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# Virtuous wonder


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ARTICLE

## Virtuous Wonder

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### Abstract

Many theorists note the important role that wonder can play in our lives. Yet, little attention has been given to the associated character virtue; characterizations of it do not go much further than basic sketches that draw on Aristotle's view about emotional dispositions that are proper to virtue. This paper fleshes out such sketches, which helps us understand what type of virtue this trait is. The account of virtuous wonder I develop here vindicates brief suggestions in the literature that this trait is an intellectual and aesthetic virtue and reveals in what sense it is a moral and environmental virtue.

**Keywords:** wonder; virtue; aesthetic virtue; intellectual virtue; environmental virtue

Famous thinkers such as Plato, 1997 Albert Einstein, and Rachel Carson note the important role that wonder can play in different aspects of our lives (*Theaetetus*, 155d; Einstein, 1954, p. 11; Carson, 1956). Yet, little attention has been given to the character virtue associated with wonder—what I call virtuous wonder.<sup>1</sup> Characterizations of it in the literature do not go much further than basic sketches that draw on Aristotle's view that emotional dispositions can have an “intermediate and best” state that is proper to virtue in which the emotion is felt “at the right times, about the right things, towards the right people, for the right end and in the right way” (*NE* 1106b20–23, Hursthouse, 2007, Pedersen, 2019). This paper fleshes out such sketches, which helps us better understand virtuous wonder's nature, including the ways in which it contributes to a flourishing life—i.e., what type of virtue it is.<sup>2</sup> The account of virtuous wonder I develop here vindicates brief suggestions in the literature that this trait is an intellectual and aesthetic virtue and reveals in what sense it is a moral and environmental virtue (Baehr, 2011; Sandler, 2005; Watson, 2015).<sup>3</sup>

In Section 1, I first provide an account of the nature of wonder, as it provides resources for the central project of the section: fleshing out the notions of the right end, right object, and right way in the Aristotelian sketch. In Section 2, I provide my concise characterization of virtuous wonder, which draws on insights from the previous section. In Section 3, I bring this characterization into conversation with dominant views in virtue theory to show that virtuous wonder is an intellectual

<sup>1</sup>Christine Swanton also uses this phrase (Swanton, 2018, p. 516). Lani Watson employs a comparable phrase—virtuous curiosity—in theorizing about the character virtue associated with curiosity (Watson, 2018).

<sup>2</sup>Ronald Sandler similarly notes the importance of filling out Aristotelian sketches—in particular, of specifying what counts as right (Sandler, 2013).

<sup>3</sup>Along these lines, Brady, 2023 describes wonder as an appreciative virtue, and suggests that such aesthetic virtues can motivate environmental actions (in particular, protecting the cryosphere). See my discussion below (§4) about wonder motivating environmental action.

and aesthetic virtue. In contrast, I explain in Section 4 how virtuous wonder is a moral and environmental virtue in only a qualified sense.

### 1. The Right End, Right Object, and Right Way

What is wonder? Understanding the experience of wonder as a type of aesthetic experience that is similar to Alexander Nehamas's account of beauty provides us with a rich and tenable picture, one which reflects paradigm cases of wonder such as our experiences viewing the starry night sky and extraordinary works of art, contemplating the Mandelbrot set, and Theaetetus's experience in Plato's eponymous dialogue when he thinks about the nature of knowledge (Nehamas, 2007). The state of wonder has two main characteristic components. The first is a pleasure in response to the object's appearance: the subject is drawn to the object and has a receptive and absorbed attention to it. They have a vague sense of the object's final value and extraordinariness, and that this object has more to offer than only it can provide. The pleasure is one of anticipation, not accomplishment. Second, the subject's vague sense that the object has more to offer comes with an indeterminate desire to learn more about the object, to learn anything they can about it. The state of wonder typically prompts an inquiry in which the subject aims to better understand and appreciate what makes the object distinctive and finally valuable—to explore what was hazy in their initial experience.<sup>4</sup>

There are two things worth explaining straightaway about the intellectual and aesthetic aspects of wonder, which are relevant to §3. First, the desire to learn more and inquiry prompted by wonder make it clear how wonder is epistemic, but what makes this experience aesthetic? One relevant feature is that the experience of wonder is a response to the appearance of the object, and there is a long tradition of regarding aesthetics as dealing with appearances and a kind of perception (Shelley, 2003; Sibley, 1965). The subject responds to what they see, hear, touch, and so forth. Moreover, aesthetic features of expressed ideas in not only literature, but also mathematics, science, philosophy, and other disciplines are *perceptual* in the sense that we experience these ideas and their aesthetic features in a first-hand and non-inferential way; we are struck by them (cf. a friend's testimony about their teacher expressing or presenting an idea in an eloquent or vivid way) (e.g., Sibley, 1965, p. 137; Walton, 1970, pp. 340–1).<sup>5</sup> Another relevant feature of wonder is that the

