautiful, extraordinary ideas (see my discussion of Theaetetus in Chapter 2 for a discussion of finding some ideas beautiful).

certain norms and correct categories but not others. Nevertheless, what counts as truly extraordinary is relative to the subject's experiences in the minimal sense that they must have *some conception* of the correct category and norm, some previous exposure to these. They cannot experience an object under a category that is completely foreign to them (Walton 1970, p.341).

To develop my view, there are two related insights in Walton's paper that help us understand the notions of norms and correct categories and how to determine what is truly wondrous. The first is that perceiving an object under correct categories means that the perceptual nonaesthetic and aesthetic features of the object are perceived correctly—the subject gets right which features are standard, variable, and contra-standard relative to the correct category—and the subject apprehends the aesthetic features that the object truly possesses (Walton 1970, pp.363, 365-6).¹² Walton provides a rough guide for determining *correct categories* of art, where 'categories' are perceptually distinguishable and include media, genres, styles, forms, etc. (pp.338-9).¹³ To him, meeting the following criteria count toward an artwork

¹² Standard features (relative to a category) are those in virtue of which a work belongs to a category; lacking those standard features will tend to disqualify it from being perceived in the category. Standard features are ones that we tend to take for granted (e.g., immobility and surface flatness are standard for the category of 'painting'). Contra-standard features are those which tend to disqualify a work from a category in which we nevertheless perceive it; these features are often shocking or startling to us. Variable features are those which are irrelevant to whether a work belongs to the category (see Walton 1970, pp.338-9, 352).

Also, Walton uses 'aesthetic properties,' but nothing in his account prevents us from adopting the more nuanced, exploratory-oriented notion of 'aesthetic features' from Nehamas 2007. Also see my fn.11 above.

¹³ To Walton, we can recognize and distinguish categories just by looking, hearing, etc. One might worry about how this relates to my point in Chapter 2 (p.45) that an object's appearance might seem different after learning some historical facts about it. A way to explain this shift that is compatible with Walton's framework is that learning relevant facts about the object either helps call the subject's attention to the object's nonaesthetic perceptual properties that were previously missed or gives them a reason to perceive the object under a different perceptually distinguishable category (see 1970, p.338). Still, there are tough questions here about what counts as 'perceptual' and 'perceptually distinguishable' (see my Chapter 2 p.45 and Laetz 2010). Glenn Willmott presents a hard case regarding a faked photograph of megalodons in a Discovery Channel documentary and viewers' experiences of wonder (see 2018, pp.106-7). My tentative thought is that being able to distinguish fact from fiction is important; our aesthetic experience of, say, a fictional shark should be different from that of a real one. I imagine that Walton wants to leave room for perceptually distinguishable categories like 'documentary' (or 'nonfiction film') and 'mockumentary' (or 'fiction film'). A less satisfying Waltonian alternative would be something like 'film in a fiction (or documentary) style.' Additionally, while *some* mockumentaries might be so deceiving that they are perceptually indistinguishable from documentaries, the two categories—on the whole, or on average—are perceptually distinguishable. Finding out the origins of the work shifts your framing of the deceptive film.

W being perceived correctly in a given category C: *i*) W has a somewhat large number of nonaesthetic features standard with regard to C and a minimum number of contra-standard features. *ii*) perceiving W in C makes the artwork “come off best.” *iii*) the artist who created W expected or intended it to be perceived in C, or thought of it as a C. *iv*) C is recognized and established in the society in which W was created; members of the community are familiar with works in that category and treat the category as important or worth mentioning.¹⁴ In most cases, these four considerations point to the same conclusions about the correct category or categories for a work (e.g., the category that makes the work come off best is likely also a well-established one and the one intended by the artist) (pp.358-9).

Walton’s guide can be modified for correct categories of nature: *iii* would not be relevant to consider (except under a theistic worldview, perhaps) and consideration *iv* would point to categories that are well-established culturally or scientifically. Further, the peripheral considerations that Walton notes for artworks—namely, the internal structure of the object and the process by which the object is produced—seem especially relevant in the context of nature categories, as these are often of interest to scientists.¹⁵ Finally, it is worth highlighting that this framework, in both the artistic and natural realms, allows for an object to have a *range* of correct categories (Walton 1970, pp.362, 341).¹⁶

The second important insight from Walton’s article is that *perceiving* an object under a correct category (rather than merely knowing the correct categories) requires that the subject is

¹⁴ In some cases, the mechanical process in which a work is produced or the internal structure of a work is relevant to perceiving a work in a correct category (Walton 1970, pp.357-8). Whether these two considerations are relevant depend on the particular object (p.358). It is important to note that this guide seems to apply to non-art artifacts as well.

¹⁵ In fn.5 of his article, Walton encourages readers to make minor modifications to his theory for literature and ideas. For the modification of delineating nature categories based on science and cultural traditions, see Carlson 2019, §3.1 (also see my fn.14 above).

¹⁶ With a given nature category (e.g., tree), there will be different sets of norms coming from different communities that have the relevant flora or fauna. I illustrate this point below.

familiar with the relevant categories. Being familiar with a category includes having been exposed to many objects in the category and that those objects are of “considerable variety” (Walton 1970, p.366).¹⁷ With such exposure, the subject has an understanding (a robust conception) of a set of *norms* associated with the category, which include standards of the category (what is *valued* in the category), its conventions, what is statistically common, and the possibilities, limitations, and standard range of the category (pp.349-52). Important for our present purposes, Walton suggests that norms—like categories—are *shared by a community* rather than individualistic, and oftentimes there are multiple relevant norms (coming from different communities) that are associated with a single category.

It is important to acknowledge that Walton’s framework and my account of ‘wondrous’ are rough or limited in a few respects. First, as I suggest above, a category might be correct despite not meeting one (or perhaps more) of the considerations above—e.g., Walton notes that Schoenberg’s early twelve-tone compositions are correctly perceived in the category ‘twelve-tone music’ even though that category was not well-established at the time he composed them. Walton further explains that the *weighting* of each consideration will to some extent vary depending on the person and the situation (1970, pp.357, 362). Second, there are hard cases that are ultimately *undecidable* with respect to a correct category. This might be because the object belongs to a category that is borderline ‘established’ in society or falls between two well-established categories (pp.361-2). Finally, there are borderline ‘extraordinary’ objects since ‘significant’ and ‘agreeable’ both admit of degrees and norms are sometimes difficult to delineate. For example, an object might not deviate quite enough from the norm or in an important enough way to be ‘extraordinary.’

¹⁷ This ‘considerable variety’ includes extraordinary objects in the category.

The pair of insights about correct categories and norms plays a role in determining what objects are truly wondrous, and the aforementioned roughness and limitations help us understand what makes hard cases hard (in other words, the limitations noted above are not taken by Walton or myself as problems that need fixing) (Walton 1970, pp.362-3). With respect to which objects are truly wondrous, having a clear view of the object's perceptual nonaesthetic and aesthetic features helps one to determine whether the evaluative feature concerning final value obtains. Furthermore, considering these features of the object along with the norms associated with relevant correct categories helps to determine whether the object is extraordinary; in the context of wonder, a perception of an object as extraordinary concerns the aforementioned features of the object along with the evaluation that their deviation from the norm is significant and agreeable. However, as I noted above, sometimes there are multiple sets of norms associated with a single correct category or there is a range of correct categories for an object. Significantly, sometimes an object is wondrous under one correct category and relevant norm but not others. So, in determining which objects are wondrous, we need to indicate which norm and correct category is employed—Walton offers a term for this clarification: ‘category-relative interpretations.’¹⁸ In other words, an object is wondrous *under certain correct categories and relevant norms*. It is misleading (and often false) to say that an object is wondrous *tout court*.¹⁹

To illustrate these ideas, I discuss a few examples concerning multiple norms and correct categories. First, a single ordinary American flamingo is extraordinary when perceived under some correct categories but not others. To clarify in what sense an object is extraordinary, we can provide a category-relative interpretation: this American flamingo is extraordinary *qua bird*

¹⁸ I recommend using both ‘category-relative interpretations’ (which Walton briefly discusses) and what we can call ‘norm-relative interpretations’ (see Walton 1970, p.355). I return to this idea below.

¹⁹ Even if an object is wondrous under *all* the correct categories and *all* the relevant norms, it is still helpful to clarify this point rather than to say that it is wondrous *tout court*.

but not *qua flamingo*.²⁰ Along these lines, there are also extraordinary and wondrous *categories*. Plausibly, the species American flamingo (*Phoenicopterus ruber*) is extraordinary *qua* bird; it deviates from the norms of birds in a significant and agreeable way (for starters, consider flamingos' backward bending legs, downward-bending bill, and pink color). Further, one might be reminded that flamingos in general are extraordinary *qua* birds when viewing an ordinary specimen in the wild.²¹ Unfortunately, our ordinary language practices sometimes do not capture these nuances; communicating our evaluation about an object being extraordinary might seem incorrect to others but is actually not.

The basic idea and clarificatory role of category-relative interpretations can be extended to thinking about *norms* associated with a category—I call them ‘norm-relative interpretations.’ Making explicit the norm involved in experiencing an object as extraordinary helps distinguish between correct and incorrect evaluations of extraordinariness. To illustrate, consider an oak tree perceived under the correct category ‘tree’ and that has aesthetic features like ‘ragged’ or ‘gnarled.’ Two individuals perceiving the oak under this correct category and apprehending these aesthetic features can nevertheless reach different conclusions about whether the tree is extraordinary (or wondrous)—and both be correct—because they adopt *different norms* associated with the category. For an individual experiencing the tree under traditional Western norms, the oak deviates from the norm in a defective and disagreeable way; the oak is correctly experienced as not extraordinary. In contrast, an individual with a Japanese *wabi-sabi* sensibility will experience the ragged, gnarled tree under a different set of norms, one in which the deviations are agreeable and significant—here, the oak tree is truly extraordinary. *Wabi-sabi*

²⁰ Walton notes that there are artworks that can be perceived under a range of different correct categories (he suggests that this is the case with Giacometti's sculptures) (see 1970, p.362).

²¹ This is one way in which a person can see the ordinary as extraordinary.

celebrates and appreciates the aged, the impoverished, and the defective, some of which provide striking contrasts to normal or exemplary objects in the category.²² Aside from synchronic differences in norms (illustrated in my oak tree example), there are also diachronic differences. For example, before the eighteenth-century, old mutilated monasteries in England aroused revulsion. In contrast, the British picturesque movement of the eighteenth-century (similar to the *wabi-sabi* sensibility) celebrated aging objects and imperfections (Saito 2007, pp.165, 174). So, the mutilated monastery perceived under the correct category ‘monastery’ could be extraordinary (and perhaps wondrous) under British picturesque norms, but not under the British norms that preceded that movement.²³

Cases where there are multiple correct categories and relevant norms also afford examples in which a subject experiences *unfitting* wonder. Returning to our flamingo example, if the subject experiences the ordinary American flamingo in front of them as an extraordinary flamingo (i.e., *qua* flamingo), they would be incorrect and their wonder would be unfitting. Similarly, if a Brit in the seventeenth-century experienced the mutilated monastery in front of them (*qua* monastery) as extraordinary, there are considerations that count against this evaluation

²² These ideas regarding *wabi-sabi* are highlighted in the Japanese *tennen kinenbutsu* program, which in 1919 set out to preserve not only typical or exemplary specimens of a particular species of plants in Japan, but also specimens that deviated from the norm (see Saito 2007, p.111).

Under this *wabi-sabi* sensibility, the New Jersey turnpike or other (impoverished) industrial settings might be truly extraordinary and wondrous as well—also see my Chapter 2, fn.16.

²³ Assuming that the architects of this monastery did not intend for the monastery to be viewed as a ‘ruin,’ it seems that the correct category is ‘monastery’ (or perhaps ‘architecture’) rather than ‘ruin.’ Even if we do experience it as a ruin, people in pre-eighteenth-century England probably found the whole category revolting (so, no ruins would be extraordinary). For similar diachronic examples in the natural realm, see Lopes 2020 and Schinkel 2020c, p.32. This idea of an object being wondrous in some communities but not others is also found in D’Arms and Jacobson 2000a, p.737.

being correct and the wonder being fitting. In these examples, the emotion arguably *mis*-presents its object; it frames the object in ways in which it is not wondrous.²⁴

While these two examples of unfitting wonder illustrate the importance of providing category- and norm-relative interpretations when it comes to determining what is wondrous, there is another, perhaps more common, sort of case that is important to discuss: we oftentimes encounter *novices* having unfitting episodes of wonder. Sometimes novices simply experience an object under an incorrect category, e.g., a young child experiences a ferret as an extraordinary and wondrous rabbit (the child's wonder here is unfitting).²⁵ There are also examples of unfitting wonder in which the subject experiences the object under a correct category but the emotion mispresents the object's evaluative features. The following example comes from personal experience. When I taught music at a small rural high school in Idaho, I established a jazz band. It seemed to me that students in the group were particularly struck by the Latin jazz chart, 'Dos Gatos Bailando' (by Roy Phillippe). These jazz novices, who I doubt had substantively engaged with Latin jazz before, experienced the chart as extraordinary. While my students understood from my remarks that the tune was 'Latin jazz' (correct category), they were not sufficiently familiar with the category to understand a relevant norm—they had a *thin* conception of the

²⁴ It is worth highlighting that while Schoenberg was at the forefront of a new category of art (twelve-tone music), the seventeenth-century Brit might be at the forefront of a new norm (picturesque). In both cases, we need to consider not only what is established in the relevant society, but also the other handful of criteria noted by Walton.

Also, if we allowed these examples to be counted as fitting episodes of wonder simply because the flamingo and monastery are wondrous under *at least one* set of norms and correct categories, then most experiences of wonder (at least in the natural realm) would be fitting and we would lose much of the normativity of wonder. In addition, as I indicate above, this move also conflicts with the D'Arms and Jacobson framework that I adopt.

These cases with multiple correct categories also highlight how we sometimes have two 'correct' options: we can view the flamingo as either extraordinary (qua bird) or not extraordinary (qua flamingo). How *should* we experience the ordinary American flamingo in front of us? Which option should we aim for? Walton's guide shows that there are aesthetic reasons to perceive the flamingo under the bird category (it might 'make the object come off best'). However, when thinking about what an agent ought to do, we must be sensitive to other considerations in the situation—I return to this point in §§4-7.

²⁵ I thank A.W. Eaton for this example.

category and relevant norm.²⁶ The tune and style of music was new to them (it deviated from their personal experiences and what they were used to), but the chart itself is not extraordinary qua Latin jazz. It is an idiomatic Latin chart that was likely composed with the intent of helping young musicians hear what a typical Latin chart sounds like and get a feel for the style.²⁷ But did I reprimand or belittle my students for experiencing the tune as extraordinary and perhaps experiencing wonder? Certainly not. Wonder in this case is unfitting, but that does not entail that experiencing wonder in such situations is ATC inappropriate. Since wonder is instrumentally valuable in engaging the subject and prompting them to learn more about the object, experiencing wonder toward the jazz chart is *welcomed* in an educational environment and is ATC appropriate in this case (experiencing wonder here would not harm anyone or be inexpedient for the student).²⁸ The important distinction between fitting and ATC appropriate emotions helps explain our sympathies for the high schoolers' (unfitting) wonder.

However, it is important to highlight that novices sometimes get *lucky* and do have fitting experiences of wonder. Even though they do not 'perceive' an object under correct categories in Walton's sense since they are not very familiar with the category (they are novices), it is still possible for them to experience an object as extraordinary under a correct category and associated norm (of which they have a thin conception) and it—by chance—actually be extraordinary. For example, an individual might have been shown pictures of or visited a couple

²⁶ To Walton, insufficient familiarity also means that the subject does not perceive the object under the correct category. However, as I illustrate below, not being able to 'perceive' the object under a correct category does not entail that the subject's wonder is always unfitting.

²⁷ However, perhaps 'Dos Gatos Bailando' is extraordinary *qua jazz* (and perhaps my students experienced the chart under this category rather than Latin jazz). Nevertheless, there are Waltonian considerations here that highlight the importance of experiencing the chart as 'Latin jazz' (e.g., Phillippe's intentions). I thank Anthony Laden for raising this possibility.

²⁸ Oftentimes, the w-inquiry will lead the subject to become more familiar with that category. Once the students become adequately familiar with Latin jazz, they would likely *retract* their previous evaluation that 'Dos Gatos Bailando' is extraordinary qua Latin jazz (see Walton 1970, p.356).

of Roman Catholic churches in their life. When they visit or are shown a picture of Sagrada Família, they experience it as extraordinary and wondrous, and it turns out that Sagrada Família is extraordinary and wondrous. Furthermore, given the *roughness* of evaluative features and presentations of emotional episodes (suggested by D'Arms and Jacobson), a novice can experience fitting wonder even if the evaluative presentation has *minor inaccuracies*. Fitting wonder might involve the subject apprehending aesthetic features that are not quite what the object truly possesses or experiencing some features as extraordinary (qua correct category and relevant norm) when other features are actually responsible for the object's extraordinariness. Experiencing the object under a combination of correct categories and norms that render the object truly wondrous is what matters for fitting wonder—one does not need to *perceive* the object under the correct category and associated norm in Walton's sense nor get the details exactly right. The novice is lucky in the sense that, since they are not very familiar with the category and relevant norms, they could easily make incorrect evaluations of, say, extraordinariness when viewing other, non-extraordinary Roman Catholic churches. Their experience of wonder toward a Roman Catholic church could easily end up being unfitting; they could end up in the same situation as my high school students.²⁹

Overall, Walton's framework provides a story for the intuitions that what is truly extraordinary and wondrous depends in part on how we (correctly) frame things and sometimes differ between communities (i.e., between the norms employed).³⁰ It also highlights in what sense 'extraordinary' is relative to the subject's personal experiences; they must have some conception of the relevant correct category and corresponding norms. Finally, the novice cases raise questions about the difference between *perceiving* and *merely experiencing* an object under

²⁹ These ideas are inspired by Ernest Sosa's safety and AAA accounts of knowledge.

³⁰ Regarding the latter point, similar views are found in Lopes 2018 and Nehamas 2007.

a correct category and associated norm, the degree of familiarity required for the former, and what the *skill* of identifying wondrous objects looks like. I turn to these topics in the next section.

§3

Walton's views about perceiving objects under correct categories is instructive for understanding not only the property 'wondrous,' but also the skill of identifying wondrous objects and the training to acquire this skill. Below, I expand upon some of Walton's insights introduced in the previous section; developing these ultimately helps us understand the skill of identifying wondrous objects. Like §§1-2, this section lays groundwork for thinking about virtuous wonder in §§4-7.

In my recent discussion of novices, I suggested a distinction between perceiving and merely experiencing an object under a correct category and relevant norm. At best, novices merely experience the object under the correct category and relevant norm, as they lack the level of familiarity required for *perceiving* an object in this way. Important for our purposes, Walton treats perceiving objects under correct categories as a *skill*—'perceiving' refers to a skilled way of experiencing the object. So, we can describe novices as lacking this perceptual skill (1970, p.366). Unlike the novice, a person with this skill reliably recognizes the perceptual nonaesthetic features in the right way (accurately recognizing them as standard, variable, or contra-standard, relative to the category) and apprehends the aesthetic features that the object has.

How does the skill of perceiving objects under correct categories relate to the skill of identifying wondrous objects? The latter is in some sense a *form of* Walton's general perceptual skill of framing and perceiving an object in correct ways and apprehending its aesthetic features, as it concerns the specific aesthetic value 'wondrous.' Nevertheless, what makes an object wondrous is often a wide variety of aesthetic features (which have labels like 'serene' or

‘lively’). So, to *reliably* identify wondrous objects, one needs to *perceive* objects under the correct categories and relevant norms. To understand the skill of identifying wondrous objects (which will be part of the picture of virtuous wonder in §4), we must understand Walton’s more general skill of aesthetic discrimination and evaluation that it is built upon.³¹ I describe below what possessing Walton’s perceptual skill looks like, which is followed by a few insights about how to cultivate this skill—both discussions also apply to the skill of identifying wondrous objects.³²

A central part of possessing Walton’s perceptual skill is being *familiar with* certain categories. Being familiar with a category requires that the subject has been exposed to a considerable variety of objects in the category and that, with such exposure, they have a robust conception of the category and a corresponding set of norms. The subject understands the standards of the category, its conventions, what is statistically common, as well as the possibilities, limitations, and standard range of the category.³³ For example, what sounds are possible in the category of piano music will be different from the possibilities in, say, electronic music; what colors are possible in dogs will be different from the possibilities with tropical fish (Walton 1970, pp.349-50).³⁴ Familiarity in the case of art categories involves an understanding

³¹ What makes the skill of identifying wondrous objects *distinct* from Walton’s more general perceptual skill? There is a slight difference in emphasis on the role of *norms*. An important part of the skill of identifying wondrous objects is identifying objects that are extraordinary, the latter of which relies on the idea of ‘norms.’ In contrast, the idea of norms is only briefly suggested in Walton’s discussion of perceptual skill. In addition, it is helpful in the context of characterizing virtuous wonder to individuate a skill that focuses on the aesthetic value ‘wondrous’—it helps highlight the focus for that individual virtue.

³² My picture of the skill of identifying wondrous objects is compatible with a robust realist view of value (e.g., that ‘wondrous’ is a mind-independent quality out there in the world that a person could be sensitive to), which is an alternative to D’Arms and Jacobson’s neo-sentimentalist view. In contrast, a dispositionalist view of value (at least with ‘wondrous’) would not be able to make sense of this skill of identifying wondrous objects nor the virtue associated with wonder (see Jacobson 2011).

³³ It seems that exposure to *extraordinary* objects of a category will not usually shift the standard range of the category (it will simply reinforce the norm). However, with exposure to such objects, the subject might update their understanding of the limitations of or what is possible in the category. Also, I note below different kinds of ‘exposure’ to objects in a category.

³⁴ E.g., mammals are unable to develop green pigment.

of the category's conventions and history, whereas familiarity with nature categories involves an awareness of the science and cultural history of the category (Walton 1970, fn.25).³⁵

This background knowledge of and familiarity with the category helps the subject reliably perceive the *Gestalt* of the category—i.e., what makes the category distinctive³⁶—in members of the category, and this involves perceiving nonaesthetic features that are standard relative to the category.³⁷ For example, we perceive the impressionist *Gestalt* in an artwork when (and as long as) it looks impressionist to us, and this involves perceiving features standard relative to that category (Walton 1970, p.341). The subject perceiving the object's nonaesthetic features in this way plays a role in them apprehending the aesthetic features of the object, since the latter depend on the former (p.363).

However, perceiving the *Gestalt* of a category in members of that category, along with becoming familiar with the category and associated norms in the first place, requires that the subject possesses what I call *perceptual sensitivities* that are relevant to the category. For a subject to possess perceptual skill, they need to have cultivated certain perceptual sensitivities, e.g., visual sensitivities for the category of painting, gustatory sensitivities in the category of red wine, and different aural sensitivities for the categories of sonatas and bird songs.³⁸ Having a

³⁵ To clarify, having an understanding or awareness of such information does not require consciously considering it or focusing one's attention on it (see Walton 1970, p.366).

³⁶ The features that make the category distinctive are combined into a single *Gestalt* quality (Walton 1970, p.341). For the idea that learning the *Gestalt* of a category (perhaps through someone explaining to us what makes a category distinctive) is part of the training for Walton's perceptual skill, see p.342.

³⁷ Walton explains that a person familiar with the category simply *recognizes* features that are standard relative to the category (rather than inferring them) (1970, p.340). Fridland 2017 provides insights about the attention of experts (namely, how they see the world differently from non-experts) which can flesh out Walton's picture. She explains how experts know where to look for rich areas of information, spend more time focusing on these areas (to gather more information) and recognize domain-specific patterns which allow them to group information in meaningful ways. Experts can also recognize nuances that novices do not.

³⁸ For the wine example, see Hume 1910. For similar ideas in the context of the 'wonder of intervals,' see Smith 1980, p.45. Walton suggests the importance of these sensitivities in 1970, p.336. Drawing on Nancy Sherman's work in Chapter 5, I describe perceptual sensitivities as a type of discriminatory capacity (see, e.g., Chapter 5 fn.12).

discriminating ear or palate enables one to recognize an object's perceptual nonaesthetic and aesthetic features.

Being familiar with the relevant categories and having a robust conception of the associated norms, along with having the relevant perceptual sensitivities, enables the subject to skillfully identify wondrous objects; such things enable them to recognize objects with the two evaluative features associated with 'wondrous.' But *how familiar* does one have to be with a category to possess the perceptual skill and, more specifically, the skill of identifying wondrous objects? Since skill admits of degrees, I cannot provide a precise answer. Nevertheless, skills require a somewhat high degree of reliability. The subject needs to be familiar enough with a category (and have the perceptual sensitivities) so that they reliably perceive the standard features of various objects in that category.³⁹

An important consideration here in thinking about familiarity and the skill of identifying wondrous objects is that some objects of a category might wear their wondrousness on their sleeve while others do not. Considering the latter sort of object helps us see the importance of this skill and to distinguish different levels of it.⁴⁰ While laypersons who have been casually exposed to a fair amount of Roman Catholic churches and have a decent understanding of their norms (along with basic visual perceptual sensitivities) will likely perceive Sagrada Família as extraordinary and wondrous, such laypersons might not have a sufficient level of perceptual skill to perceive the wondrousness in Roman Catholic churches whose wondrousness lies hidden in the details, e.g., Basilica of San Vitale.⁴¹ To reliably experience objects of the latter sort as

³⁹ This point about reliability also applies to the *level of refinement* of perceptual sensitivities (within perceptual skill).

⁴⁰ I thank Anthony Laden for raising this point. For similar suggestions, see Walton 1970, p.336.

⁴¹ Of course, if a skilled layperson goes on a *guided tour* of Basilica of San Vitale, they may very well come to apprehend the basilica's wondrousness with the help of the (expert) tour guide.

wondrous, the subject needs what we might call *expert-level* perceptual skill, which likely involves *highly* refined perceptual sensitivities; *attentive* exposure to a considerable variety of Roman Catholic churches (which comes with a *deep* familiarity with the category); and a *very robust* conception of the relevant norms.⁴² In general, when the wondrousness of an object is buried in nuances, it might require a *high degree* of perceptual skill (of the sort we often find in experts of the relevant field) and sustained attention to reliably experience the wondrousness of such objects. Taking this sort of case even further, some objects' wondrousness will be *especially* hidden in the details, e.g., some nuance of the object that only the *extremely* skilled will perceive. This can explain some disagreements between skilled experts (in the relevant category). The individual who is extremely skilled perceives the important nuance that makes the object wondrous whereas the slightly less skilled individual misses this important feature. Assuming that the latter person (along with our skilled layperson above) only occasionally misses important nonaesthetic or aesthetic features of objects in the category, they still have some level of perceptual skill for the category.⁴³

The foregoing discussion about degrees of skill points us toward two important ideas about *how to cultivate* Walton's perceptual skill and the skill of identifying wondrous objects. First, as I have suggested at various points, the *scope* of perceptual skill and the skill of identifying wondrous objects corresponds to the set of categories with which the subject is familiar and in which they have the relevant perceptual sensitivities. In thinking about how we

⁴² As I indicate above, it seems that 'exposure' can come in different forms. Someone could casually browse through pictures of Roman Catholic churches, but this brief and casual exposure (by itself) does not necessarily boost their level of perceptual skill. In contrast, carefully studying such buildings plausibly leads to increased perceptual skill—the exposure and familiarity here is *deeper* than in the former (more superficial) case.

⁴³ Thinking about the degree of importance of certain aesthetic features and how hidden they are, along with the degree of reliability in the subject perceiving them in the object, fits with my point above about how skill admits of degrees.

cultivate this skill, Walton highlights at the end of his paper that it is ineffective to show the learner several objects that have a particular aesthetic feature (e.g., serene). Rather, the learner needs to focus on becoming familiar with a particular category (or set of categories). The same is true for the skill of identifying wondrous objects; we do not acquire this skill by having someone show us one wondrous object after another, each being a member of a different category.⁴⁴

Second, it generally takes time to become familiar with a category (and, if the subject needs to, develop the relevant perceptual sensitivities), so it *takes time* to cultivate the skill of identifying wondrous objects and perceptual skill. And because humans unfortunately have only so much time in the day, each of us can be familiar with and have perceptual skills in some categories but not others. There are three points to make about this.

The first point is that it takes time to acquire perceptual skills and the skill of identifying wondrous objects even when we do not deliberately pursue the training. Walton explains that, with respect to objects and categories that are part of our everyday lives or that we are otherwise regularly exposed to, it is not generally necessary to undertake *deliberately* the task of training ourselves to acquire the perceptual skill because, in most cases, we have already been trained unwittingly (1970, p.366).⁴⁵ Acquiring perceptual skill in some categories happens naturally whereas others require deliberate training, but in both cases skill acquisition takes time.

The second point is that even though it is likely impossible for a person to be familiar with all categories, they can nevertheless *branch out* to some that are new to them. One common path for branching out concerns the agent's existing background knowledge and perceptual sensitivities relevant to a category with which they are already familiar. Their set of sensitivities and knowledge might translate well to new nearby categories, which enable them to skillfully

⁴⁴ I return to these ideas in Chapter 5.

⁴⁵ Though, as I suggested earlier, a casual approach will not likely help us acquire *expert-level* skill.

identify wondrous objects in the latter. A person familiar with swing can branch out more easily to bebop than, say, ikebana.⁴⁶ Also, sometimes we make efforts to familiarize ourselves with certain categories and cultivate relevant perceptual sensitivities for social reasons; our friends, family, or colleagues can get us into orchids, sci-fi, whatever. In any case, branching out and cultivating perceptual skills in new categories usually takes time—Dominic Lopes suggests this when he explains that a person into swing can move over to bebop by “engaging in persistent exchanges with bebop insiders” (2018, p.179).

These ideas about branching out also apply to *norms* associated with a category. A veteran arborist might have a robust conception of the category ‘tree’ and *a* relevant norm, but this does not entail that they will have a robust conception of *all* the relevant norms (which are associated with different communities). For example, the *wabi-sabi* norms associated with the category ‘tree’ might be foreign to them. Still, if they have a friend with this sensibility, they might want to branch out to perceive trees under new norms.⁴⁷

The third point gives us a head-start in thinking about virtuous wonder (to which I turn in §4). If the skill of identifying wondrous objects—which, as I discuss below, is an important part of virtuous wonder⁴⁸—depends on being familiar with the relevant categories, and we do not have time to become familiar with all categories, this means that virtuous wonder (like many

⁴⁶ As I suggest, some categories take more time than others to become adequately familiar. One reason why some categories take longer than others to become familiar is that some have more diversity than others. For example, it seems to be a little easier and quicker to become adequately familiar with the category ‘ska’ than with ‘painting’—to become exposed to a ‘considerable variety’ of objects in the latter, one needs to be exposed to paintings of various styles from various cultures, past and present. Ska, in contrast, is a rather narrow and recent category of art. Also, somewhat general genres in literature might take more time than ska simply because reading books like *In Search of Lost Time* or *War and Peace* take a long time to read (i.e., to be *exposed* to artworks in the category). For more about ‘exposure,’ see my fn.42 above.

⁴⁷ No pun intended!

⁴⁸ A very lucky novice who experiences fitting wonder throughout their life does not possess the character virtue associated with wonder; virtue responsibilism rejects the idea that someone can be virtuous simply because of chance or luck—we are to some degree *responsible* for our character traits (see Battaly 2008, p.645). I return to this point below.

other virtues) is what Quassim Cassam calls an ‘in-between’ trait. Such traits conceptually fall between *global* traits which require consistency across all realms of one’s life and *local* traits which are so finely individuated that they might apply only to that particular situation and therefore have little explanatory power in explaining and predicting the agent’s conduct (2016, p.174).⁴⁹ Virtuous wonder and the skill of identifying wondrous objects are exercised in the relatively small number of categories with which the subject is familiar and in which they have the relevant perceptual sensitivities. If I am a novice when it comes to gamelan music, I could not *skillfully* identify wondrous musical performances in this genre. I might have experiences of wonder in listening to some gamelan music—some of which, by chance, are fitting—but they would not be *an exercise of* virtuous wonder.

§4

As I highlight below, experiencing fitting wonder that involves the skill of identifying wondrous objects is an important and distinctive part of the character virtue of virtuous wonder. But to bring together earlier insights about the normativity of wonder and the nature of this experience, and to ultimately help us more readily see how this trait is an intellectual, aesthetic, and moral virtue, how it interacts with other virtues, and its concomitant vices, I first provide a concise characterization of virtuous wonder.

Many virtue theorists draw upon the following view when providing concise characterizations of virtuous emotions (i.e., dispositions to experience certain emotions in appropriate ways): Aristotle holds that emotional dispositions can have an “intermediate and best” state that are proper to virtue in which the emotion is felt “at the right times, about the right

⁴⁹ A related debate that I do not have time to take up here is whether a person can maintain virtuous wonder (or other character virtues) if they are never in an appropriate situation to exercise the virtue. If you don’t use it, do you lose it? Compare Snow 2018, p.186 and Kristjánsson 2020, pp.82-3.

things, towards the right people, for the right end and in the right way” (*NE* II.6). Drawing on this formulation, I characterize virtuous wonder in the following way:

Virtuous Wonder: The subject characteristically experiences wonder toward appropriate wondrous objects, to the appropriate degree, ATC, and aims to better understand and appreciate what makes such objects distinctive and finally valuable.⁵⁰

This characterization captures earlier insights in the dissertation but also incorporates some new ones. Below, I unpack and provide support for this characterization; doing so helps us better understand virtuous wonder.

To begin, I should explain the connections between Aristotle’s formulation from *Nicomachean Ethics* and my characterization. The idea of aiming ‘to better understand and appreciate what makes such objects distinctive and finally valuable’ (an insight about w-inquiry from previous chapters) corresponds to Aristotle’s ‘right end.’ The appropriate wondrous object and appropriate degree (ATC) in my characterization—which incorporates, but goes beyond, the idea of feeling fitting wonder in terms of shape and size—correspond to Aristotle’s ‘right things’ and ‘right way.’⁵¹ But there are also some differences between my characterization and Aristotle’s formulation. One will notice that my characterization does not explicitly talk about the ‘right people’ or ‘right times.’ However, the idea of experiencing wonder toward the right objects captures both. Experiencing wonder toward the right things can include wondrous people along with a variety of other kinds of wondrous objects (natural objects, artworks, etc.). Experiencing wonder at the right time (as well as for the right amount of time) is also captured

⁵⁰ Jan Pedersen and Rosalind Hursthouse provide somewhat similar Aristotelian sketches of virtuous wonder, though my characterization is more detailed. See Pedersen 2019, p.210 and Hursthouse 2007, p.161, as well as Kristjánsson 2018, p.20. I will discuss the accounts of Pedersen and Hursthouse in Chapter 5.

⁵¹ For interpreting ‘right way’ as ‘right degree,’ see Kristjánsson 2018, p.20. For the idea that ‘appropriate object, and appropriate degree, ATC’—which, as I discuss below, captures the role of *phronesis*—corresponds to the parts of Aristotle’s formulation I note above, see Swanton 2018, pp.513-4.

To be clear, virtuous wonder concerns both the initial state of wonder and the w-inquiry prompted by it (also see my p.133 below).

by the idea of right things since the experience of wonder is object-focused; the right times or occasions simply are the ones that concern the right objects.

§5

I stated above that my characterization will help us more readily see how virtuous wonder is an intellectual, aesthetic, and moral virtue. To show that virtuous wonder is plausibly an intellectual virtue and to better understand how aspects of virtuous wonder relate, I discuss how my characterization conceptually fits into a Zagzebskian account of intellectual character virtues. I draw upon Linda Zagzebski's very influential account of intellectual virtue as well as Lani Watson's recent work on virtuous curiosity, which adopts a Zagzebskian picture of intellectual virtue, to highlight some important details regarding virtuous wonder and to distinguish it from virtuous curiosity.

Zagzebski holds that intellectual character virtues—which are modeled on Aristotle's moral virtues—have two main components: there is a motivational component that drives inquiry and a reliable success component that requires a degree of success or skill in realizing that motivation (Zagzebski 1996, pp.113-4, 133-4, 176; Watson 2018a, p.156). I discuss each of these two components in turn.

Zagzebski explains that “The motivational component of a virtue is a disposition to have an *emotion* that directs action toward an end” (1999, p.106, my italics). The emotion-disposition involved in an intellectual virtue initiates, directs, and drives inquiry (Zagzebski 1996, pp.130-1; Watson 2018a, p.156). While the emotions associated with some virtues like open-mindedness do not have names, virtuous wonder concerns an emotion that does have a familiar name: wonder.⁵² As I noted in previous chapters, this emotion typically prompts inquiry, and many

⁵² See my Chapter 1, fn.8 for more about wonder as an emotion.

aspects of the initial experience of wonder live on during w-inquiry, directing it and driving it forward. Furthermore, Zagzebski distinguishes two kinds of motivations: a common, underlying motivation and a distinctive, immediate motivation. How do these apply to virtuous wonder?⁵³

To Zagzebski, the common motivation for intellectual virtues is a motivation for “cognitive contact with reality” (1996, p.167). Many contemporary virtue epistemologists adopt this general idea but characterize this motivation in a variety of ways. Some describe it as a love of epistemic goods or, as Watson puts it, a motivation to “improve epistemic standing” (2015, p.276; 2018a, p.156).⁵⁴ In all these cases, the common motivation concerns aiming at information, truth, justification, knowledge, or understanding. Further, theorists plausibly hold that an intellectually virtuous person pursues these epistemic goods at least primarily for their own sake.⁵⁵ Considering my characterization of virtuous wonder and insights from previous chapters, the aims and motivations associated with virtuous wonder conceptually fit within this common motivation.

In addition to the common motivation, there is a *distinctive* motivation associated with each individual intellectual virtue, where the latter is generated by and manifests this underlying

⁵³ For Zagzebski, *motivation* is more than simply an aim at or desire for some state of affairs; the motivation includes a connection between the subject’s emotions and their aims (and this connection explains *why* a state of affairs is desired). Further, Zagzebski pairs each virtue with a particular emotion (see 1996, pp.130-1). It is not clear whether Watson endorses these aspects of Zagzebski’s account. If one were to hold that wonder is not itself an emotion but, rather, a state involving a range of emotions, one could plausibly drop Zagzebski’s claim about pairing certain emotions with certain virtues and leave the rest intact; we could still, e.g., adopt Zagzebski’s idea that each virtue has a distinctive immediate motivation by pointing to distinctive aims rather than emotions (I discuss immediate motivations below).

⁵⁴ Watson’s interpretation of the common motivation, which includes the notion of improvement, resonates with the aims associated with the experience of wonder. Similarly, ‘love of epistemic goods’ also resonates with my account of wonder, as I describe the experience as one of love—for the latter view, see Riggs 2018, p.144 and Roberts and Wood 2007, p.305.

⁵⁵ In other words, the intellectually virtuous person is not *substantially* or *entirely* motivated by other, non-epistemic, ends (see Baehr 2011, p.31). For ‘primarily,’ see Kidd 2018, p.245; for ‘dominant,’ see p.250. Similarly, for ‘governing motivation’ in the context of appreciative virtues, see Kieran 2010, p.261 and 2011, p.40. It is important to note that having non-aesthetic or non-epistemic reasons to go to an art gallery or attend a lecture in the first place are compatible with the virtuous motivations noted above in the sense that, once a person is in an experience of wonder, inquiring, or appreciating, then they have the appropriate motivations—see Kieran 2010, p.261 for this point.

concern for improving epistemic standing. While the distinctive motivation of virtuous curiosity is, according to Watson, “to acquire epistemic goods that [the subject] lacks, or believes that she lacks” (2018a, p.158), I propose that the distinctive motivation of virtuous wonder is a characteristic motivation *to better understand and appreciate what makes the object distinctive and finally valuable*.⁵⁶ As I discuss in previous chapters, the vague desire to learn more about the object in the initial state of wonder blooms into this refined motivation which plays an important role in initiating, directing, and driving w-inquiry. While the vague desire to learn more and pleasure of anticipation in the state of wonder in some sense initiates inquiry, inquiry itself involves exploring a principal question, and such a question does not arise until the more refined aim blooms (see Chapter 3). Just as the motivation to acquire epistemic goods in virtuous curiosity is a manifestation of the common motivation of intellectual virtues, we see the same structure with virtuous wonder. Nevertheless, these two intellectual virtues differ in ways intimated in previous chapters: the aim of virtuous curiosity is to *acquire* and *possess* epistemic goods whereas the motivations associated with virtuous wonder are put in terms of *improved* understanding and appreciation about what makes the object distinctive and finally valuable.

To Zagzebski, possessing intellectual virtue requires more than the right motivations; it also requires a degree of skill or success realizing that motivation, namely, actually acquiring various epistemic goods like knowledge. However, many contemporary virtue epistemologists argue that this requirement is too strong. One criticism is that requiring the subject to actually improve their epistemic standing goes against the spirit of a responsibilist conception of character virtues, which holds that virtues are acquired traits for which the subject is to some

⁵⁶ Zagzebski’s way of individuating virtues in terms of their immediate motivations also supports my view that virtuous wonder is a single virtue rather than several different traits that sometimes concern wonder. Nevertheless, I talk later about how virtuous wonder is a ‘complex’ virtue (i.e., it includes other virtues).

degree responsible. Zagzebski's requirement prevents a person who happens to live in an epistemically unfriendly environment from being able to acquire intellectual character virtues.⁵⁷ Additionally, the open-ended nature of the distinctive motivation of virtuous wonder highlights another problem with Zagzebski's success condition: it would be misguided and awkward to (non-arbitrarily) set some endpoint or minimum requirement that determines whether the subject is successful.

To address the first criticism, Watson in some sense moves the success condition closer to the agent, to a realm over which the subject has some control and for which they can be to some degree responsible. On Watson's modified Zagzebskian view, the reliable success condition concerns the subject's skill in identifying appropriate objects, which plays an important role in getting the subject started off on the right foot for their virtuous inquiry.⁵⁸ Unlike Zagzebski, Watson does not require that the virtuously curious person actually acquire epistemic goods; reliable success means reliably starting off on the right foot. The virtuously curious person has the skill of identifying worthwhile epistemic goods and "is characteristically motivated to acquire *worthwhile* epistemic goods that she lacks, or believes that she lacks" (2018a, p.159).⁵⁹ Applying this idea to virtuous wonder, the subject has the skill of identifying wondrous objects and reliably aims to better understand and appreciate what makes *wondrous*

⁵⁷ For a discussion of this criticism, see, e.g., Battaly 2008, pp.645, 649 and Riggs 2003, e.g., p.212.

Zagzebski notes that 'reliable' success allows for a person who possesses a virtue to have *occasional* failures, including occasions where the agent is in an epistemically unfriendly environment (see Zagzebski 1999, p.106). However, this qualification does not resolve the criticism highlighted by many virtue epistemologists (e.g., it does not account for people who are *often* in epistemically unfriendly environments), nor does it address my concern regarding the open-ended aims of virtuous wonder.

⁵⁸ Virtuous curiosity and wonder are 'motivational intellectual virtues,' which initiate and drive virtuous inquiry, and so they ought to get us started off on the right foot (see Watson 2015, pp.281-2, 284; 2018b, p.156; and Baehr 2011, p.21). We can think of 'initiating' inquiry as "getting inquiry off the ground" (see Watson 2015, p.282), whereas 'driving' inquiry is something more persistent, something in the background throughout an inquiry.

⁵⁹ I suspect that Watson's success condition noted on p.159—which includes the idea of 'worthwhile' epistemic goods—is *slightly different from* the distinctive motivation on p.158 (and noted above) because she wants to highlight how her view differs from Zagzebski's simpler view that has a tighter connection between the motivation and reliable success components.

objects distinctive and finally valuable. Though I illustrate below that it is not always ATC appropriate to experience wonder towards a wondrous object, the skill of identifying wondrous objects is nevertheless characteristically *part of* the picture of virtuous wonder.

The discussion above shows how my characterization of virtuous wonder conceptually fits within a Zagzebskian account of intellectual virtue, which supports my view that virtuous wonder is an intellectual virtue—an idea that has been briefly noted in the virtue epistemology literature but not fleshed out.⁶⁰ My discussion also brings out new insights about the relation between the common and immediate motivations involved with virtuous wonder and how they interact with the skill of identifying wondrous objects.

My characterization of virtuous wonder also conceptually fits under Matthew Kieran's account of appreciative virtue. Whereas intellectual virtues play a role in the activity of inquiry and are traits of a good thinker, appreciative virtues play a role in the activity of aesthetic appreciation and are traits of a good aesthetic appreciator (Battaly 2008; Kieran 2010, p.261). To Kieran, appreciative virtues require the subject to have an appropriate governing motivation: they attend and respond to aesthetically relevant features of an appropriate object for its own sake (2010, pp.254, 261; 2011, pp.40-1). More specifically, the subject is motivated to improve their understanding and aesthetic appreciation of objects that have aesthetic merit, and this is typically facilitated by the subject discriminately attending to the aesthetically relevant features of the object and learning aesthetically relevant facts about it (2010, pp.248, 250, 254, 260-1).⁶¹

⁶⁰ For example, see Baehr 2011, pp.21; 2013, p.255; Watson 2015, p.282; Swanton 2018, p.516; and Kristjánsson 2020, p.106.

⁶¹ I suspect that many, including Kieran, use 'deeper understanding' in a colloquial sense, namely, to refer to *improvement* in understanding, whether it is broader, more nuanced, etc. (also see my Chapter 2). For the idea that aesthetic virtue concerns attending to *genuine* aesthetic goods, see Kieran 2010, p.254 (also Roberts 2018, p.433).

Important for our purposes, virtuous aesthetic appreciation includes a concern for certain epistemic goods—ones that look familiar to us by now.⁶²

These features of aesthetic virtue are present in virtuous wonder. As I discussed earlier, the subject with virtuous wonder has the aesthetic perceptual skill of identifying wondrous objects (objects that have aesthetic merit) and they characteristically aim to better understand and appreciate what makes wondrous objects distinctive and finally valuable. This conceptually falls within the common motivation of appreciative virtues. Virtuous wonder is both an intellectual and aesthetic virtue.

How is virtuous wonder a *moral* virtue? The discussion below helps me explain how virtuous wonder is a moral virtue in a qualified sense.

§6

My characterization of virtuous wonder (in §4) indicates that while experiencing wonder towards wondrous objects is *part of* the picture of virtuous wonder, it is also important for the subject to be sensitive to what objects are ATC appropriate. To support this pair of claims, I offer some examples that introduce moral and prudential considerations (in addition to fittingness considerations) and that fall under the four different combinations of fittingness and ATC appropriateness. Type 1 and 2 cases provide intuitive support for the idea that wondrous objects are an important part of virtuous wonder; if the object is not wondrous, then the subject's reaction seems to either be the exercise of a different virtue or not involve virtue. Type 3 cases provide intuitive support for the idea that fittingness alone is not sufficient for virtuous wonder; we are disinclined to think that someone possesses virtuous wonder if they often have Type 3

⁶² Along these lines, Kieran describes virtues like humility and openness (which are intellectual virtues) as appreciative virtues in 2011, p.41. More generally, the nascent virtue aesthetics literature often draws upon the more established virtue epistemology literature—see, e.g., Woodruff 2001, Lopes 2008, Goldie 2010, and Roberts 2018.

experiences. Type 4 reflects what we expect for virtuous wonder: objects that are both wondrous and ATC appropriate.

1) Not Fitting, not ATC appropriate

POETRY: While cramming for a math exam, a teenager who is rather unfamiliar with poetry glances at his social media account and comes across a banal poem that he experiences as wondrous (qua poem) and he cannot help but express his wonder; he reads the poem in its entirety and reflects upon its meaning for several minutes. Since the poem ultimately distracts him from much-needed studying, it is imprudent to experience wonder. The poem is both an ATC inappropriate object and not wondrous.

2) Not fitting, ATC appropriate

MEDIOCRE PAINTING: Your friend shows you some of their artwork that is mediocre; it is not wondrous. However, being the kind person that you are, you consciously decide to perceive their painting in some newly-contrived, incorrect categories—categories that make the painting seem beautiful and extraordinary.⁶³ In this case, your experience of wonder toward your friend's painting is an exercise of your *virtuous kindness* and *phronesis*, but not your virtuous wonder. (Another exercise of virtuous kindness might be to pretend to experience wonder or enthusiastically say 'Oh wow, that's amazing!' when your friend asks what you think).

LATIN JAZZ: Novice jazz students experience unfitting wonder toward 'Dos Gatos Bailando' (the Latin chart is not truly wondrous, qua Latin jazz), but this object is ATC appropriate due to the educational setting. It is educationally valuable for the students to experience wonder (see my example on pp.105-6).

3) Fitting, not ATC appropriate

MOUNTAIN DRIVING: While the subject is driving his car down a narrow and winding mountain road, he experiences wonder toward the wondrous landscape. He cannot help but look out the side window, drawing his attention away from the road, thereby putting the lives of other drivers and himself at risk. Experiencing wonder might also distract him from making the necessary turns to get to the cabin that he booked. The moral and prudential considerations here plausibly make the wondrous surrounding landscape an ATC inappropriate object of wonder.

NEW ACQUAINTANCE: The subject meets for the first time a person with a wondrous appearance (say, someone with a rare condition or who is completely covered in tattoos). The new acquaintance's appearance might be an ATC inappropriate object of wonder on moral and prudential grounds. The wondering subject cannot help but stare at the person, which makes them feel uncomfortable or objectified. Further, it is inexpedient for the

⁶³ See Walton 1970, p.360 (and his fn.23) for a similar example.

subject to experience wonder at this time, as they miss out on social and epistemic benefits of the interaction with the new acquaintance (e.g., learning the person's name).

NAZI FILM: A person living in the 1930s might feel fitting wonder towards the Nazi propaganda films directed by Leni Riefenstahl like *Triumph of the Will* (1935) and *Olympia* (1938). These wondrous films feature innovative film techniques (e.g., aerial shots). However, these are ATC inappropriate objects of wonder due to moral considerations.

4) Fitting, ATC appropriate

BASILICA: A tourist experiences wonder when visiting Sagrada Família. They are struck by its many extraordinary features and they spend time exploring the Roman Catholic basilica. Their wonder is not inexpedient or harmful to anyone. Accordingly, the object is both fitting and ATC appropriate.

When thinking about ATC appropriate objects, moral and prudential considerations should also be considered in relation to a distinction that we can make regarding 'experiencing wonder' from my characterization of virtuous wonder: *merely feeling* wonder and *expressing* wonder.⁶⁴

Significantly, the former might be ATC appropriate while the latter is not (D'Arms and Jacobson 2000b, pp.77-8). So, an additional consideration for the subject is whether they can successfully stifle the expression of a felt emotion. If it is ATC inappropriate to express the emotion and successfully stifling it is not likely, then it is ATC *inappropriate* to even feel this emotion—the object is not ATC appropriate. This idea brings out new dimensions of the cases above. For instance, if our driver from MOUNTAIN DRIVING *can* stifle his expression of wonder (e.g., staring out of the side window to get a better look) and instead attend to his driving, then *feeling* wonder at the landscape is both fitting and ATC appropriate. However, D'Arms and Jacobson maintain that, psychologically, it is often difficult for us to successfully stifle a felt emotion; "the relationship between feeling an emotion and expressing it...is exceedingly tight" (2000b, p.77).

This seems especially true in the case of wonder, as wonder characteristically involves an

⁶⁴ My use of 'experiencing wonder' refers to, at minimum, *feeling* wonder—it also covers cases where we both feel and express this emotion.

absorbed attention to the object and is at least a somewhat intense experience. It seems difficult to stifle our expressions of wonder, e.g., staring, being deep in thought, inquiring in some way, etc. But in other cases like NAZI FILM, this distinction between feeling and expressing wonder is not so important; simply *feeling* wonder here is morally wrong and ATC inappropriate, as it debases the subject and might have other harmful consequences (Baumgarten 2001, §IV).

As the cases above illustrate, the notion of ATC appropriate objects is an important part of my characterization of virtuous wonder. This element of my characterization captures the crucial role that the virtue of *phronesis* plays in virtuous wonder.⁶⁵ But before discussing the role of *phronesis*, we might first question whether it is a good idea to include *other virtues* in a characterization of virtuous wonder. Why should we muddy the waters? Why not capture, in isolation, the nature of virtuous wonder? Such critics might opt for the following alternative characterization of virtuous wonder, one which leaves out the idea that virtuous wonder is infused with the higher-order virtue of *phronesis*:

Virtuous Wonder (Alternative): The subject characteristically experiences wonder toward (appropriate) wondrous objects, to the appropriate degree, and aims to better understand and appreciate what makes such objects distinctive and finally valuable.

The alternative does not mention ‘ATC,’ and the ‘appropriate’ in parenthesis refers to the subject exercising judgment about which wondrous object to attend to when there is more than one available—moral, prudential, or ATC considerations are not included.⁶⁶ Compared to my original characterization, this alternative better reflects what is distinctive about, and seems to pick out the individual virtue of, virtuous wonder.

⁶⁵ Whitcomb et al. 2017 similarly incorporate indications of *phronesis* into their characterization of the virtue of intellectual humility.

⁶⁶ For a parallel idea for virtuous curiosity, see Watson 2018a, fn.6.

However, the critic's aim to capture virtuous wonder in isolation from other virtues is misguided since, as I explain below, virtuous wonder is a *complex virtue*. It includes within it other virtues like open-mindedness and intellectual humility, and these are suggested even in the alternative characterization. Along these lines, there are two problems with characterizing virtuous wonder in a way that excludes *phronesis*—both of which constitute reasons why I opt for the original characterization in §4. First, if we apply the alternative characterization to realistic examples that capture some of the complexity of the world, we end up with counterintuitive results about who has this virtue. For example, the agents in MOUNTAIN DRIVING, NEW ACQUAINTANCE, and NAZI FILM—subjects who fall under the alternative characterization—clearly make errors with respect to experiencing wonder. When agents frequently have these sorts of experiences, we are disinclined to describe them as possessing virtuous wonder. Second, on an Aristotelian picture, a virtue not infused with *phronesis* is not a “virtue in the strict sense” (*NE VI.13*). The alternative characterization similarly does not sufficiently capture what Aristotle calls ‘natural virtue,’ which has the *appearance of* virtue in the strict sense (i.e., ‘virtue proper’ or ‘*phronetic* virtue’) insofar as the subject acts in the way that they should but are not *guided by phronesis*.⁶⁷ The alternative characterization does not require the subject to act as they should (as we see in virtue proper). Overall, there are good reasons to keep my original characterization of virtuous wonder centerstage, but it is nevertheless instructive to hold the alternative in the back of our minds, as it helps clarify which features refer to the role that *phronesis* plays and which constitute the *core* features of virtuous wonder.

⁶⁷ Kristjánsson's notion of ‘habituated virtue’ (2007, pp.24, 26) and Baehr's ‘natural temperament’ (2011, pp.28-9) are interpretations of or similar to Aristotle's ‘natural virtue’ (the latter of which is discussed in *NE VI.13*).

What role does *phronesis* play in virtuous wonder, then? Answering this below ultimately helps us understand in what sense virtuous wonder is a moral virtue and leads to an exploration of what other virtues are intimately involved with the complex virtue of virtuous wonder.

Phronesis concerns good judgment about what to do qua good person. It attaches to and interacts with all of the different virtues (including virtuous wonder) in its facilitating role. Lacking or not exercising *phronesis* with respect to the activities of inquiry or aesthetic appreciation means lacking or not exercising virtuous wonder. To flesh out these basic points, I briefly describe the mediating and coordinating roles of *phronesis*.

Insofar as *phronesis* is a mediator, a subject who possesses virtuous wonder and *phronesis* is *alive to* a variety of considerations (prudential, moral, etc.) that are pertinent not only to virtuous wonder but also to the other virtues in play in a given situation. Further, *phronesis* resolves conflicts between the ends of different virtues that are operative in the situation—sometimes this involves *coordinating* different virtues into a single line of thought or action rather than mediating between them.⁶⁸ Returning to our set of examples above, the consideration that the subject might cause others harm—e.g., in MOUNTAIN DRIVING or NEW ACQUAINTANCE—is tied to moral virtues. Unfortunately, in those examples the subjects are not alive to such considerations or otherwise make bad judgments in mediating or coordinating between virtues.

Phronesis, along with the skill of identifying wondrous objects, enables the subject to characteristically experience wonder when it is *what to feel, ATC*. Furthermore, behind the mediating and coordinating roles of *phronesis* is the idea that there is some unity to the virtues; to possess a particular virtue, that virtue must be integrated to a sufficient extent with sufficiently

⁶⁸ A third role that *phronesis* plays is hitting the (Aristotelian) mean. For a discussion of *phronesis* and the roles it plays in our intellectual activities, see Zagzebski 1996, pp.219-26.

many other virtues.⁶⁹ There are three further points to make regarding *phronesis* and the unity of the virtues. First, as I suggest above, *phronesis* helps the subject experience wonder toward the appropriate objects and to the appropriate degree, ATC.⁷⁰

Second, our understanding of the role that *phronesis* plays in virtuous wonder helps me explain in what sense virtuous wonder is a moral virtue (see end of §5). There are features of wonder that suggest the possibility of virtuous wonder being a moral virtue in a narrow, other-regarding sense. Some theorists in the wonder literature plausibly suggest that when the object of wonder is a person or other object that possesses moral status, wonder is an ethically motivating force; it provides moral motivation to *genuinely engage with* and *care about* the object, and this can be reflected in how the subject conducts their w-inquiry or aesthetic appreciation.⁷¹ Along these lines, I noted in previous chapters that the subject focuses on the final value of the object and does not see it as something to possess or master—they engage with it for its own sake and on its own terms. One moral implication here is that the subject experiencing wonder is guided away from a motivation to treat the other person as a mere means to their personal ends. But these features of wonder guide us away from only *some* immoral behaviors, and this is the case

⁶⁹ This reflects Swanton’s moderate version of Aristotle’s Unity of the Virtues thesis (the latter of which states that “to have one virtue you must have them all”). For this moderate view, which I adopt, and a discussion, see Swanton 2015, p.211 and 2018, p.514. A related idea (discussed by Swanton) is that living well is not a fragmented or compartmentalized endeavor. Cf. Roberts’s example of the humble white supremacist (2016, p.187) and Hills’s example of great artists who are not sensitive to moral considerations (Hills 2018, p.269).

⁷⁰ The skill of identifying wondrous objects also plays a role in experiencing wonder toward the appropriate objects (see above).

⁷¹ The idea that wonder provides moral motivation is to some extent suggested in Moore 2005, pp.272-3, Bennett 2001, p.156, La Caze 2013, pp.56-7, and Nussbaum 2001, pp.54-5 and 2006, p.349. Assuming that the experience of wonder is an experience of beauty, Irvin 2010 expresses similar ideas. For a similar view with respect to curiosity and a discussion of the connection between epistemic goods and care, see Baumgarten 2001, §II.

It is worth noting that most of these writers are not clear about *when* this moral motivation and caring takes place in relation to the experience of wonder. An exception is La Caze, who suggests that w-inquiry should not have an investigative, probing, mastery-oriented stance when the object of wonder is a person (see 2013, pp.23, 31. For her positive view about how wonder prompts *genuine* engagement with others, see pp.56-7).

It is important to highlight that the motivation to care about the welfare of the object of wonder (when the object is a person or something with moral status) seems to fit within the underlying, common motivation of other-regarding moral virtue: to promote the well-being of others (see Battaly 2014, p.184 and Baumgarten 2001, §II).

even when wonder is fitting—‘wondrous’ does not have what D’Arms and Jacobson call a ‘moral shape’ (2000b, pp.87-8). Having this moral motivation to care about the wondrous object’s welfare and genuinely engaging with it for its own sake does not preclude the experience of wonder from being immoral. For instance, expressing our wonder toward a wondrous person might be morally insensitive, making them feel objectified or uncomfortable (see, e.g., NEW ACQUAINTANCE). In general, the features of wonder and *core* features of virtuous wonder (captured in the alternative characterization above) *do not provide a Zagzebskian success condition*. To meet the success condition—i.e., to at least start off on the right foot in our moral interactions—we need the virtue of *phronesis*. Unlike the features of wonder noted above, *phronesis* makes us sensitive to all the relevant moral considerations in various situations and reliably guides us toward moral interactions with others.⁷² Since virtuous wonder necessarily involves *phronesis*, virtuous wonder is a moral virtue. However, in contrast to my views about virtuous wonder being an intellectual and aesthetic virtue (in §5), *phronesis* is *doing all the work* with respect to the success condition of this moral virtue. Without *phronesis*, the subject has unreliable guidance toward moral interactions with others; they risk having many immoral interactions like NEW ACQUAINTANCE.⁷³ So, virtuous wonder is an other-regarding moral virtue in only a qualified sense.⁷⁴

⁷² Like the skills of identifying wondrous objects and identifying worthwhile epistemic goods, the sensitivity and good judgment of *phronesis* lies within the realm of the subject’s responsibility (rather than being a feature of the external world over which they have little control).

⁷³ If the subject’s experiences of wonder turn out to all involve (successful) moral interactions, it is only *by chance* that this is the case.

⁷⁴ Cf. Swanton 2018, p.516, who briefly indicates that virtuous wonder is an environmental and intellectual virtue, but *not* a moral virtue (in a narrow, other-regarding sense).

Virtuous wonder is perhaps also an other-regarding moral virtue in the restricted sense that, oftentimes, the object of wonder does not have moral status (see my fn.2 above). In contrast, virtuous wonder is an aesthetic and intellectual virtue in a more robust sense since it *characteristically* concerns aesthetic and epistemic goods.

We can draw a similar nuanced conclusion about virtuous wonder's status as a moral virtue *in a broad sense*, where 'moral' here refers to the integration of various domains of the practical, such as the aesthetic, the intellectual, the religious, etc. Like in my previous discussion, *phronesis* is doing the work here. But this is the case for all other virtues as well (Swanton 2018, pp.513-5). Moral virtues in this broad sense help us live well. One way in which virtuous wonder (which involves *phronesis*) is generally conducive to living well is that it helps the subject possessing it find or create meaning in their life. Finding a purpose beyond themselves and their personal projects adds meaning to their life. Virtuous wonder characteristically involves the subject recognizing things that are outside of their personal projects and that have final value and are worth exploring, ATC. Virtuous wonder also helps them avoid obstacles to living well—e.g., boredom and indifference—and individuals with this character virtue will not run out of things in the world that are worthy of exploration.⁷⁵

The third and final point to make here about *phronesis* and the unity of the virtues is that it raises the question of how virtuous wonder interacts with other virtues (aside from *phronesis*). A common and plausible view in the virtue theoretic literature is that an adequate account of an individual virtue says something about how it relates to other virtues (e.g., Cobb 2015, p.272). As I noted earlier, it is plausible that virtuous wonder is a *complex virtue* insofar as it includes other virtues within it. What virtues play a role in virtuous wonder, aside from *phronesis*? Answering this question is relevant for Chapter 5, where I discuss how we can *cultivate* virtuous

⁷⁵ I draw upon Elias Baumgarten's account of virtuous curiosity (see 2001, pp.171, 179-80). The last point made above also anticipates my §7 where I discuss vices associated with virtuous wonder.

wonder; to cultivate the latter, other virtues need to be cultivated as well. I briefly discuss a few good candidates below.⁷⁶

The foundational role that intellectual humility (IH) plays throughout exercises of wonder is reflected in Whitcomb et al. (2017). They argue that the virtue of IH consists in the subject *owning their intellectual limitations* because they are appropriately motivated to pursue epistemic goods (p.520). As I note in previous chapters, the object of wonder is mysterious to the subject—they are not sure what else the object has to offer. The subject recognizes some gap in their knowledge or understanding, i.e., an intellectual limitation. In the case of virtuous IH and virtuous wonder, the subject is appropriately attentive to these limitations. Moreover, Whitcomb et al. indicate that the subject *owns* such limitations in part by responding to them in the appropriate ways, and this often involves the exercise of other virtues like curiosity and open-mindedness (p.517). IH is foundational in the sense that it prompts the exercise of other intellectual virtues when it is appropriate.

Like IH, open-mindedness (OM) plays a foundational role throughout the state of wonder and w-inquiry in exercises of virtuous wonder.⁷⁷ This is highlighted in Jack Kwong’s view of OM as *serious engagement* with novel ideas. This type of engagement stands in contrast to being quickly dismissive or not changing one’s beliefs or plans when it is appropriate to do so, and it can be exhibited in a variety of intellectual activities such as trying to make sense of an idea, assessing an idea in various ways, or connecting ideas to our existing web of beliefs. Further, this

⁷⁶ There are likely other virtues included within or otherwise interact with virtuous wonder besides the ones I discuss here—some of which might not have common names. However, the candidates I discuss here seem to play the most prominent roles within virtuous wonder. Also, I should note that I will not have space in Chapter 5 to discuss in a direct way how to cultivate these other virtues that interact with virtuous wonder.

⁷⁷ We can describe IH and OM as “facilitating virtues” insofar as they *make possible or sustain* virtuous wonder (see Baehr 2011, p.173 for this idea). To be clear, my view is *not* that the virtues of OM and IH in general conceptually fall within virtuous wonder. Though OM, IH, and virtuous wonder interact and co-occur in certain situations, there are many instances where someone exercises OM or IH but not virtuous wonder.

serious engagement is motivated out of a “desire for new truths and for a deeper understanding” (Kwong 2016, p.76). Though the core of Kwong’s view is tenable, his account needs some modifications to adequately capture the *virtue* of OM—e.g., by making the motivation broader to include a variety of epistemic goods and adding something about engaging seriously with *appropriate* ideas.⁷⁸ But even without these modifications, his view highlights the pervasive role of OM in virtuous wonder, assuming that engaging with new possibilities and aspects of the wondrous object can be understood in terms of novel ideas or viewpoints. Throughout both the initial state of wonder and w-inquiry, the subject’s attention toward the object is receptive and open, and they engage seriously with new possibilities or ideas with respect to the wondrous object, aiming to learn more about it.

While IH and OM are characteristically and intimately involved in virtuous wonder, there are other virtues that at least *sometimes* play a role within exercises of virtuous wonder. One good candidate is the virtue of hope. Aaron Cobb explains that hope (as an intellectual virtue) plays an enhancing role by working in concert with other intellectual virtues (2015, p.278). Hope’s role is to “strengthen, give shape to, and energize other cognitive dispositions” (2015, p.282). In virtuous wonder, hope can play a role in wonder’s pleasure of anticipation; the subject hopes that there is more of value to discover in the wondrous object. Further, hope can work with other virtues that are involved with virtuous wonder, such as OM. Cobb explains that hope helps the subject remain open and receptive to different ways to get to their goals (their hopes) (2015, p.274).

⁷⁸ Kwong implies that we should seriously engage with *all* novel ideas. But this is untenable—think of pro-rape arguments or other vile ideas that offer very little to epistemic communities. A general issue with Kwong’s article is that it is often unclear when he is referring to the mere character trait of OM (i.e., the disposition to seriously engage with novel ideas, but not in the right ways), the character virtue of OM, or an act or exercise of it.

As I suggested above, virtuous wonder concerns both the initial state of wonder and w-inquiry; it gets the subject started off on the right foot in the former and plays motivating roles in both (namely, initiating and directing inquiry). Accordingly, a variety of virtues interact with virtuous wonder in some way insofar as they also play a role in the activity of w-inquiry. Hope can enhance our motivation during inquiry, helping us persevere (Cobb 2015, pp.273-4, 276). Along these lines, a variety of endurance virtues can play a role in virtuous wonder since the activity of w-inquiry is often long-lasting. For example, *perseverance* enables the subject to appropriately respond to various obstacles during w-inquiry (Baehr 2011, p.21; Kidd 2018, p.246).

Virtues like OM, IH, hope, and perseverance can play a role in not only w-inquiry but also the activity of aesthetic appreciation. Accordingly, we can conceptualize these supporting intellectual virtues associated with virtuous wonder as also *aesthetic* virtues. To illustrate, humility and openness are described by Kieran as appreciative virtues. Responding appropriately to one's limitations (e.g., the possibility of missing some important feature of an artwork or realizing that there is more to learn about it) and engaging with possibilities in an open-minded way when appropriate is important on both an epistemic and aesthetic level (2011, p.41).

Finally, the importance of virtues like IH and OM are also reflected in virtuous wonder as an other-regarding moral virtue (in the weak, qualified sense described above). Humility and openness play an important part in responding appropriately to another person, e.g., in not projecting our own views or experiences onto them. Overall, the foregoing discussion reflects at least a modest version of Aristotle's Unity of the Virtues thesis. While possessing virtuous wonder might not require possessing every virtue under the sun, it certainly does not work alone.

My discussion of the different virtues that function within or otherwise interact with virtuous wonder suggests that there are many ways in which wonder and w-inquiry can go wrong or be hindered. Just as it is important to discuss how virtuous wonder relates to other virtues, an adequate account also says something about its concomitant *vices*.

Vices of excess include being *gullible* or *overly-excitabile*.⁷⁹ Individuals with such traits frequently experience unfitting wonder or wonder toward ATC inappropriate objects. For example, a gullible person might often experience wonder towards objects that are not wondrous. An overly-excitabile person might frequently experience wonder that is too intense (as they often experience objects as more extraordinary than they actually are) or their expressions or feelings of wonder are not toned down when they ATC should be.

However, in our everyday lives, we more commonly encounter the associated vices of deficiency: *cynical*, *over-confident*, or *apathetic* individuals miss all sorts of appropriate opportunities to experience fitting and ATC appropriate wonder. Their inquiries or aesthetic engagement with objects are generally inappropriately infused with cynicism or overconfidence rather than with fitting and ATC appropriate wonder. Apathetic persons might not even pursue the activities of inquiry or aesthetic appreciation when it is appropriate. This might be partly explained by their lack of familiarity with a Waltonian category and of the associated skill of identifying wondrous objects in that category—as I indicated in §3, virtues and vices are displayed in some areas of one’s life but not others. However, even experts with a high degree of this perceptual skill might not exercise it often enough; they too can be apathetic, cynical, or over-confident. Drawing on the previous section, an individual—whether a novice or expert of a

⁷⁹ One might alternatively use labels like ‘gullible wonder’ or ‘overly-excitabile wonder,’ though these do not capture very well the idea that these vices are *traits of character*. A better, but more cumbersome, option might be ‘gullible sense of wonder’ and ‘overly-excitabile sense of wonder.’ Since these phrases are rare in our ordinary language practices, I opt for the terms noted above.

Waltonian category—might miss many appropriate opportunities to experience wonder because they lack one of the virtues intimately involved in the exercise of virtuous wonder, such as IH or OM.⁸⁰ Along these lines, it is worth highlighting that the vices associated with virtuous wonder are quite similar to those of IH, OM, and hope: over-confidence and cynicism are similar to arrogance and closed-mindedness (Whitcomb et al. 2017, Kwong 2016, Cobb 2015).⁸¹

§8

My discussion of virtuous wonder from the previous four sections qualifies suggestions from the literature and my earlier chapters about the ways in which wonder is valuable. I noted in previous chapters that the object of wonder captures the subject's attention and that they value their engagement with the object (during both the state of wonder and w-inquiry)—it is not an activity of drudgery. Further, they display intellectual humility, openness, and are willing to change themselves (their views, their projects, etc.), putting themselves in a vulnerable position. Their experience of wonder and the things that they learn about the object are memorable, and they oftentimes actively engage with the object for the long-term. Furthermore, Adam Morton indicates that emotions like wonder enable the subject to pursue more risky or ambitious (but responsible) inquiries (Morton 2010).⁸² These features suggest that, through the experience of

⁸⁰ As I note earlier, to exercise virtuous wonder, it is important for the subject to also exercise IH and OM. While experts might tend to fall into an over-confident stance toward their area of expertise, they should resist this vice and instead cultivate or maintain OM. One form of OM is what martial artists call 'beginner's mind'—while this attitude is associated with beginners, experts can also adopt this attitude or something like it, viewing objects without jaded or prejudging eyes (of course, some beginners do not have a 'beginner's mind' or other open-minded stance). I thank Anthony Laden for raising this point about beginner's mind and experts.

⁸¹ I do not include *snobbery* here as a vice corresponding to virtuous wonder. While 'judgment snobs' sometimes end up appreciating the wrong sorts of objects (and sometimes make bad aesthetic judgments), a key feature of these snobs, according to Kieran, is that they have the *wrong sorts of motivations*; they do not engage with objects for their own sake. Accordingly, insofar as a person exhibits this vice, they would not be well-placed to have an experience of wonder—in the latter, the subject characteristically engages with the object at least primarily for its own sake. For more on snobbery, see Kieran 2010.

⁸² Inquirers are responsible in the sense that they are vigilant during inquiry (Morton 2010, p.394). Further, taking risks seems to contribute to *epistemic diversity*, something that contemporary epistemologists like Philip Kitcher value—see Kitcher 1990 and Morton's example of the smart young scientist who has no curiosity (Morton 2010, pp.388-9).

wonder, the subject can make personal and meaningful connections with the object and what they learn. Further, since the experience of wonder oftentimes prompts the subject to share the object with others, it can lead to a form of peer-teaching (where the subject gets someone else interested in an object or topic) or social inquiry (where the subject works with others to better understand and appreciate what makes the object special). Finally, as I illustrated with the ice case in Chapter 3, experiences of wonder (or other emotions) enable the subject to know or understand things on the deeper level.

These suggestions about the value of wonder are elucidated by the qualification that wonder has educational, intellectual, and ‘gateway’ value when the subject exercises virtuous wonder (or some other virtue in an experience of wonder and w-inquiry).⁸³ In contrast, when we wonder at inappropriate objects, the experience has little of these values.

Similar points can be made with respect to the moral value of wonder. As I briefly noted in §6, some scholars like Martha Nussbaum hold that wonder expands the subject’s circle of concern and care (2001, pp.55, 65). Marguerite La Caze similarly explains that, when the object of wonder is a person or something else with moral status, “Wonder is a way of responding directly to the other, rather than imposing or projecting our own views or self-understanding onto them” (2013, p.17). But these features of wonder are valuable primarily (or perhaps only) when the objects that the subject wonders at, genuinely engages with, and brings into their circle of concern are *appropriate, ATC* (I made a very similar point in §6 about virtuous wonder as a moral virtue). Virtuous wonder enables us to reliably experience wonder in the appropriate ways.

⁸³ “Gateway” value can be interpreted in two ways, both of which apply to virtuous wonder: the experiences of wonder and w-inquiry serve as a gateway to the possibility of learning new things or becoming familiar with new Waltonian categories and norms.

Also, while ‘educational’ and ‘intellectual’ value are very similar, I use both terms to highlight how wonder has value in educational settings.

Similarly, Glenn Willmott suggests that wonder is valuable since, at the end of the experience, the subject is obligated to make an ethical decision about how to treat the object going forward (2018, p.46). However, if the subject has poor judgment or wonders at inappropriate objects, this feature of wonder does not seem to have much value.

As I suggested above, the emotion of wonder itself can be valuable for someone who has an appropriate experience of wonder but who does not possess the corresponding skill and virtue; as we saw in *LATIN JAZZ*, the emotion itself can have positive effects. Virtuous wonder similarly has instrumental value. For example, since the trait involves skillfully identifying wondrous objects, virtuous wonder is instrumental in attuning the subject to value in the world that they might otherwise miss and prompts them to explore it during w-inquiry (which ultimately helps them find meaning in their life) (Kristjánsson 2018, p.36; Baumgarten 2001).⁸⁴ But virtuous wonder, qua virtue, has more than just instrumental value. A foundational view in virtue ethics is that virtues are also valued *for their own sake*.⁸⁵

Given the value of virtuous wonder, there are good reasons to undertake the long-term project of shaping an emotional disposition to experience wonder in the appropriate ways. While we have limited control over our occurrent emotions, we can cultivate virtuous character traits associated with emotions like wonder, and which help us avoid pitfalls we encounter in inquiry, aesthetic appreciation, and interacting with others. *But how can we cultivate virtuous wonder?* While I provided some initial suggestions here (e.g., cultivating the skill associated with virtuous

⁸⁴ Also see my p.130 above.

⁸⁵ There are many ways to offer support for the view that virtuous wonder has final value. Since virtuous wonder helps us *live well* in the sense that, e.g., it helps us find meaning in our own lives, we can appeal to the neo-Aristotelian approach: virtues contribute to a flourishing life (see my §6 and Zagzebski 1996, pp.197-8; Baril 2018, p.78; and Lopes 2018. Also see Battaly 2008, p.651 and, for an example, Cobb 2015, p.272). Given my picture of virtuous wonder, another good option is Lopes's approach, which draws on G.E. Moore's view that pro-attitudes toward things with intrinsic value (e.g., beauty) are themselves intrinsically valuable. Activities that feature pro-attitudes (such as appreciation) and engage with a beautiful object for its own sake are intrinsically valuable. Virtuous wonder, which concerns the activity of aesthetic appreciation, fits the bill (see Lopes 2008).

wonder is part of the picture), I aim to further discuss this topic in Chapter 5. My exploration of the nature of virtuous wonder in this chapter points toward some ways in which we can cultivate this character virtue.

V. CULTIVATING VIRTUOUS WONDER

At the end of Chapter 4, I illustrated how my account of virtuous wonder imparts subtlety to suggestions earlier in the dissertation and in the literature about the value of wonder—e.g., wonder’s educational, intellectual, and moral value. But I spent little time explaining what the literature says about wonder’s educational value. Discussing these views at the outset of this chapter is instructive, as it brings into relief how my project of providing an account of virtuous wonder and ways to cultivate this virtue differs from much of the wonder literature. I also critically engage with the few theorists who to some extent explore the notion of an excellent disposition to wonder. While these discussions about the educational value of wonder and virtuous wonder each provide some context, the latter also ultimately highlights how a developed account of virtuous wonder—in conjunction with Aristotelian ideas about virtue—can provide insights about cultivating it.

In Section 1, I provide an overview of what the literature says about the educational value of wonder and the nature of virtuous wonder. Sections 2 and 3 engage with the central question of this chapter: How can teachers help learners cultivate virtuous wonder? I bring together ideas from previous chapters, the pedagogical literature on wonder, and neo-Aristotelian work to offer some answers.

§1

A common idea in the pedagogical literature is that wonder is educationally valuable insofar as it prompts engaged learning or plays a role in other desired educational outcomes. For example, a student’s experience of wonder can make course content meaningful to them and, according to Yannis Hadzigeorgiou, “it can emotionally charge information, thus resulting in better retention and easier retrieval of that information” (Hadzigeorgiou 2014, p.56; also see,

e.g., Hadzigeorgiou and Fotinos 2007; Piersol 2014; Takaya 2014; Haralambous and Nielsen 2014). These theorists generally focus on the instrumental value of the experience and treat wonder as an *educational tool* (e.g., Hadzigeorgiou 2014, Takaya 2014, Trotman 2014). But, as I highlighted in previous chapters, focusing solely on the instrumental value of the experience misses other ways in which wonder has value. One theorist in this literature who acknowledges both the instrumental and non-instrumental value of wonder is Anders Schinkel. He describes wonder as not only a tool to help students develop their perspectives of the world and engage them in learning, but also finally valuable and as having a place in a flourishing life (Wolbert and Schinkel 2020, p.7; Schinkel 2020b, pp.11-2; 2018, p.31).

However, Schinkel falls in line with another trend in the pedagogical literature on wonder: it tends to be concerned with students' *basic* ability or capacity to experience wonder. These theorists do not seriously consider the normativity of wonder, namely, appropriate experiences of wonder (e.g., Silverman 1989; Takaya 2014; Hart 2005). Schinkel briefly considers the notion of appropriate wonder but suggests that we cannot talk productively about the normativity of wonder because it inevitably leads to circularity (Schinkel 2018, pp.46-7).¹ He also avoids normative language in describing dispositional wonder (which stands in contrast to individual episodes of wonder). He characterizes this disposition as a basic ability to wonder, one which shifts our general way of looking at the world and makes experiencing wonder an “ever-present latent possibility” (Schinkel 2020a, pp.489-90; Wolbert and Schinkel 2020 p.7).

Contra Schinkel, I showed in Chapter 4 how we *can* make sense of the normativity of wonder and develop a characterization of the excellent disposition to experience wonder (i.e., virtuous wonder). Furthermore, Schinkel's worry about circularity is addressed in D'Arms and

¹ Schinkel is critical about providing justification for an episode of wonder, which is closely related to the rationality of emotions and other normative issues.

Jacobson's work. They hold that their account of fittingness is circular but not viciously so, as it passes through and seriously engages with the philosophy of emotion (2000a, pp.746-7; Jacobson 2011). I illustrated this in Chapter 4 by drawing upon aspects of my characterization of wonder to explain what counts as wondrous and appropriate wonder.

Once we see that there is such a thing as appropriate and virtuous wonder, we can study wonder in education *in a new light*: there are ways for teachers to help learners cultivate virtuous wonder. My dissertation underscores how wonder is not merely a tool to engage students in learning course material. Studying wonder in this new light is not entirely new, though. There are a couple of contemporary philosophers—Rosalind Hursthouse and Jan Pedersen—who discuss what I call virtuous wonder. However, as I explain below, their accounts are rather underdeveloped.²

Hursthouse (2007) provides only a cursory discussion of the virtue associated with wonder. Many aspects of her sketch align with my picture of virtuous wonder. However, she suggests that some objects are wondrous *tout court* while others are not:

[Wonder] can be felt in accordance with, or contrary to, reason just as fear and anger can. Some objects, for instance nature and its works, are proper objects of it; some, such as the merely novel or unfamiliar, are not. And getting this natural human emotion in harmony with reason really matters morally, just as getting the emotions of fear and anger in harmony with reason do. If we think and feel, not that nature is wondrous but that Disneyland or the Royal Family of Windsors are, that the other animals are not, but we are, that the seas are not but swimming pools on the twentieth floor of luxury hotels are, and act accordingly, then we will act wrongly (Hursthouse 2007, p.162).

While Hursthouse's examples have some intuitive pull, my discussion of category- and norm-relative interpretations in Chapter 4 underscores how it is at best misleading to suggest that natural objects (or any other sorts of objects) are wondrous *tout court*. I illustrated how natural objects are *not* wondrous when experienced under some norms and categories. Conversely, it

² Also see Chapter 4, fn.50.

seems that royal families, swimming pools, or Disneyland (or perhaps aspects of these) are truly wondrous when framed in certain ways. Overall, there is a more complex story to tell about appropriate and virtuous wonder.

Compared to Hursthouse, Pedersen suggests a slightly more developed view about appropriate wonder: we can determine which objects are truly wondrous (the “right objects”) by whether they *likely* elicit wonder. On his view, an object is more wondrous if it is more likely to elicit wonder. But he makes an untenable connection here between the descriptive and prescriptive (Pedersen 2019, pp.119-21, also p.190). Pedersen also briefly discusses a method for cultivating the virtue associated with wonder: educating the imagination. This involves training the imagination to “look for the richest possible account of something” and to “have an eye for the ordinary as a conveyer of the extraordinary” (2019, p.123). I agree with him that this is relevant for the ability to see the ordinary as extraordinary and instances of wonder associated with this phenomenon. However, as I will illustrate in §§2 and 3, there is much more to say about the cultivation of virtuous wonder

Hursthouse and Pedersen both have underdeveloped or otherwise inadequate accounts of wonder’s right objects and virtuous wonder. I show in the following sections how a more developed account of virtuous wonder like my own—in conjunction with Aristotelian ideas about virtue—provides several insights about cultivating this character virtue.

§2

While I outlined the scope of my discussion about cultivating virtuous wonder at the outset of this chapter, two clarifications are in order. First, my account of virtuous wonder in Chapter 4 underscores the important role that the skill of identifying wondrous objects and *phronesis* play in this virtue, which means that developing this skill and higher-order virtue are

important in acquiring virtuous wonder. While virtues like intellectual humility (IH) and open-mindedness (OM) are also part of the picture, the cultivation strategies explored in this chapter are primarily considered in terms of targeting and fostering virtuous wonder. (Nevertheless, some of the strategies that I explore can foster a cluster of virtues that include virtuous wonder, IH, and OM).

Second, I discuss cultivation strategies primarily in terms of what teachers can do to help learners, but these insights at the same time indicate things that learners can or need to do themselves to cultivate virtuous wonder.³ Furthermore, while ‘teachers’ likely calls to mind schoolteachers and ‘learners’ to students in a classroom, I use these two terms broadly. ‘Teachers’ can include schoolteachers, parents, siblings, colleagues, tour guides, etc. and ‘learners’ can include individuals of any age taking a course, on a guided tour, watching a documentary at home, discussing things with friends, etc.⁴ Nevertheless, the somewhat general cultivation strategies I discuss are most effective when modified to meet the learner where they are at. I develop this idea below and sketch some possibilities, but I cannot provide a comprehensive discussion of the topic. Still, this chapter goes some way toward addressing our central question of how teachers can help learners cultivate virtuous wonder.

My discussion is organized around three closely related Aristotelian themes regarding the cultivation of virtue. I focus on strategies under each theme that are significant in cultivating virtuous wonder and note some of their limitations. In this section (§2), I explore the theme of guided practice. Given its centrality in Aristotle’s account of cultivating virtue and its importance

³ A common view in the neo-Aristotelian virtue literature is that cultivating virtues involve both teachers and learners (see, e.g., Battaly 2006, p.204; Sherman 1989; *NE* 1103b7-18).

⁴ For a discussion of Aristotle’s views about cultivating virtues at both home and school, see Kristjánsson 2002, pp.188-9. Cf. Heather Battaly’s view that “while it may be primarily the job of parents and communities to make young adults better people in general, it is primarily the job of schools and universities to make them better thinkers” (2016, p.166). Whether cultivating virtuous wonder (an intellectual virtue) is the responsibility of schools, parents at home, or a collaborative project, the strategies I discuss here could be adapted for either setting.

in cultivating virtuous wonder, I dedicate much of this chapter to guided practice strategies. In the final section of the chapter (§3), I briefly discuss the two other Aristotelian themes in the context of virtuous wonder and how they relate to guided practice: direct instruction and creating a learning environment that supports the cultivation of virtue.⁵

I mentioned that central to Aristotle’s account of cultivating virtue is repeated practice, but what does this practice look like? He explains that “we become just by doing just acts, temperate by doing temperate acts, brave by doing brave acts” (*NE* 1103b1-2). We cultivate virtue by performing virtuous actions.

Nancy Sherman’s interpretation of Aristotle is helpful here in highlighting how virtuous action is multifaceted. Practicing virtuous actions is complex; it involves exercising various discriminatory capacities (e.g., perceptual, affective, and deliberative). She suggests that cultivating a virtue involves developing this set of capacities which constitute the virtue (1989, pp.179, 158, 166). Similarly, Lamb et al. (2021) and Battaly (2016) explain that virtue cultivation involves practicing appropriate perceptions and emotions along with appropriate actions (Lamb et al 2021, p.85; Battaly 2016, p.173).

These insights raise a set of questions, the primary one being, What does it mean to *practice* having appropriate emotions such as appropriate wonder? After all, we generally cannot

⁵ All three of these themes, in some form, appear in Kotzee et al. 2019, who provides an overview of this topic in contemporary virtue epistemology. Similarly, my three strategic themes closely align with what Steven L. Porter describes as “The Standard Approach to Virtue Formation” (2016, p.222).

It is worth noting that either exemplar modeling, being exposed to exemplars, or imitating exemplars is frequently noted as a fourth strategic theme. However, it is often described in terms of either providing a vivid example of a virtue—which seems to be a form of direct instruction—or being a way to guide learners’ practice (see, e.g., Battaly 2006, p.204 and Porter 2016, p.222). To streamline my discussion and to illustrate this point, I note below how exemplar modeling can function within guided practice and direct instruction.

will ourselves to experience wonder.⁶ However, drawing on Jon Elster’s insight, we *can* make ourselves “ready for it”—i.e., to be in a position where we are likely to experience it (Elster 2016, p.53).⁷ But how can teachers help learners be ready for wonder? Is there an *indirect* way in which learners can practice having appropriate emotions and, if so, what does it look like? A related question is what we mean by appropriate emotions here. I explained in Chapter 4 how there are different types of appropriateness, namely, fittingness and all-things-considered (ATC) appropriateness. I address all these questions below by drawing upon my picture of virtuous wonder and Sherman’s cultivation strategy of teachers guiding learners to size up situations appropriately.

This method from Sherman marks an important, indirect approach to help learners practice having appropriate wonder. A key insight is that how the subject *construes* a situation—i.e., how they interpret it, which impacts both what they see and which features of the situation are salient—influences their emotional response (Sherman 1989, pp.167-8, 173).⁸ A construal does not seem to guarantee a corresponding emotional experience, but it at least makes the subject “ready for” it. Teachers can help learners be well-placed to have appropriate wonder by helping them size up situations in appropriate ways. What learners actually *practice*—with the guidance of a teacher—is *sizing up situations appropriately*. Sherman explains that the role of the teacher is to help learners “see and respond aright” (p.180).⁹ Further, this guided practice over time helps learners form patterns and trends in what they notice and see, to develop patterns of seeing things aright, and becomes almost second nature for them (pp.172, 177). Learners

⁶ Trying to have this experience is akin to *trying* to be spontaneous (Elster 2016). Also see my Chapter 3, fn.15. I thank Samuel Fleischacker for raising this issue.

⁷ I have used the notion of ‘putting oneself in a position to wonder’ in other contexts earlier in the dissertation (see, e.g., Chapter 1, pp.22-3; Chapter 2, fn.60; Chapter 3, fn.15).

⁸ For empirical support, see Kristjánsson 2018, p.177 (also 2002, pp.190-1).

⁹ As I explain below, *seeing* aright involves both *observing* and *interpreting* the object in appropriate ways. Also, it is worth noting that we can construe situations with other senses besides vision—I interpret ‘see’ broadly.

come to perceive the world differently, in ways that make them well-positioned to experience appropriate wonder (among other appropriate emotions).

What do we mean here by *appropriate* construals and emotions? Following Sherman's suggestion, the ultimate goal is for these to be ATC appropriate. The ideal is for the subject to exercise their perceptual capacities to notice all the relevant considerations in the circumstance (the important details of the object or situation) and for the construal of the situation—in particular, what features are salient—to be *in harmony with* their deliberative capacities and ATC judgments about what they should do.¹⁰ For example, drawing on the MOUNTAIN DRIVING case in Chapter 4, the driver ideally construes the situation in a way that makes the narrow roads and other hazardous driving conditions salient, which aligns with what he ATC ought to do: pay attention to his driving rather than look out of the side window at the wondrous landscape. This sort of picture reflects Aristotle's characterization of full virtue.

Nevertheless, Sherman rightly places importance on meeting learners where they are at. Most learners will often construe situations in ways that make the wrong features salient or that miss relevant considerations, and it is the job of the teacher to help them improve their perceptual capacities, e.g., to notice additional details that they missed. The aim with young learners, for instance, is not to get them to notice *all* the relevant considerations; they will not be prepared or able to do this (1989, pp.168, 173). Sherman suggests that, before learners can make ATC judgments and cultivate *phronesis* in earnest, the central aim for teachers is guiding them to size up situations appropriately in the fittingness sense and make them ready for fitting emotions (pp.171-3). In cultivating virtuous wonder, teachers begin with helping learners construe objects in appropriate ways that make the object's wondrousness salient.

¹⁰ The idea of noticing all the relevant considerations fits with Fridland's characterization of expert perception (see my fn.17 below).

There are at least two further connections to make between my previous chapters and Sherman's method which help us understand the latter. First, the notion of seeing aright (whether it is appropriate in the fitting or ATC sense) is special in the case of virtuous wonder: in sizing up the situation, at least some of the considerations are not seen in a clear and confident way by the subject. I noted in previous chapters how the subject has a vague sense of the aesthetic features and extraordinariness of the object—they characteristically apprehend important aesthetic features, but there is much more to explore.¹¹ In other words, the goal of guided practice in the case of virtuous wonder is different from the goals of cultivating most other virtues. Second, as I note below, the strategy of guiding learners to size up situations appropriately in the fittingness sense also serves as a method for helping learners both become familiar with a Waltonian category and develop the skill of identifying wondrous objects.¹²

The foregoing discussion explains the main goals of Sherman's strategy and what practicing means in the context of cultivating virtuous wonder. However, I have not yet described *how* teachers go about guiding learners in their practicing. To develop this aspect of Sherman's strategy and to give us a better understanding of what *seeing* aright means, what

¹¹ For suggestions that at least some of the considerations (e.g., aesthetic features of the object) are not seen in a clear-eyed and confident way, see my Chapter 2 and Chapter 4, pp.107-10 (e.g., my discussion about minor inaccuracies with fitting wonder and apprehending aesthetic features).

¹² A third connection worth noting here is that, in drawing on Zagzebski's work in Chapter 4, I talked about developing the perceptual *skill* of identifying wondrous objects—for Zagzebski, virtues involve skills. In contrast, Sherman primarily uses the language of 'capacities' (though, she also talks about cognitive and deliberative skills, e.g., 1989, pp.159, 179). There are some differences between skills and capacities, e.g., capacities can be possessed without practice, whereas skills are necessarily acquired through practice (Pavese 2022). Nevertheless, the two interact; I suggested in Chapter 4 that in order to develop the perceptual skill of identifying wondrous objects, the subject needs to develop perceptual capacities, e.g., what I called perceptual sensitivities. Similarly, Sherman focuses on learners developing and exercising capacities, and I note below how Sherman's guided practice strategy helps learners develop perceptual capacities and skills, both of which are important for virtuous wonder.

guided practice for virtuous wonder looks like, and ways in which learners can become familiar with a Waltonian category, I explore below the important cultivation strategy of curation.

A central way of helping learners size up situations appropriately in cultivating virtuous wonder is *curating*, which involves exposing learners to certain objects and presenting those objects in certain ways.¹³ There are a couple of preliminary points to make here. First, I will focus below on the curation of wondrous objects, which helps put learners in a position to experience appropriate wonder in at least the fittingness sense. But even when the object is not wondrous, curating guides learners in becoming familiar with Waltonian categories and gives them opportunities to practice sizing up objects and situations appropriately.¹⁴ Second, I suggested that there are two important elements of curation: the *selection* and *presentation* of objects. I unpack these two closely related strategies in turn.

With respect to selection, the learner is guided in the sense that the teacher exposes them to some objects and avoids others.¹⁵ The teacher exposes the learner to a variety of objects in a Waltonian category, including wondrous ones, and this guides the learner in becoming familiar with the category. An important part of this strategy going well is the teacher meeting the learner where they are at, e.g., exposing the learner to objects that are age and developmentally appropriate. The teacher should not expose very young children to, say, wondrous R-rated films (Aristotle *Politics* VII.17; Kristjánsson 2002, p.189). The objects should also be developmentally appropriate in the sense that their wondrousness is accessible to the learner. For example, a

¹³ Of course, a teacher could offer guidance to a learner in how to appropriately interpret and observe an object that they did not thoughtfully select—i.e., it was not curated. Still, my discussion below covers these types of guidance in sizing things up appropriately.

¹⁴ Sherman explains that *familiarity* with a type of circumstance (in our case, a Waltonian category) is required for virtue (1989, p.192). Relatedly, Fridland (2017) suggests that repeated exposure to certain types of situations is a form of repeated practice (she likely has what I call *attentive exposure* in mind here—see my Chapter 4, §3, especially fn.42).

¹⁵ Also see Kristjánsson 2007, Ch.5 for the strategy of situation selection and Aristotle *Politics* VII.17.

teacher would not be fostering virtuous wonder in exposing a typical kindergartener to a Petersen graph, as grasping and appreciating the wondrousness of this object requires quite a bit of background mathematical knowledge—knowledge that typical kindergarteners do not have.

However, there are further, deep questions about which sorts of age and developmentally appropriate objects learners should be exposed to; there are many to choose from. To illustrate, the Hungarian music pedagogue and composer Zoltán Kodály suggests that the foundation of a child's music education should at least initially be the exposure to and singing of folk music from the learner's own culture. Frank York interprets Kodály's view in the following way: "If we believe that [a] person can have only one mother-tongue-musically, ...then we must make serious efforts to base music education on the music of the culture, at least in the initial stages" (York 1999, p.18). Kodály has other lines of support which could be generalized in thinking about which kinds of objects teachers should expose learners to. First, he prioritizes Hungarian folk music because of its accessibility to Hungarian children; they do not need to learn a foreign language to sing these songs and the formal aspects of this music are not as complex as classical works. In other words, this music is developmentally appropriate. Second, Kodály cared about preserving Hungarian culture and was worried about efforts to "Germanise Hungary." Teaching children folk music of a culture is a way to preserve that culture (1999, p.19). Other relevant considerations might include the individual learner's interests and cultural background. All these considerations (and likely others) need to be weighed up by the teacher in selecting what to expose the learner to.

When teachers expose learners to objects, they necessarily *present* those objects—e.g., introduce, frame, or elaborate upon them—in certain ways. Presenting objects in appropriate ways guides learners to *interpret* and *observe* the object appropriately. I develop this idea below

by first discussing presentation strategies focused on appropriate interpretation before turning to methods concerning appropriate ways to observe objects.¹⁶ Before discussing these methods, three points are in order. First, some of the strategies and activities I discuss come from the pedagogical literature, which tends to treat these strategies as tools to engage students in course content (see §1). However, such strategies can also serve to guide the learner's practice in sizing things up appropriately and cultivating virtuous wonder more generally. Second, many of the presentation strategies I explore provide models for how to interpret and observe things appropriately which learners can imitate. Third, presentation strategies offer other kinds of guidance besides how to size things up that are important to cultivating virtuous wonder. For example, like selection strategies, presentation strategies can guide learners in becoming familiar with a Waltonian category, and similarly should meet learners where they are at. Teachers should not present objects in ways that go over the learner's head, e.g., using lots of advanced vocabulary that confuses the learner or introducing an artist's work by situating it among names of artists whom the learner has never heard of. Presentation strategies additionally guide learners in developing the skill of identifying wondrous objects; over time, these strategies can help learners develop a sense of where to look, how to look, what details matter, how to interpret the situation, and help them refine their perceptual capacities (e.g., perceptual sensitivities) with respect to the category.¹⁷

I turn now to presentation strategies focused on appropriate *interpretation* that make the wondrousness of the object salient. These can be illuminated by Elisabeth Camp's research on

¹⁶ Overall, my discussion here reflects the idea from Chapter 2 that presentation matters—see my Chapter 2, p.15 (though, this idea is also found in a variety of places in the philosophical literature).

¹⁷ For similar ideas, see the discussion of expert perception in Fridland (2017). She explains that, compared to novices, experts direct more of their attention to relevant and informationally rich areas of the situation and recognize domain-specific patterns which allow them to group information in meaningful ways (§2). Also see my Chapter 4, fn.37. For the connection between perceptual sensitivities and perceptual capacities, see my fn.12 above.

frames. Drawing on Camp (2019), “interpretive frames” help learners think about the object in appropriate ways. These frames can help learners notice certain features of an object, how they relate to one another, and guide how learners evaluate and respond to the object (Camp 2019). Important for our purposes, various types of frames can bring out an object’s wondrousness, which influences the learner’s emotional response.

To organize my discussion of these interpretation-oriented presentation strategies, I adopt Camp’s distinction between internal and external interpretive frames. The former directly attributes a feature to the target object, whereas latter involves finding matching features between two distinct domains and viewing the target object in terms of a different domain (2019, pp.313-4). A well-known type of external frame is metaphor, and these can be used to highlight the wondrousness of a phenomenon that is presented to a learner. For example, a science teacher can present the atmosphere *as an ocean of air*. This framing makes salient the thickness, currents, pressure, density, and pressure gradients that exist in both the atmosphere and oceans (Girod 2007, p.54).¹⁸ Presenting the atmosphere in this way not only puts learners in a position to experience fitting wonder, but also opens many potential lines of inquiry for them (Camp 2019, p.330, also p.318).

There are also internal interpretive frames that can bring out features that make an object wondrous. One example of an internal framing device is a teacher presenting scientific facts in ways that bring out the wondrousness of the phenomenon, e.g., ‘There are thousands of gallons of water suspended in the air before a rainstorm; what keeps all that water in the air?’ (Girod

¹⁸ Of course, when using metaphors, learners do not place the target object in the framing (Waltonian) category in a robust or literal way. For example, they do not think, ‘Wow! The atmosphere is an extraordinary ocean because we can see through it and don’t need to hold our breath!’

For some similar examples of teachers using metaphors, along with high school student responses collected in empirical research, see Hadzigeorgiou 2014, p.60. Also, using metaphors with young learners is prominent in the children’s book *Wonder Walkers* (2021) by Micha Archer.

2007, pp.54-5; Cole 1999).¹⁹ This framing is much different from one that does not make salient the wondrousness of the phenomenon, e.g., ‘I heard that there’s a high chance of rain today.’

Another example of internal framing is a teacher presenting an object alongside others of its kind (e.g., in an image or diagram) where the target object stands out among the rest in some significant way. By using juxtaposition or comparison, the teacher makes certain features of the object salient. This strategy is well-suited for highlighting how an object is extraordinary and wondrous.²⁰

A third example of an internal framing device are *Wunderkammern* (cabinets of curiosities), which were popular in Renaissance Europe and a forerunner of the modern museum. The curators of these collections typically sought to bring together the widest possible variety of wondrous objects, from natural specimens like shells and preserved insects to cultural objects like weapons, scientific equipment, and artworks. They presented each of these as wondrous and intended to elicit the associated response in viewers (Kaulingfreks et al. 2011, p.320).²¹ Whereas the previous framing device places one wondrous object amongst ordinary items of the same kind, wonder cabinets typically use juxtaposition differently: namely, by putting very different types of wondrous objects all together in one room or piece of furniture.²²

¹⁹ Similar examples are found in Carl Sagan’s *Cosmos: A Personal Voyage* (television series): “We are made of star stuff.” There are also examples in *The Undersea World of Jacques Cousteau*: “All of the waters of the world today are the same waters which first materialized on the newly born earth, four and a half billion years ago.”

²⁰ This is closely related to another strategy which I discuss below: pairing.

²¹ As the example of *Wunderkammern* suggests, curation can be rather involved on the teacher’s part, e.g., carefully organizing the objects and thinking about various other details of the room (such as the colors of the walls) to guide the learner’s experience. I thank A.W. Eaton for raising these points about curation. Nevertheless, John Onians suggests that creators of *wunderkammern* did not *need* to be meticulous in their curating: “If you put a large number of strange objects into the cage of any monkey it will, as Darwin noted, greet them with astonishment and curiosity, and that is what happened in the palaces of Europe” (Rubenstein 2008, p.14).

²² ‘Cabinets’ were sometimes pieces of furniture, sometimes entire rooms. Also, curators like Ole Worm organized their collections into broad classes (e.g., putting all the invertebrate specimens together in one area of the cabinet, the shells together in another area, etc.) while others intermixed their collection of wonders.

A fourth internal framing device is mimetic artworks.²³ As A.W. Eaton explains, representational artworks can activate our imaginations and get us to see things in terms in which we would not normally see them. They can guide and structure our attention in ways that highlight the wondrousness of an object that we previously considered dull or ordinary (Eaton 2016, pp.52-3).²⁴ This strategy has some philosophical complexities that the others above do not. In some sense, the *artist* of the artwork is the teacher; it is Vermeer, Cézanne, etc. who present everyday objects in new ways and which help learners see the wondrousness of such objects. In addition, a second-order teacher—e.g., a docent, a friend, a professor of visual art or literature, etc.—plays a role in exposing learners to such artworks and guiding their interpretation of them.²⁵ Further, a representational artwork might not only help make salient to a learner the extraordinary and wondrous aspects of an everyday object, but also be a worthy object of wonder in its own right. Distinguishing between the subject matter and the manner in which it is depicted is important in thinking about and employing this strategy.

An alternative way for teachers to make salient the wondrousness of an object and guide the learner to size things up appropriately is to establish an interpretive frame with the intention to later show learners how it is inadequate in some way—e.g., the frame obscures important features of the object or makes the wrong ones salient (Camp 2019, p.331). This creates a higher-order framing that connects the old and new frame. A teacher can guide learners to think about an object in certain ways and make predictions that are later refuted. The latter move reveals the

²³ The surrealist art of René Magritte has mimetic elements, but also seems to use external interpretive frames (e.g., something akin to metaphors or analogies). Examples of paintings that use a mix of frames include his *Golconda* (1953) and *L'État De Veille* (1958).

²⁴ For similar sentiments, see Parsons 1969, p.86 and D'Olimpio 2020, p.266. Also, Eaton notes that framing the represented object as an instance of a larger class is important, as it helps us recognize the connection between everyday objects of a certain sort and the corresponding objects depicted in the artwork (2016, p.53).

²⁵ While my examples focus on visual art, this also applies to other artforms as well, such as poetry. We can even find examples in music, e.g., the sound of a typewriter is heard in new ways in Leroy Anderson's *The Typewriter* (1950).

learner's ignorance and prompts them to reinterpret the situation. For instance, a mathematics teacher introducing fractals to learners might first highlight the simplicity of an equation, $Z_{n+1}=(Z_n)^2 + C$, guiding students to focus on this aspect of it and to make corresponding predictions. Next, the teacher shows students the visually striking and complex images of the Mandelbrot set. Part of what is striking about it is that such a complicated pattern can emerge from a simple equation, and explaining this gap is still being studied by mathematicians (Zazkis and Zazkis 2014, p.66). We see this type of strategy employed in philosophy as well, e.g., in Socratic Method. Socrates allows his interlocutors to hold a set of assumptions and think about some phenomenon in a certain way. After this frame is established in the dialogue, Socrates helps others (learners) see how it is inadequate.²⁶ In doing so, he helps them see the extraordinary in what was heretofore taken for granted or considered ordinary.²⁷

There are also presentation strategies that primarily guide learners to *observe* or *engage with* the object appropriately and in ways that bring out the object's wondrousness. One way that teachers offer guidance in this respect is by recommending certain *pairings* of objects and modes of observation or engagement, much like how oenophiles recommend certain pairings of wines and cheeses.²⁸ Such a recommendation is part of how the teacher presents (e.g., introduces) the object to the learner, and is intended to ultimately guide the learner towards the object's wondrousness. For example, the thinking routine See-Think-Wonder from the popular

²⁶ See my Chapter 2 for a discussion of young Theaetetus, which reflects this strategy.

²⁷ My earlier metaphorical example of presenting the atmosphere as an ocean of air might be understood as breaking initial learner impressions and interpretations about the atmosphere. Also, this strategy of breaking frames could often be effective in introducing learners to contemporary artworks. Learners might initially frame an artwork in ways that make it seem dumb and uninteresting until the teacher reveals the inadequacies of this initial framing.

²⁸ One might be able to understand some interpretation-oriented strategies in terms of pairing (e.g., "I'll use an external frame with this object to bring out its wondrousness"). However, the notion of pairing is more illuminating with observation-oriented strategies; I illustrate below how these strategies themselves do not significantly change depending on the object (e.g., a magnifying glass is a magnifying glass, whether you use it with a snowflake or an insect). A 'pair' suggests two independent entities that are brought together.

pedagogical text *Making Thinking Visible* (2011) emphasizes how, with some objects, it is important for learners to first observe it in silence for a few minutes. Such an activity, guided by a teacher, encourages learners to spend time searching for important details in, say, a painting (Baehr 2021, p.149).²⁹ Patience is sometimes crucial to see the wondrousness of the object (this is especially true with temporal artworks like films and music).³⁰ A closely related example is a teacher recommending that learners spend some time exploring or researching a particular object—i.e., presenting the object as something that deserves exploration. Laura Piersol notes how having students research an everyday item like jeans can lead to experiences of wonder. She notes how students find out surprising things, e.g., that it takes 3,480 liters of water to make one pair of jeans. Guiding students in this way is interdisciplinary in nature and can help learners “become aware of the myriad of wonders at their fingertips” (Piersol 2014, p.16).

Teachers can also offer guidance in how to observe or engage with objects by providing or recommending certain *tools* when presenting an object.³¹ For example, Rachel Carson recommends that teachers give learners a magnifying glass to use in nature, as it will “bring a new world into being” (Carson 1956, p.47). Seeing the intricate details of leaves, snowflakes, insects, and other things in nature make salient the wondrousness of such objects. Further, such tool recommendations are a form of pairing. Like other pairings, using a magnifying glass will help the learner see the wondrousness of some objects but is an unhelpful pairing with others. A

²⁹ It is worth noting that the authors of *Making Thinking Visible* do not seem primarily interested in the robust ‘wonder’ that is my focus. Their ‘wonder’ step of the thinking routine consists in giving learners an opportunity to ask or ponder lingering questions about the object. This step *could* elicit wonder in my sense, but it need not—it might elicit curiosity or interest instead (Ritchhart et al. 2011).

³⁰ A couple of musical examples plausibly include John Cage’s *4’33”* and The Velvet Underground’s *Heroin* (also see my Chapter 1, p.10).

³¹ I use ‘recommends’ rather than, say, ‘demands’ because of my discussion in §3 about a learning environment that supports the cultivation of virtuous wonder.

magnifying glass is of little use while visiting Sagrada Família, whose wondrousness does not primarily lie in the microscopic details.

There are also strategies that are best understood as pedagogical tricks that help prompt the learner to observe or engage with the object in appropriate ways. In contrast to the strategies above, these interventions do not themselves involve sizing things up appropriately and do not serve as models for learners to imitate.³² One example which is similar to the internal framing strategies above is suggested by Carson. Learners often take certain objects for granted and do not seriously engage with them. In such cases, teachers can pair these objects with the following imaginative exercise: “One way to open your eyes to unnoticed beauty is to ask yourself, ‘What if I had never seen this before? What if I knew I would never see it again?’” (Carson 1956, p.47). The counterfactuals themselves do not count as sizing things up appropriately; they are a mere means to appropriate engagement with the object. Furthermore, a limitation of this strategy is that its effectiveness likely decreases over time if the teacher over-uses this imaginative exercise with the learner.³³

A more general limitation to acknowledge here about all observation-oriented strategies is that they often need to be accompanied by interpretation-oriented strategies (like the ones described earlier). Giving a learner a magnifying glass or recommending another pairing—by itself—is oftentimes not enough to guide them to size things up appropriately, or at least not

³² For the relationship between modeling and guided practice, see my fn.5 above.

³³ One other strategy that I only briefly note here since it applies only to adult learners is pairing recreational drugs with certain objects. Like Carson’s hypothetical questions, this strategy seems to be a trick to help learners seriously engage with taken-for-granted objects. It does not seem that drug use—from the perspective of cultivating virtue—is part of sizing things up *appropriately*. Along these lines, it seems that a magnifying glass is *important* (or even needed) for certain objects in a way that marijuana or Carson’s hypothetical questions are not important or needed. An exception to this, however, is if the learner is trying to familiarize themselves with the Waltonian category ‘drug-induced experiences.’ In this case, using various types of recreational drugs is central. Nevertheless, there are questions in the background about which Waltonian categories learners should spend time becoming familiar with (also see my p.149 above).

reliably so. A common and plausible idea in the virtue theoretic literature is that using a combination of strategies, including various curation strategies, is most effective in helping learners cultivate virtue (e.g., Battaly 2006, p.205; 2016, pp.171-3; Lamb et al. 2021, p.98; Porter 2016, pp.222-3).

Aside from the general strategy of curating objects in ways that guide a learner's interpretation and observation of the object, an explicit part of Sherman's strategy of guiding learners to size things up appropriately is a *dialogue* between the learner and teacher: "What is required is some dialogue and verbal exchange about what one sees (and feels) and should see (and feel)...actual descriptions which articulate a way of perceiving the situation and which put into play relevant concepts, considerations and emotions" (Sherman 1989, p.172). The dialogue helps each person understand how the other sizes up the situation, and once the teacher grasps this about the learner, they can offer feedback to the learner about it. Sherman suggests that a key part of these dialogues is teachers providing explanations *why* it is appropriate to size up the situation in certain ways. Such why-explanations are a primary way in which teachers persuade learners to change how they size things up. Most important for Sherman, though, is that these aspects of the dialogue actively engage learners and their critical capacities (pp.172-3).

As I suggested, these dialogues can help learners improve their perceptual and deliberative capacities. The teacher can point out important considerations that the learner might have missed, and this can be done by introducing some new vocabulary ("relevant concepts") which can help them see more clearly certain details and considerations (Curren 2018, p.478).³⁴ Participating in these dialogues over time can help learners develop a sense of where to look,

³⁴ However, throwing too much new vocabulary at the learner might be overwhelming and only confuse them (see my p.150 above).

what details matter, and more generally how to appropriately size up situations—they support the development of perceptual sensitivities and the skill of identifying wonderful objects. In addition, these dialogues can motivate learners to be self-reflective. When teachers provide explanations why it is appropriate to size things up in a certain way, they model reflective practice which learners can imitate. As Steutel and Spiecker put it, providing such explanations and modeling initiates learners into “habitual practices of giving and accepting reasons” (Steutel and Spiecker 2004, p.547; also Curren 2018, p.476 and Kristjánsson 2018, p.180). Along similar lines, Ross Thompson explains that how children evaluate themselves is influenced by their parents’ feedback (Thompson 2015, p.296). In a word, these dialogues guide learners’ reflection in their practice.

Learners being self-reflective in their practice sizing up situations is important in a few related ways. The dialogues and learner self-reflection described above seem to support what Sherman calls *critical practice*, i.e., where the learner is reflectively self-aware of how they are doing and tries to improve (Sherman 1989, p.179). This sort of practice helps learners improve their perceptual and deliberative capacities and ultimately helps them become *independent* in arriving at competent judgments and appropriate reactions (p.172). Moreover, this type of practice is important because it fosters the cultivation of *phronesis*.³⁵ Independent self-reflection and understanding why sizing something up in a certain way is appropriate are both parts of this higher-order virtue (Steutel and Spiecker 2004, p.547; Kristjánsson 2007, p.37; 2018, pp.42, 177-8; Lamb et al. 2021, p.87).

³⁵ Another important part of cultivating *phronesis* is learners practicing making ATC judgments, e.g., working through ethical dilemmas (Sherman 1989, p.175; Hatchimonji et al. 2020, p.139). Along these lines, self-reflection can be further promoted through activities like writing journal reflections (see Lickona 1997, p.55; Battaly 2016, p.179; Hatchimonji et al. 2020, p.138).

Overall, Sherman's account of helping learners see aright focuses on the *perceptual* (discriminatory) capacities of learners, but she also emphasizes that how learners construe situations influence their emotions and actions. When construing a situation ATC appropriately makes salient the wondrousness of the object, the subject is primed to experience appropriate wonder and perform the actions characteristic of virtuous wonder: the activity of w-inquiry (which starts off on the right foot).³⁶ Moreover, through this guided practice strategy, the learner comes to value and enjoy exercising their skills and capacities and performing the relevant actions; the learner acquires a taste for these (Sherman 1989, pp.159, 176, 184-5, 187; Battaly 2006, pp.204-5). This pleasure and enjoyment motivates further critical practice and improvement of these capacities and skills, which can be supported in part by teacher-learner dialogues (Sherman 1989, p.184).

In discussing the strategy of guiding learners to size things up appropriately, I have suggested a couple of its limitations. First, this strategy does not guarantee that learners actually experience appropriate wonder—when successful, it only primes them for it. Second, sometimes teachers are not in a position to adequately guide learners. I indicated that teachers need to have knowledge about which construals and ways of engaging or observing with the object are appropriate and why they are so. Without this knowledge, they cannot adequately provide feedback, point out important details of the situation, or engage in dialogue. To foster virtuous wonder, it is also important for teachers to present objects and engage in dialogue in ways that both reflect the aforementioned knowledge and meet learners where they are at.³⁷ If teachers do not

³⁶ For this interpretation of the *action* associated with virtuous wonder, see my Chapter 4 and Kristjánsson 2018, p.16 (in particular, his distinction between noticing and acting in his brief discussion of virtuous compassion).

³⁷ This suggests that the teacher must have at least *some* familiarity with—some exposure to—the relevant Waltonian category.

know these things and have this ability, then there is a risk of guiding learners towards vice rather than virtue (*NE* 1103b7-12).³⁸

Fortunately, if teachers recognize their lack of knowledge or ability in guiding a learner's practice, there are some potential ways to address this issue. If the teacher lacks the relevant knowledge, they could acquire it themselves by consulting trustworthy sources (e.g., experts in the Waltonian category), and if they lack the aforementioned ability, they could develop their pedagogical skills, e.g., by participating in a teaching workshop. A drawback, though, is that these options are time consuming. A perhaps more common alternative is to refer the learner to another teacher who does have the relevant knowledge and ability with respect to a particular object or an entire Waltonian category (I noted earlier that guided practice involves sizing up not only wondrous objects but also a range of other objects in a category). But if a qualified teacher is not available to interact with the learner, what can the ill-placed teacher do? One option that is usually available (whether one is short on teachers or not) is to expose learners to what I call 'media exemplars,' who are often famous people possessing the relevant virtue(s). Plausible media exemplars of virtuous wonder include Albert Einstein and Rachel Carson (Sherry 2019; Fuller 2006a pp.43-4). Published biographies, autobiographies, documentaries, or other media such as television series can provide learners with a vivid picture of virtuous wonder. Important for our purposes here, media exemplars can model appropriate ways of sizing up situations and which make salient the wondrousness of certain phenomena—e.g., Carl Sagan explains in the television series *Cosmos: A Personal Voyage* (1980) that “We are made of star stuff.” But while

³⁸ Some philosophers emphasize that teachers who employ Sherman's strategy must also be *exemplars*—i.e., possess the relevant virtue(s) (e.g., Battaly 2006, pp.204-5; cf. Sherman 1989, p.179). However, the foregoing discussion in conjunction with an observation by Aristotle suggests that teachers *do not* need to be virtuous in the case of guided practice for virtuous wonder. Aristotle indicates that most adult teachers who fall short of virtue nevertheless *know* what is right with respect to emotions and actions (Kristjánsson 2007, pp.21, 27; *NE* 1150a15, 1152a25-6). This suggests that such teachers can adequately guide learners' practice by employing strategies like curation and engaging in dialogue (provided that they also have relevant pedagogical skills).

media exemplars can indicate why sizing up a situation in a certain way is appropriate, a major limitation is that they cannot engage in dialogues with learners or offer other types of feedback.

§3

In this final section, I briefly discuss two other Aristotelian strategic themes and strategies falling under them that play an important role in cultivating virtuous wonder: direct instruction and creating a learning environment that supports the cultivation of virtue. In discussing each, I highlight how they relate to the guided practice strategies from §2.

A helpful way to understand the strategic theme of direct instruction and how it differs from guided practice is that the latter is centrally concerned with learners exercising their nascent (or more developed) capacities and skills and experiencing wonder, whereas the former's immediate focus is on learners acquiring knowledge and understanding *about* the nature and value of virtues and related ideas. While someone can learn about such things through practice, direct instruction is 'direct' in the sense that helping learners acquire such knowledge is the focus and is pursued in an explicit way (Baehr 2015, p.329). One common example of direct instruction is lecturing about virtues and related concepts. Another is learners and teachers discussing such ideas together and exchanging illustrative examples.³⁹ In our case, the relevant topics include wonder, appropriate wonder, wondrous, virtuous wonder, and its associated vices (e.g., cynical). I also noted in Chapter 4 that a teacher might explain to a learner the *Gestalt* of a Waltonian category (i.e., what makes the category distinctive), which is important in understanding what is extraordinary in a category.⁴⁰ Learning about any of these topics can be

³⁹ These discussions or lectures often include the teacher (or learner) explaining *why* an example is illustrative of some concept, e.g., why a case is one of appropriate wonder—for empirical support about the benefits of teacher explanation and learner self-explanation, see Bisra et al. 2018. Also, teachers asking learners to provide their own examples encourages learners to make personal connections with these ideas (see Hatchimonji et al. 2020, p.137).

⁴⁰ See my Chapter 4, fn.36 and Walton 1970, p.341.

facilitated through children’s books, case studies, etc. and—just like guided practice strategies—it is important for the teacher to meet the learner where they are at with this direct instruction.⁴¹

What role does direct instruction play in helping learners cultivate virtuous wonder? A primary role of direct instruction is *supplementing* guided practice strategies. It is supplemental in three senses. First, direct instruction is neither necessary nor sufficient to cultivate virtue (the latter marks a limitation of this strategy).⁴² Second, direct instruction is a natural addition to guided practice. For example, the teacher-learner dialogue described at the end of §2 can easily transition into (and out of) direct instruction. The teacher might use new vocabulary in explaining why sizing something up in a certain way is appropriate and, to clarify this new concept, they provide direct instruction about it. Third, direct instruction supplements insofar as it provides some additional benefits to learners. For example, I just illustrated how it can help clarify concepts for learners. In the case of direct instruction about ‘wondrous’ and ‘appropriate wonder,’ direct instruction can help shake learners’ naïve subjectivism about aesthetic judgments. Finally, learning about vices, the value of virtues, ‘wondrous,’ or being exposed to exemplars (i.e., vivid illustrative examples of virtuous wonder) can *motivate* learners

⁴¹ Some theorists highlight how fairly young children (e.g., children ages five to seven) can understand topics like appropriate emotions and virtues—see, e.g., Roberts 2016, p.199; Lickona 1997, pp.50, 55-6; Kristjánsson 2002, p.186.

⁴² See, e.g., Porter 2016, p.223; Battaly 2016, pp.171-3 and 2006, p.205. While I agree with Battaly that direct instruction alone “won’t be enough” to acquire virtues (including virtuous wonder), her interpretation of Aristotle suggests that direct instruction is also *necessary* to cultivate virtues (2016, p.172). But many people have acquired virtuous wonder (or other virtues) without direct instruction. There are moments where Battaly acknowledges this, e.g., when she says that cultivating virtue is “difficult” for learners who have not received direct instruction (p.173).

to cultivate virtuous wonder (Baehr 2015, p.330; 2021, p.158; Roberts 2015, p.196; Kristjánsson 2002, p.183; Lamb et al. 2021, pp.88-9).⁴³

The third Aristotelian strategic theme is teachers creating a learning environment that supports the cultivation of virtue. Whereas direct instruction plays a supplemental role in interacting with guided practice strategies, the third strategy operates in the background of these other cultivation methods. But, like the other two methods, this final strategy comes with its own limitations. I illustrate both points while discussing this strategic theme in the context of cultivating virtuous wonder.

What does an environment that supports the cultivation of virtuous wonder look like? One feature of a supportive environment that many teachers have some control in shaping is learners feeling safe and secure. A number of wonder theorists plausibly suggest that if learners are in an insecure environment, their encounters with dramatic and novel objects tend to repel them or prompt fear—the possibility of wonder, attraction, and exploration are significantly diminished.⁴⁴ Similarly, learners not feeling safe to express not knowing or understanding things impedes the cultivation of not only virtuous wonder, but also virtues like IH and OM.

⁴³ Exposure to exemplars has another benefit which is related to motivation: through *emotional contagion*, a learner can catch appropriate feelings of wonder from the exemplar's expression of appropriate wonder (Coplan 2006). However, empirical research indicates that different emotion-types have different levels of contagiousness, and wonder's contagiousness has not yet been studied (Isern-Mas and Gomila 2019). Most importantly, such modeling and emotional contagion needs to be accompanied by Sherman's strategy of guiding learners to size things up appropriately; feelings of anticipation and excitement alone do not constitute a full-blown experience of (appropriate) wonder.

⁴⁴ See, e.g., Nussbaum 2001, p.195; Keen 1969, pp.189, 195; Parsons 1969, pp.87, 101; Daston and Park 1998, pp.18-9, also 187, 189, 191; Izard and Ackerman 2000, p.257; Smith 1980, p.50. For the role of feeling secure with respect to cultivating virtues, see Roberts 2016, p.197.

Along these lines, a supportive learning environment makes space for and gives learners a sense of security in *exploring* objects of wonder.⁴⁵ Giving learners room to explore is a way to support their autonomy and acknowledge their skills, both of which, according to psychologists Edward Deci and Richard Ryan, promote intrinsic motivation—an important part of virtuous wonder (Battaly 2016, p.181; Curren 2018, p.477). Deci and Ryan explain that while humans have an innate and intrinsic drive to explore and learn, this intrinsic motivation can be undermined when teachers foreground a set of extrinsic rewards and punishments (e.g., grades) or tell learners to value certain epistemic goods rather than let them choose (Curren 2018, pp.476-7; Battaly 2016, p.181).

These ideas about a supportive learning environment flesh out *how* teachers can best employ the guided practice and direct instruction strategies discussed earlier. For example, teachers should not provide feedback that is so harsh that the learner no longer feels safe or secure or demand that the student size up something in a certain way (which would constrain the learner's autonomy). Similarly, teachers' direct instruction should not be overly restrictive (e.g., in asking learners to provide their own illustrative examples) or prioritize external rewards and punishments.

The foregoing discussion explored aspects of the environment that many teachers have some control over and can shape in creating an environment that supports the cultivation of virtuous wonder. However, there are factors that inevitably lie outside of teachers' control which can present challenges for or place limits on creating the type of environment described above. Below, I describe some of the challenges that schoolteachers face to illustrate this point.

⁴⁵ See Markey and Loewenstein 2014, p.235 for empirical support regarding a sense of security being conducive to learner exploration. While they discuss environments conducive to curiosity, their insights plausibly apply to wonder as well.

Schoolteachers have little power in addressing things that happen outside of their classroom and that make students feel generally insecure or anxious, e.g., an unstable living situation at home or the learner being teased on the playground for saying ‘I don’t know’ while in the schoolteacher’s classroom. Such things can undermine the kind of learning environment that the schoolteacher aims to create.

In addition, school administration sometimes constrains or puts pressure on schoolteachers to teach in ways that either leave little room for or work against creating a supportive learning environment. An extreme but real case that illustrates this is the Knowledge is Power Program (KIPP) charter school network. KIPP schools focus their efforts on improving student standardized test scores and college acceptance rates. To achieve their goals, Sigal Ben-Porath explains that they create a “highly rule-ordered and regulated environment” (Ben-Porath 2013, p.119). The teachers and staff closely supervise students, enforce strict rules, and have detailed control over every minute of the students’ school day. While such environments promote the safety of students—which is part of the supportive learning environment I described above—they also inhibit the cultivation of virtuous wonder in at least two ways. First, they discourage the sorts of motivations involved with virtuous wonder by setting up school-wide reward and sanction systems for following the school’s detailed set of rules (e.g., merit/demerit cards that students carry with them) (pp.120-1). Second, I indicated that KIPP learning environments minimize student autonomy, which also stifles students’ intrinsic motivation to learn. Teachers not only provide students with instructions every few minutes to retain control over the class, but also limit student expression. Ben-Porath explains that “facilitating autonomy...is hard when children and young people are not allowed to speak during the school day, unless answering a specific question addressed to them” (p.122). Similarly, student

emotions are marginalized in this environment: “A teacher who is observed by his supervisor to waste time on finding out why a student is crying is reprimanded” (p.120). This stands in stark contrast to the overall project of cultivating virtuous wonder, which focuses on and guides learners’ emotions. While the learning environment at KIPP schools is extreme, many schoolteachers face some version of these challenges.

Schoolteachers limited by school administration in these sorts of ways might still be able to incorporate aspects or versions of guided practice or direct instruction strategies into their pedagogy. For example, they can revisit the curriculum and consider ways to present topics that bring out their wondrousness, i.e., incorporate aspects of Sherman’s guided practice strategy into their lessons. With respect to direct instruction, schoolteachers can create a bulletin board or bookmarks for students that list virtues along with brief definitions or slogans (Baehr 2021, pp.97-9).⁴⁶ However, such interventions will likely not be very effective in helping learners cultivate virtuous wonder if the environment undermines the learner’s autonomy, intrinsic motivation, opportunities to explore, and feelings of safety and security.

In considering the foregoing discussion and other limitations and challenges noted earlier in the chapter, both fostering virtuous wonder as a teacher and cultivating it as a learner is not easy.⁴⁷ However, exploring promising cultivation strategies, how they can work together, and clarifying the limitations or challenges of them can inform how we go about cultivating this virtue and addressing these obstacles. Given virtuous wonder’s intellectual and aesthetic value and role in human flourishing, pursuing such projects is worthwhile.

⁴⁶ In fact, Baehr recommends not including too much direct instruction in class, as it can lead to “virtue talk burnout” (2021, p.98; 2022).

⁴⁷ For a similar sentiment, see Aristotle *NE* 1108b24.

CITED LITERATURE

- Adajian, Thomas. 2016. "The Definition of Art." In *The Stanford Encyclopedia of Philosophy*, edited by E.N. Zalta, Summer 2016 Edition.
<https://plato.stanford.edu/archives/sum2016/entries/art-definition/>.
- Allison, H.E. 2001. *Kant's Theory of Taste: A Reading of the Critique of Aesthetic Judgment*. Cambridge: Cambridge University Press.
- Aristotle. 1941. *The Basic Works of Aristotle*. Edited by Richard McKeon. New York: Random House.
- Armstrong, Thomas, and Brian Detweiler-Bedell. 2008. "Beauty as an Emotion: The Exhilarating Prospect of Mastering a Challenging World." *Review of General Psychology* 12 (4): 305–29.
- Baehr, Jason. 2011. *The Inquiring Mind: On Intellectual Virtues and Virtue Epistemology*. Oxford: Oxford University Press.
- . 2015. *Cultivating Good Minds: A Philosophical and Practical Guide to Educating for Intellectual Virtues*. Self-published.
- . 2021. *Deep in Thought: A Practical Guide to Teaching for Intellectual Virtues*. Cambridge, MA: Harvard Education Press.
- . 2022. "Deep in Thought with Dr. Jason Baehr." The Kern Family Foundation, Online, January 25.
- Baril, Anne. 2018. "What Makes the Epistemic Virtues Valuable?" In *The Routledge Handbook of Virtue Epistemology*, edited by Heather Battaly, 69–80. New York: Routledge.
- Battaly, Heather. 2006. "Teaching Intellectual Virtues: Applying Virtue Epistemology in the Classroom." *Teaching Philosophy* 29 (3): 191–222.
- . 2008. "Virtue Epistemology." *Philosophy Compass* 3/4: 639–63.
- . 2014. "Intellectual Virtues." In *Handbook of Virtue Ethics*, edited by Stan van Hooft, 177–87. Durham: Acumen.
- . 2016. "Responsibilist Virtues in Reliabilist Classrooms." In *Intellectual Virtues and Education: Essays in Applied Virtue Epistemology*, edited by Jason Baehr, 163–83. New York: Routledge.
- Baumgarten, Elias. 2001. "Curiosity as a Moral Virtue." *International Journal of Applied Philosophy* 15 (2): 169–84.

- Beardsley, Monroe. 1981. "Aesthetic Value." In *Aesthetics: Problems in the Philosophy of Criticism*, 500–556. Indianapolis: Hackett.
- Ben-Porath, Sigal. 2013. "Deferring Virtue: The New Management of Students and the Civic Role of Schools." *Theory and Research in Education* 11 (2): 111–28.
- Ben-Ze'ev, Aaron. 2001. *The Subtlety of Emotions*. Cambridge, Mass.: MIT Press.
- Bennett, Jane. 2001. *The Enchantment of Modern Life: Attachments, Crossings, and Ethics*. Princeton: Princeton University Press.
- Bisra, Kiran, Qing Liu, John C. Nesbit, Farimah Salimi, and Philip H. Winne. 2018. "Inducing Self-Explanation: A Meta-Analysis." *Educational Psychology Review* 30: 703–25.
- Bosanquet, Bernard. 1923. "Lecture III: Forms of Aesthetic Satisfaction and the Reverse--Beauty and Ugliness." In *Three Lectures on Aesthetic*, 76–116. London: Macmillan and Co.
- Boyd, Kenneth, and Jennifer Nagel. 2014. "The Reliability of Epistemic Intuitions." In *Current Controversies in Experimental Philosophy*, edited by Edouard Machery, 109–27. New York: Routledge.
- Brady, Michael S. 2018a. "The Role of Emotion in Intellectual Virtue." In *The Routledge Handbook of Virtue Epistemology*, edited by Heather Battaly, 47–57. New York: Routledge.
- . 2018b. "Curiosity and Pleasure." In *The Moral Psychology of Curiosity*, edited by Ilhan Inan, Lani Watson, Dennis Whitcomb, and Safiye Yigit, 183–96. London: Rowan & Littlefield.
- Budd, Malcolm. 2002. *The Aesthetic Appreciation of Nature*. Oxford: Oxford University Press.
- Burke, Edmund. 1909. *A Philosophical Inquiry into the Origin of Our Ideas of the Sublime and Beautiful*. New York: P.F. Collier & Son Co.
- Burnyeat, Myles, M. J. Levett, and Plato. 1990. *The Theaetetus of Plato*. Indianapolis: Hackett.
- Camp, Elisabeth. 2019. "Imaginative Frames for Scientific Inquiry: Metaphors, Telling Facts, and Just-So Stories." In *The Scientific Imagination*, edited by P. Godfrey-Smith and A. Levy, 304–36. Oxford: Oxford University Press.
- Carlson, Allen. 2019. "Environmental Aesthetics." In *The Stanford Encyclopedia of Philosophy*, edited by E.N. Zalta, Summer 2019.
[<https://plato.stanford.edu/archives/sum2019/entries/environmental-aesthetics/>](https://plato.stanford.edu/archives/sum2019/entries/environmental-aesthetics/).
- Carroll, Noël. 2003. "Aesthetics and the Educative Powers of Art." In *A Companion to the Philosophy of Education*, edited by Randall Curren, 365–83. Malden, MA: Blackwell.

- Carson, Rachel. 1956. "Help Your Child to Wonder." *Women's Home Companion*, July 1956.
- Cassam, Quassim. 2016. "Vice Epistemology." *The Monist* 99: 159–80.
- Cobb, Aaron D. 2015. "Hope as an Intellectual Virtue?" *The Southern Journal of Philosophy* 53 (3): 269–85.
- Cole, K. C. 1999. *First You Build a Cloud: And Other Reflections on Physics as a Way of Life*. 1st Harvest ed. San Diego: Harcourt Brace.
- Coplan, Amy. 2006. "Catching Characters' Emotions: Emotional Contagion Responses to Narrative Fiction Film." *Film Studies* 8: 26–38.
- Curren, Randall. 2018. "Virtue Epistemology and Education." In *The Routledge Handbook of Virtue Epistemology*, edited by Heather Battaly, 470–82. New York: Routledge.
- Currie, Greg. 2020. *Imagining and Knowing: The Shape of Fiction*. Oxford: Oxford University Press.
- D'Arms, Justin, and Daniel Jacobson. 2000a. "Sentiment and Value." *Ethics* 110 (July): 722–48.
- . 2000b. "The Moralistic Fallacy: On the 'Appropriateness' of Emotions." *Philosophy and Phenomenological Research* 61 (1): 65–90.
- D'Olimpio, Laura. 2020. "Education and the Arts: Inspiring Wonder." In *Wonder, Education, and Human Flourishing*, edited by Anders Schinkel, 256–70. Amsterdam: VU University Press.
- Daniels, Norman. 2015. "Reflective Equilibrium." In *The Cambridge Rawls Lexicon*, edited by Jon Mandle and David A. Reidy, 711–16. Cambridge: Cambridge University Press.
- . 2020. "Reflective Equilibrium." In *Stanford Encyclopedia of Philosophy*, edited by E.N. Zalta, Summer 2020. <https://plato.stanford.edu/archives/sum2020/entries/reflective-equilibrium/>.
- Daston, Lorraine, and Katharine Park. 1998. *Wonders and the Order of Nature, 1150-1750*. New York: Zone Books.
- Dawkins, Richard. 1998. *Unweaving the Rainbow: Science, Delusion and the Appetite for Wonder*. Houghton Mifflin Harcourt.
- Descartes, René. 1984. *The Philosophical Writings of Descartes*. Translated by John Cottingham, Robert Stoothoff, and Dugald Murdoch. Vol. 1. Cambridge University Press.

- Devitt, Michael. 2011. "Linguistic Knowledge." In *Knowing How: Essays on Knowledge, Mind, and Action*, edited by John Bengson and Marc A. Moffett, 314–33. Oxford: Oxford University Press.
- Dewey, John. 1933. *How We Think*. Lexington, MA: D.C. Heath and Co.
- Dickie, George. 1964. "The Myth of the Aesthetic Attitude." *American Philosophical Quarterly* 1 (1): 56–65.
- Dodd, Julian. 2014. "On a Proposed Test for Artistic Value." *British Journal of Aesthetics* 54 (4): 395–407.
- Dubay, Thomas. 1999. *The Evidential Power of Beauty: Science and Theology Meet*. San Francisco: Ignatius Press.
- Dutton, Dennis. 2006. "A Naturalist Definition of Art." *The Journal of Aesthetics and Art Criticism* 64 (3): 367–77.
- Dworkin, Ronald. 2013. *Religion Without God*. Cambridge, MA: Harvard University Press.
- Eaton, A.W. 2016. "Taste in Bodies and Fat Oppression." In *Body Aesthetics*, edited by Sherri Irvin, 37–59. Oxford: Oxford University Press.
- Eaton, Marcia Muelder. 2005. "Beauty and Ugliness In and Out of Context." In *Contemporary Debates in Aesthetics and the Philosophy of Art*, edited by Matthew Kieran, 39–50. Malden, MA: Blackwell.
- Elson, Luke. 2016. "Tenenbaum and Raffman on Vague Projects." *Ethics* 126: 474–88.
- Elster, Jon. 2016. *Sour Grapes: Studies in the Subversion of Rationality*. Cambridge philosophy classics edition. New York: Cambridge University Press.
- Evans, H.M. 2012. "Wonder and the Clinical Encounter." *Theoretical Medicine and Bioethics* 33 (2): 123–36.
- Fingerhut, Joerg, and Jesse Prinz. 2018. "Wonder, Appreciation, and the Value of Art." In *The Arts and The Brain: Psychology and Physiology Beyond Pleasure*, edited by Julia F. Christensen and Antoni Gomila, 107–28. Progress in Brain Research. Elsevier.
- . 2020. "Aesthetic Emotions Reconsidered." *The Monist* 103: 223–39.
- Fisher, Philip. 1998. *Wonder, the Rainbow, and the Aesthetics of Rare Experiences*. Cambridge, MA: Harvard University Press.

- Floridi, Luciano. 2019. "Semantic Conceptions of Information." In *Stanford Encyclopedia of Philosophy*, edited by E.N. Zalta.
<https://plato.stanford.edu/archives/win2019/entries/information-semantic/>.
- Forsey, Jane. 2017. "The Sublime, Redux." In *The Possibility of the Sublime: Aesthetic Exchanges*, edited by Lars Aagaard-Mogensen. Newcastle, UK: Cambridge Scholars Publishing.
- Fridland, Ellen. 2017. "Motor Skill and Moral Virtue." *Royal Institute of Philosophy Supplement* 80: 139–70.
- Friedman, Jane. 2013. "Question-Directed Attitudes." *Philosophical Perspectives* 27: 145–74.
- . 2019a. "Inquiry and Belief." *Noûs* 53 (2): 296–315.
- . 2019b. "Checking Again." *Philosophical Issues* 29 (1): 84–96.
- Frierson, Patrick. 2010. "Kant and the End of Wonder." In *Philosophy Begins in Wonder: An Introduction to Early Modern Philosophy, Theology, and Science*, edited by Michael Funk Deckard and Péter Losonczi, 285–309. Eugene, OR: Pickwick.
- Frijda, Nico H. 1986. *The Emotions*. Cambridge: Cambridge University Press.
- Fuller, Robert C. 2006a. *Wonder: From Emotion to Spirituality*. Chapel Hill: University of North Carolina Press.
- . 2006b. "Wonder and the Religious Sensibility: A Study in Religion and Emotion." *The Journal of Religion* 86 (3): 364–84.
- Furtak, Rick Anthony. 2018. "Emotional Knowing: The Role of Embodied Feelings in Affective Cognition." *Philosophia* 46: 575–87.
- Gaultier, Benoit. 2017. "Skills, Procedural Knowledge, and Knowledge-How." *Synthese* 194: 4959–81.
- Gillis, Alexandra J. 2015. "Aesthetic Dimensions of Education: Exploring a Philosophical Pedagogy Using Dialogue with Arts Learners and Educators." Doctoral Thesis, Burnaby, British Columbia: Simon Fraser University.
- Girod, Mark. 2007. "A Conceptual Overview of the Role of Beauty and Aesthetics in Science and Science Education." *Studies in Science Education* 43 (1): 38–61.
- Girod, Mark, Cheryl Rau, and Adele Schepige. 2003. "Appreciating the Beauty of Science Ideas: Teaching for Aesthetic Understanding." *Science Education* 87: 574–87.
- Goldie, Peter. 2000. *The Emotions: A Philosophical Exploration*. Oxford: Clarendon Press.

- . 2010. “Virtues of Art.” *Philosophy Compass* 5 (10): 830–39.
- Gould, Carol S. 2005. “Glamour as an Aesthetic Property of Persons.” *Journal of Aesthetics and Art Criticism* 63 (3): 237–47.
- Grimm, Stephen R. 2011. “Understanding.” In *The Routledge Companion to Epistemology*, edited by Sven Bernecker and Duncan Pritchard, 84–94. New York: Routledge.
- Hadzigeorgiou, Yannis. 2014. “Reclaiming the Value of Wonder in Science Education.” In *Wonder-Full Education: The Centrality of Wonder in Teaching and Learning Across the Curriculum*, edited by Kieran Egan, Annabella Cant, and Gillian Judson, 40–65. New York: Routledge.
- . 2016. *Imaginative Science Education*. Springer.
- . 2020. “Wonder: Its Nature and Its Role in the Learning Process.” In *Wonder, Education, and Human Flourishing*, edited by Anders Schinkel, 185–211. Amsterdam: VU University Press.
- Hadzigeorgiou, Yannis, and Nick Fotinos. 2007. “Imaginative Thinking and the Learning of Science.” *The Science Education Review* 6 (1): 15–23.
- Haralambous, Bronwen, and Thomas W. Nielsen. 2014. “Wonder as a Gateway Experience.” In *Wonder-Full Education: The Centrality of Wonder in Teaching and Learning Across the Curriculum*, edited by Kieran Egan, Annabella Cant, and Gillian Judson, 219–38. New York: Routledge.
- Hatchimonji, Danielle R., Arielle C.V. Linsky, Samuel J. Nayman, and Maurice J. Elias. 2020. “Spiral Model of Phronesis Development: Social-Emotional and Character Development in Low-Resourced Urban Schools.” *Journal of Moral Education* 49 (1): 129–42.
- Heidegger, Martin. 1994. *Basic Questions of Philosophy: Selected “Problems” of “Logic.”* Translated by Richard Rojcewicz and Andre Schuwer. Bloomington: Indiana University Press.
- Hepburn, R. W. 1980. “The Inaugural Address: Wonder.” *Aristotelian Society Supplementary Volume* 54: 1–23.
- Higgins, Kathleen M. 2000. “Beauty and Its Kitsch Competitors.” In *Beauty Matters*, edited by Peg Z. Brand, 87–111. Bloomington: Indiana University Press.
- Hills, Alison. 2018. “XI - Moral and Aesthetic Virtue.” *Proceedings of the Aristotelian Society* 118: 255–74.

- Hintikka, Jaakko. 2007. *Socratic Epistemology: Explorations of Knowledge-Seeking by Questioning*. Cambridge: Cambridge University Press.
- Hookway, Christopher. 2006. "Epistemology and Inquiry: The Primacy of Practice." In *Epistemology Futures*, edited by Stephen Hetherington, 95–110. Oxford: Oxford University Press.
- . 2007a. "Fallibilism and the Aim of Inquiry." *Proceedings of the Aristotelian Society, Supplementary Volumes* 81 (June): 1–22.
- . 2007b. "Action and Inquiry." In *Action in Context*, edited by Anton Leist, 351–71. Berlin: De Gruyter.
- . 2008. "Questions, Epistemology, and Inquiries." *Grazer Philosophische Studien* 77 (1): 1–21.
- Hove, Philo H. 1996. "The Face of Wonder." *Journal of Curriculum Studies* 28 (4): 437–62.
- Hume, David. 1910. "Of the Standard of Taste." In *English Essays from Sir Philip Sidney to Macaulay*, edited by C.W. Eliott, 215–36. P.F. Collier & Son Co. <http://bradleymurray.ca>.
- Huovinen, Erkki. 2011. "Understanding Music." In *The Routledge Companion to Philosophy and Music*, edited by Theodore Gracyk and Andrew Kania, 123–33. New York: Routledge.
- Hursthouse, Rosalind. 2007. "Environmental Virtue Ethics." In *Working Virtue: Virtue Ethics and Contemporary Moral Problems*, edited by Rebecca L. Walker and Philip J. Ivanhoe, 155–71. Oxford: Oxford University Press.
- Inan, Ilhan. 2012. *The Philosophy of Curiosity*. New York: Routledge.
- Irvin, Sherri. 2008. "Scratching an Itch." *Journal of Aesthetics and Art Criticism* 66 (1): 25–35.
- . 2010. "Aesthetics as a Guide to Ethics." In *Aesthetics Today: A Reader*, 370–78. Lanham, MD: Rowan & Littlefield.
- . 2017. "Resisting Body Oppression: An Aesthetic Approach." *Feminist Philosophy Quarterly* 3 (4): 1–15.
- Isern-Mas, Carme, and Antoni Gomila. 2019. "Making Sense of Emotional Contagion." *Humana.Mente Journal of Philosophical Studies* 35: 71–100.
- Ivanova, Milena. 2017. "Aesthetic Values in Science." *Philosophy Compass* 12: 1–9.
- Izard, Carroll E., and Brian P. Ackerman. 2000. "Motivational, Organizational, and Regulatory Functions of Discrete Emotions." In *Handbook of Emotions*, edited by Michael Lewis and Jeanette M. Haviland-Jones, 253–64. New York: Guilford Press.

- Jacobson, Daniel. 2011. "Fitting Attitude Theories of Value." In *Stanford Encyclopedia of Philosophy*, edited by E.N. Zalta, Spring 2011.
<https://plato.stanford.edu/archives/spr2011/entries/fitting-attitude-theories/>.
- Jakobson, Britt, and Per-Olof Wickman. 2008. "The Roles of Aesthetic Experience in Elementary School Science." *Res Sci Educ* 38: 45–65.
- Kant, Immanuel. 2000. *Critique of the Power of Judgment*. Translated by Paul Guyer. Cambridge: Cambridge University Press.
- Kaulingfreks, Ruud, Sverre Spoelstra, and René ten Bos. 2011. "Wonders without Wounds: On Singularity, Museum and Organisation." *Management & Organizational History* 6 (3): 311–27.
- Kauppinen, Antti. 2018. "Moral Sentimentalism." In *Stanford Encyclopedia of Philosophy*, edited by E.N. Zalta, Winter 2018.
<https://plato.stanford.edu/archives/win2018/entries/moral-sentimentalism/>.
- Keen, Sam. 1969. *Apology for Wonder*. New York: Harper & Row.
- Keltner, Dacher, and Jonathan Haidt. 2003. "Approaching Awe, a Moral, Spiritual, and Aesthetic Emotion." *Cognition and Emotion* 17 (2): 297–314.
- Kidd, Ian James. 2018. "Epistemic Courage and the Harms of Epistemic Life." In *The Routledge Handbook of Virtue Epistemology*, edited by Heather Battaly, 244–55. New York: Routledge.
- Kieran, Matthew. 2010. "The Vice of Snobbery: Aesthetic Knowledge, Justification and Virtue in Art Appreciation." *The Philosophical Quarterly* 60 (239): 243–63.
- . 2011. "The Fragility of Aesthetic Knowledge: Aesthetic Psychology and Appreciative Virtues." In *The Aesthetic Mind: Philosophy and Psychology*, edited by E Schellekens and P Goldie, 32–43. Oxford: Oxford University Press.
- Kitcher, Philip. 1990. "The Division of Cognitive Labor." *The Journal of Philosophy* 87 (1): 5–22.
- Koestler, Arthur. 1964. *The Act of Creation*. London: Hutchinson & Co.
- Korsgaard, Christine. 1993. "The Reasons We Can Share: An Attack on the Distinction between Agent-Relative and Agent-Neutral Values." *Social Philosophy and Policy* 10 (1): 24–51.
- Korsmeyer, Carolyn. 2004. *Gender and Aesthetics: An Introduction*. New York: Routledge University Press.

- . 2005. “Terrible Beauties.” In *Contemporary Debates in Aesthetics and the Philosophy of Art*, edited by Matthew Kieran, 51–63. Malden, MA: Blackwell.
- . 2011. *Savoring Disgust*. Oxford: Oxford University Press.
- Kristjánsson, Kristján. 2002. *Justifying Emotions Pride and Jealously*. London: Routledge.
- . 2007. *Aristotle, Emotions, and Education*. Aldershot, Hants, England ; Burlington, VT: Ashgate.
- . 2017. “Awe: An Aristotelian Analysis of a Non-Aristotelian Virtuous Emotion.” *Philosophia* 45 (1): 125–42.
- . 2018. *Virtuous Emotions*. First edition. Oxford, UK: Oxford University Press.
- . 2020. *Flourishing as the Aim of Education: A Neo-Aristotelian View*. Abingdon, Oxon ; New York, NY: Routledge.
- Kvanvig, Jonathan L. 2013. “Curiosity and the Response-Dependent Special Value of Understanding.” In *Knowledge, Virtue, and Action: Putting Epistemic Virtues to Work*, edited by Tim Henning and David P. Schweikard, 151–74. New York: Routledge.
- Kwong, Jack M.C. 2016. “Open-Mindedness as Engagement.” *The Southern Journal of Philosophy* 54 (1): 70–86.
- L’Ecuyer, Catherine. 2014. “The Wonder Approach to Learning.” *Frontiers in Human Neuroscience* 8: 1–8.
- La Caze, Marguerite. 2013. *Wonder and Generosity: Their Role in Ethics and Politics*. State University of New York Press.
- Laetz, Brian. 2010. “Kendall Walton’s ‘Categories of Art’: A Critical Commentary.” *British Journal of Aesthetics*, 287–306, 50 (3).
- Lamb, Michael, Jonathan Brant, and Edward Brooks. 2021. “How Is Virtue Cultivated? Seven Strategies for Postgraduate Character Development.” *Journal of Character Education* 17 (1): 81–108.
- Lazarus, Richard S. 1991. *Emotion and Adaptation*. New York: Oxford University Press.
- Leddington, Jason. 2020. “Savouring the Impossible.” Conference talk, Canterbury, UK, May 28.
- Levinson, Jerrold. 2011. “Beauty Is Not One: The Irreducible Variety of Visual Beauty.” In *The Aesthetic Mind: Philosophy and Psychology*, edited by E Schellekens and P Goldie, 190–207. Oxford: Oxford University Press.

- Lickona, Thomas. 1997. "Educating for Character: A Comprehensive Approach." In *The Construction of Children's Character*, edited by Alex Molnar, 45–62. Chicago: University of Chicago Press.
- Llewelyn, John. 1964. "What Is a Question?" *Australasian Journal of Philosophy* 42 (1): 69–85.
- . 1988. "On the Saying That Philosophy Begins in Thaumazein." In *Post-Structuralist Classics*, edited by Andrew Benjamin, 173–91. London: Routledge.
- Lloyd, Genevieve. 2018. *Reclaiming Wonder: After the Sublime*. Edinburgh: Edinburgh University Press.
- Lopes, Dominic McIver. 2008. "Virtues of Art: Good Taste." *Proceedings of the Aristotelian Society, Supplementary Volumes* 82: 197–211.
- . 2018. *Being for Beauty*. Oxford: Oxford University Press.
- . 2020. "Desolation Sound: Social Practices of Natural Beauty." *Thought: A Journal of Philosophy* 9 (4): 266–73.
- Lorand, Ruth. 1994. "Beauty and Its Opposites." *The Journal of Aesthetics and Art Criticism* 52 (4): 399–406.
- MacTaggart, Eric. 2017. "The Varieties of Aporia and Aporetic Method." Unpublished manuscript.
- Markey, Amanda, and George Loewenstein. 2014. "Curiosity." In *International Handbook of Emotions in Education*, edited by Reinhard Pekrun and Lisa Linnenbrink-Garcia, 228–45. New York: Routledge.
- Marshall, Laura A. 2017. "Gadfly or Spur? The Meaning of ΜΥΩΨ in Plato's Apology of Socrates." *Journal of Hellenic Studies* 137: 163–74.
- Matravers, Derek. 2013. "Wonder and Cognition." In *Practices of Wonder Cross-Disciplinary Perspectives*, edited by Sophia Vasalou, 166–78. Cambridge: James Clarke Company, Limited.
- Meinwald, Constance C. 2016. *Plato*. Routledge Philosophers. London ; New York: Routledge, Taylor & Francis Group.
- Miščević, Nenad. 2018. "Curiosity, Its Objects and Varieties." In *The Moral Psychology of Curiosity*, edited by Ilhan Inan, Lani Watson, Dennis Whitcomb, and Safiye Yiğit, 35–55. London: Rowan & Littlefield.

- Montero, Barbara. 2016. *Thought in Action: Expertise and the Conscious Mind*. Oxford: Oxford University Press.
- Moore, Kathleen Dean. 2005. "The Truth of the Barnacles: Rachel Carson and the Moral Significance of Wonder." *Environmental Ethics* 27 (3): 265–77.
- Morton, Adam. 2010. "Epistemic Emotions." In *The Oxford Handbook of Philosophy of Emotion*, edited by Peter Goldie, 385–99. Oxford: Oxford University Press.
- Mulligan, Kevin. 2018. "Interest, Questions, and Knowledge." In *The Moral Psychology of Curiosity*, edited by Ilhan Inan, Lani Watson, Dennis Whitcomb, and Safiye Yiğit, 239–64. London: Rowan & Littlefield.
- Nehamas, Alexander. 2007. *Only a Promise of Happiness: The Place of Beauty in a World of Art*. Princeton University Press.
- . 2010. "Reply to Korsmeyer and Gaut." *British Journal of Aesthetics* 50 (2): 205–7.
- Nguyen, C. Thi. 2020. *Games: Agency as Art*. Thinking Art. New York, NY: Oxford University Press.
- Nussbaum, Martha Craven. 2001. *Upheavals of Thought: The Intelligence of Emotions*. Cambridge: Cambridge University Press.
- Olsen, Stein Haugom. 2014. "Appreciation." In *Encyclopedia of Aesthetics*, edited by Michael Kelly, 2nd ed. Oxford: Oxford University Press.
- Parsons, Howard L. 1969. "A Philosophy of Wonder." *Philosophy and Phenomenological Research* 30 (1): 84–101.
- Pavese, Carlotta. 2022. "Knowledge How." In *Stanford Encyclopedia of Philosophy*, edited by E.N. Zalta, Fall 2022. <https://plato.stanford.edu/archives/fall2022/entries/knowledge-how/>.
- Pedersen, Jan B. W. 2019. *Balanced Wonder: Experiential Sources of Imagination, Virtue, and Human Flourishing*. Lanham: Lexington Books.
- Piersol, Laura. 2014. "Our Hearts Leap Up." In *Wonder-Full Education: The Centrality of Wonder in Teaching and Learning Across the Curriculum*, edited by Kieran Egan, Annabella Cant, and Gillian Judson, 3–21. New York: Routledge.
- Plato. 1997. *Complete Works*. Edited by John M. Cooper and D.S. Hutchinson. Indianapolis: Hackett.

- Porter, Steven L. 2016. "A Therapeutic Approach to Intellectual Virtue Formation in the Classroom." In *Intellectual Virtues and Education: Essays in Applied Virtue Epistemology*, edited by Jason Baehr, 221–39. New York: Routledge.
- Prinz, Jesse. 2011. "Emotion and Aesthetic Value." In *The Aesthetic Mind: Philosophy and Psychology*, edited by E Schellekens and Peter Goldie, 71–88. Oxford: Oxford University Press.
- . 2013a. "Why Wonder Is the Most Human of All Emotions." *Aeon Essays* (blog). June 21, 2013. <https://aeon.co/essays/why-wonder-is-the-most-human-of-all-emotions>.
- . 2013b. "Wonder Works: Renovating Romanticism About Art." *Aesthetics for Birds* (blog). August 5, 2013. <https://aestheticsforbirds.com/2013/08/05/wonder-works-renovating-romanticism-about-art-jesse-prinz/>.
- Quinn, Dennis. 2002. *Iris Exiled: A Synoptic History of Wonder*. Lanham, Md.: Univ. Press of America.
- Rieger, Adam. 2017. "The Beautiful Art of Mathematics." *Philosophia Mathematica* 26 (2): 234–50.
- Riggs, Wayne. 2003. "Understanding 'Virtue' and the Virtue of Understanding." In *Intellectual Virtue: Perspectives from Ethics and Epistemology*, edited by Michael DePaul and Linda Zagzebski, 203–26. Oxford: Clarendon Press.
- . 2018. "Open-Mindedness." In *The Routledge Handbook of Virtue Epistemology*, edited by Heather Battaly, 141–54. New York: Routledge.
- Ritchhart, Ron, Mark Church, and Karin Morrison. 2011. *Making Thinking Visible: How to Promote Engagement, Understanding, and Independence for All Learners*. First edition. San Francisco, CA: Jossey-Bass.
- Roberts, Robert C. 2016. "Learning Intellectual Humility." In *Intellectual Virtues and Education: Essays in Applied Virtue Epistemology*, edited by Jason Baehr, 184–201. New York: Routledge.
- Roberts, Robert C., and W. Jay Wood. 2007. *Intellectual Virtues: An Essay in Regulative Epistemology*. Oxford : New York: Clarendon Press ; Oxford University Press.
- Roberts, Tom. 2018. "Aesthetic Virtues: Traits and Faculties." *Philosophical Studies* 175: 429–47.
- Robinson, Jenefer. 2012. "Emotional Responses to Music: What Are They? How Do They Work? And Are They Relevant to Aesthetic Appreciation?" In *The Oxford Handbook of Philosophy of Emotion*, edited by Peter Goldie, 651–80. Oxford Handbooks. Oxford: Oxford University Press.

- Root-Bernstein, Robert S. 1997. "The Sciences and Arts Share a Common Creative Aesthetic." In *The Elusive Synthesis: Aesthetics and Science*, edited by Alfred I. Tauber, 49–82. Dordrecht: Kluwer Academic Publishers.
- Ross, Lewis. 2020. "The Virtue of Curiosity." *Episteme* 17 (1): 105–20.
- Rubenstein, Mary-Jane. 2008. *Strange Wonder: The Closure of Metaphysics and the Opening of Awe*. New York: Columbia University Press.
- Rueger, Alexander. 2013. "Literary Wonder in the Seventeenth Century and the Origins of 'Aesthetic Experience.'" In *Practices of Wonder Cross-Disciplinary Perspectives*, edited by Sophia Vasalou, 201–24. Cambridge: James Clarke Company, Limited.
- Ryle, Gilbert. 1954. "Pleasure." *Proceedings of the Aristotelian Society, Supplementary Volumes* 28: 135–46.
- Saito, Yuriko. 2007. *Everyday Aesthetics*. Oxford: Oxford University Press.
- Sauchelli, Andrea. 2016. "The Acquaintance Principle, Aesthetic Judgments, and Conceptual Art." *The Journal of Aesthetic Education* 50 (1): 1–15.
- Scarantino, Andrea, and Ronald de Sousa. 2018. "Emotion." In *The Stanford Encyclopedia of Philosophy*, edited by E.N. Zalta, Winter 2018.
- Scherer, Klaus R. 2005. "What Are Emotions? And How Can They Be Measured?" *Social Science Information* 44 (4): 695–729.
- Schinkel, Anders. 2017. "The Educational Importance of Deep Wonder." *Journal of Philosophy of Education* 51 (2): 538–53.
- . 2018. "Wonder and Moral Education." *Educational Theory* 68 (1): 31–48.
- . 2019. "Wonder, Mystery, and Meaning." *Philosophical Papers* 48 (2): 293–319.
- . 2020a. "Education as Mediation Between Child and World: The Role of Wonder." *Studies in Philosophy and Education* 39: 479–92.
- . 2020b. "Introduction to Wonder, Education, and Human Flourishing." In *Wonder, Education, and Human Flourishing*, edited by Anders Schinkel, 7–16. Amsterdam: VU University Press.
- . 2020c. *Wonder and Education: On the Educational Importance of Contemplative Wonder*. London ; New York: Bloomsbury.

- Schliesser, Eric. 2005. "Wonder in the Face of Scientific Revolutions: Adam Smith on Newton's 'Proof' of Copernicanism." *British Journal for the History of Philosophy* 13 (4): 697–732.
- Schwitzgebel, Eric. 2019. "Belief." In *Stanford Encyclopedia of Philosophy*, Fall 2019. <https://plato.stanford.edu/archives/fall2019/entries/belief/>.
- Scruton, Roger. 2009. *Beauty*. Oxford: Oxford University Press.
- Searle, John R. 1983. "The Word Turned Upside Down." *The New York Review of Books* 30: 74–79.
- Shelley, James. 2003. "The Problem of Non-Perceptual Art." *British Journal of Aesthetics* 43 (4): 363–78.
- Sherman, Nancy. 1989. *The Fabric of Character: Aristotle's Theory of Virtue*. Oxford: Oxford University Press.
- Sherry, Patrick. 2013. "The Varieties of Wonder." *Philosophical Investigations* 36 (4): 340–54.
- . 2019. "Einstein, Dawkins, and Wonder at the Intelligibility of the World." *Heythrop Journal* 60 (1): 5–15.
- Shusterman, Richard. 2006. "Aesthetic Experience: From Analysis to Eros." *The Journal of Aesthetics and Art Criticism* 64 (2): 217–29.
- Sibley, Frank. 1965. "Aesthetic and Nonaesthetic." *The Philosophical Review* 74 (2): 135–59.
- Silverman, M.P. 1989. "Two Sides of Wonder: Philosophical Keys to the Motivation of Science Learning." *Synthese* 80 (1): 43–61.
- Sinclair, Nathalie, and Anne Watson. 2001. "Wonder, the Rainbow and the Aesthetics of Rare Experiences." *For the Learning of Mathematics* 21 (3): 39–42.
- Small, Will. 2014. "The Transmission of Skill." *Philosophical Topics* 42 (1): 85–111.
- Smith, Adam. 1980. *Essays on Philosophical Subjects*. Oxford: Clarendon Press.
- Smith, Nicholas. 2020. "Simply Finding Answers, or the Entirety of Inquiry While Standing on One Foot." *Disputatio* 12 (57): 181–98.
- Snow, Nancy E. 2018. "Intellectual Humility." In *The Routledge Handbook of Virtue Epistemology*, edited by Heather Battaly, 178–95. New York: Routledge.
- Stalnaker, Robert C. 1984. *Inquiry*. Cambridge, MA: MIT Press.

- Staniforth, Nate. 2018. *Here Is Real Magic: A Magician's Search for Wonder in the Modern World*. New York: Bloomsbury.
- Starikova, Irina. 2017. "Aesthetic Preferences in Mathematics: A Case Study." *Philosophia Mathematica* 26 (2): 161–83.
- Stecker, Robert. 2006. "Aesthetic Experience and Aesthetic Value." *Philosophy Compass* 1 (1): 1–10.
- Steutel, Jan, and Ben Spiecker. 2004. "Cultivating Sentimental Dispositions Through Aristotelian Habituation." *Journal of Philosophy of Education* 38 (4): 531–49.
- Streeter, George. 2006. "Virtues of Inquiry and the Limits of Reliabilism." *Social Epistemology* 20 (1): 117–28.
- Swanton, Christine. 2015. "Cultivating Virtue: Two Problems for Virtue Ethics." In *Cultivating Virtue: Perspectives from Philosophy, Theology, and Psychology*, edited by Nancy E. Snow, 111–34. Oxford: Oxford University Press.
- . 2018. "Virtue Ethics and Virtue Epistemology." In *The Routledge Handbook of Virtue Epistemology*, edited by Heather Battaly, 508–21. New York: Routledge.
- Takaya, Keiichi. 2014. "Renewing the Sense of Wonder in the Minds of High School and College Students." In *Wonder-Full Education: The Centrality of Wonder in Teaching and Learning Across the Curriculum*, edited by Kieran Egan, Annabella Cant, and Gillian Judson, 97–109. New York: Routledge.
- Thompson, Ross A. 2015. "The Development of Virtue." In *Cultivating Virtue: Perspectives from Philosophy, Theology, and Psychology*, edited by Nancy E. Snow, 279–306. Oxford: Oxford University Press.
- Tobia, Kevin Patrick. 2015. "Wonder and Value." *Res Philosophica* 92 (4): 1–26.
- Todd, Cain S. 2013. "The Importance of the Aesthetic." In *The Routledge Handbook of Tourism and the Environment*, edited by Andrew Holden and David Fennell, 65–74. London: Routledge.
- Trotman, Dave. 2014. "Wow! What If? So What?" In *Wonder-Full Education: The Centrality of Wonder in Teaching and Learning Across the Curriculum*, edited by Kieran Egan, Annabella Cant, and Gillian Judson, 22–39. New York: Routledge.
- Vasalou, Sophia. 2013. "Wonder: Toward a Grammar." In *Practices of Wonder Cross-Disciplinary Perspectives*, edited by Sophia Vasalou, 16–63. Cambridge: James Clarke Company, Limited.
- . 2015. *Wonder: A Grammar*. Albany: State University of New York Press.

- Velleman, J. David. 1999. "Love as a Moral Emotion." *Ethics* 109 (2): 338–74.
- Walsh-Piper, Kathleen. 1994. "Museum Education and the Aesthetic Experience." *The Journal of Aesthetic Education* 28 (3): 105–15.
- Walton, Kendall. 1970. "Categories of Art." *Philosophical Review* 79 (3): 334–67.
- Warburton, Nigel. 2003. *The Art Question*. London: Routledge.
- Watson, Lani. 2015. "What Is Inquisitiveness." *American Philosophical Quarterly* 52 (3): 273–87.
- . 2018a. "Curiosity and Inquisitiveness." In *The Routledge Handbook of Virtue Epistemology*, edited by Heather Battaly, 155–66. New York: Routledge.
- . 2018b. "Educating for Curiosity." In *The Moral Psychology of Curiosity*, edited by Ilhan Inan, Lani Watson, Dennis Whitcomb, and Safiye Yiğit, 293–310. London: Rowan & Littlefield.
- Weitz, Morris. 1956. "The Role of Theory in Aesthetics." *The Journal of Aesthetics and Art Criticism* 15 (1): 27–35.
- Whitcomb, Dennis. 2010. "Curiosity Was Framed." *Philosophy and Phenomenological Research* 81 (3): 664–87.
- Whitcomb, Dennis, Heather Battaly, Jason Baehr, and Daniel Howard-Snyder. 2017. "Intellectual Humility: Owning Our Limitations." *Philosophy and Phenomenological Research* 94 (3): 509–39.
- Willmott, Glenn. 2018. *Reading for Wonder: Ecology, Ethics, Enchantment*. Literatures, Cultures, and the Environment. New York: Palgrave Macmillan.
- Wilson, Ruth A. 2010. "Aesthetics and a Sense of Wonder." *Exchange*, 2010.
- Wittgenstein, Ludwig. 1968. *Philosophical Investigations*. Translated by GEM Anscombe. Oxford: Basil Blackwell.
- Wolbert, Lynne, and Anders Schinkel. 2020. "What Should Schools Do to Promote Wonder?" *Oxford Review of Education*, 1–16. <https://doi.org/10.1080/03054985.2020.1856648>.
- Wollheim, Richard. 1980. *Art and Its Objects*. 2nd ed. Cambridge: Cambridge University Press.
- Woodruff, David M. 2001. "A Virtue Theory of Aesthetics." *The Journal of Aesthetic Education* 35 (3): 23–36.

- Yiğit, Safiye. 2018. "Curiosity as an Intellectual Virtue." In *The Moral Psychology of Curiosity*, edited by Ilhan Inan, Lani Watson, Dennis Whitcomb, and Safiye Yiğit, 117–39. London: Rowan & Littlefield.
- York, Frank A. 1999. "Cultural Identity and the Kodaly Philosophy." *Bulletin (Kodaly Music Education Institute of Australia)*, 14–25.
- Young, James O. 2005. "Profound Offense and Cultural Appropriation." *Journal of Aesthetics and Art Criticism* 63 (2): 135–46.
- Zagzebski, Linda. 1996. *Virtues of the Mind: An Inquiry into the Nature of Virtue and the Ethical Foundations of Knowledge*. New York, NY, USA: Cambridge University Press.
- . 1999. "What Is Knowledge?" In *The Blackwell Guide to Epistemology*, edited by John Greco and Ernest Sosa, 92–116. Malden, MA: Wiley-Blackwell.
- Zazkis, Dov, and Rina Zazkis. 2014. "Wondering about Wonder in Mathematics." In *Wonder-Full Education: The Centrality of Wonder in Teaching and Learning Across the Curriculum*, edited by Kieran Egan, Annabella Cant, and Gillian Judson, 66–85. New York: Routledge.

VITA

- NAME: Eric Barclay MacTaggart
- EDUCATION: Ph.D., Philosophy, University of Illinois at Chicago, expected 2022
 M.A., Philosophy, University of Illinois at Chicago, 2017
 M.A., Philosophy of Art and Aesthetics, University of Kent, 2012
 B.M., Music Performance/Music Education, University of Iowa, 2009
- PRESENTATIONS: “Supporting Ethical Action and The Possibility of a Division of Labor,”
Ethics, Emotion, Education, and Empowerment book symposium, Society
 for Philosophy of Emotion online event, 2022
- “Wonder’s Role in Clinical Medicine,” Northwestern University Pre-
 Health Professionals Lecture Series, Chicago, 2018
- “Accidental Beauty,” American Society for Aesthetics Annual Meeting,
 Seattle, 2016
- PUBLICATIONS: MacTaggart, Eric. Forthcoming. “Supporting Ethical Action and The
 Possibility of a Division of Labor.” *Journal of Philosophy of Emotion*.
- MacTaggart, Eric. 2019. Review of *The Possibility of the Sublime:
 Aesthetic Exchanges*, edited by Lars Aagaard-Mogensen. *American
 Society for Aesthetics Graduate E-Journal*.
- TEACHING: University of Illinois at Chicago, Department of Philosophy
 Primary Instructor: Theory of Knowledge (x2), What is Art? (x2)
 Teaching Assistant: Medical Ethics, Introductory Logic (x2),
 Introduction to Ethics, Death
- School District of Durand, Instrumental Music Teacher (Durand, WI)
- West Jefferson School District #253, Music Teacher (Terreton, ID)
- AWARDS &
 MEMBERSHIP: Center for Ethics and Education McPherson Fellow, 2020-2022
 American Society for Aesthetics Travel Grant (\$900 USD), 2016
 University of Kent in America Scholarship (\$20,000 USD), 2011
 Phi Beta Kappa
 Big Ten Medal of Honor, University of Iowa, 2009