<sup>4</sup>This picture brings together several intuitive, oft-cited features of wonder. For the idea that the experience of wonder is one of pleasure, joy, or delight, see, e.g., Carson, 1956, Parsons, 1969, Lazarus, 1991, Fisher, 1998, Nussbaum, 2001, Fuller, 2006a, Rubenstein, 2008, Robinson, 2012, Evans, 2012, Matravers, 2013, Sherry, 2013, and Vasalou, 2013, 2015. For the idea that the state of wonder is object-focused, see, e.g., Fuller, 2006a, 2006b, and Schinkel, 2020b (for similar views, see Hepburn, 1980, Nussbaum, 2001, and Tobia, 2015). I unite these ideas of pleasure and absorbed attention with Rylean attitudinal pleasure (see Korsmeyer, 2011 and Ryle, 1954). The idea of the subject having a vague desire to learn more about the object is reflected in Hepburn, 1980 and Parsons, 1969. The idea of seeming value is emphasized in Tobia, 2015, and the subject's vague sense of the object's final value is suggested in Evans, 2012, Tobia, 2015, and Schinkel, 2017, 2020b. For the idea that the subject remains aware of the final value of the object and is only minimally (or not at all) aware of its instrumental value, see, e.g., Nussbaum, 2001, Tobia, 2015, and Fuller, 2006a. For the idea that objects of wonder are typically experienced as extraordinary, see, e.g., Fuller, 2006b and Fingerhut & Prinz, 2018 (see Fisher, 1998 and Tobia, 2015 for similar views). For the idea that wonder prompts an inquiry in which the subject aims to better understand the object's meaning or value, see, e.g., Parsons, 1969, Evans, 2012, La Caze, 2013, and Schinkel, 2017, 2020a.

How is wonder different from awe? A key difference is that wonder is associated with inquiry and an aim to understand the object's specialness, whereas awe does not characteristically have these intellectual features (see, e.g., Inan, 2012, McShane, 2013, Darbor et al. 2016, and Kristjánsson, 2017). An additional difference is that wonder is characteristically positively valenced whereas awe is more variable in this respect (see, e.g., Tobia, 2015 and Kristjánsson, 2017). It is worth noting that Kristjánsson, 2017 offers an Aristotelian sketch of virtuous awe and fleshes out the right objects as “proper instantiations of the ideals of the good, true and beautiful” (p. 136).

<sup>5</sup>Frank Sibley explains that we are struck by the presence of aesthetic properties in things, including ideas 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). For discussions about the aesthetic value of instantiated ideas in mathematics, science, and other disciplines, see, e.g., Gould, 2005, Schellekens, 2007, Rieger, 2017, Ivanova, 2017.

subject focuses on the particularity of the object and engages with it for its own sake.<sup>6</sup> These features concerning appearances and particularity are often treated as important aspects of the experience of beauty or aesthetic experience in general (e.g., Nehamas, 2007; Scruton, 2009).<sup>7</sup>

Second, it is important to emphasize how the aesthetic and epistemic aspects of the aim of the inquiry prompted by wonder are closely connected and mutually support one another. Appreciation is a perception of value that includes the enjoyment of the object's goodness, and this affective aspect can improve the appreciator's epistemic standing with respect to the object (Furtak, 2018, p. 584). In the case of wonder, aiming to better appreciate what makes the object distinctive and finally valuable can help the subject understand the object's specialness in a deeper way. Conversely, understanding can support appreciation since grasping the relationships between various aspects of the object and other things can help the subject better appreciate the object's specialness.

The picture of wonder above suggests that the motivation associated with wonder is already of a virtuous form and fleshes out the notion of the right end in the Aristotelian sketch. Since the subject is drawn to the object's seeming particularity and final value, they engage with the object at least primarily for its own sake. There is little room for them to have an instrumental stance toward the object, e.g., to think about how engaging with it benefits their own projects. This aligns with the Aristotelian idea that virtue involves engaging in the relevant activity for its own sake (*NE* 1105a33).<sup>8</sup>

My characterization of wonder also provides insights into Aristotle's notions of the right objects and right ways—the latter of which I interpret as feeling the emotion to the right degree.<sup>9</sup> While Rosalind Hursthouse and Jan Pedersen each provide a plausible Aristotelian sketch of virtuous wonder, their suggestions about what counts as the right objects and right ways are inadequate.<sup>10</sup> Hursthouse suggests that objects are wondrous or not *tout court*, and Pedersen holds that the extent to which an object is wondrous (if it is at all) is determined by how likely it is to elicit wonder (Hursthouse, 2007, p. 162; Pedersen, 2019, pp. 119–21). Pedersen draws an untenable connection here between the descriptive and prescriptive, and I show below how Hursthouse's suggestion that objects are simply wondrous or not is misleading and cannot capture what goes amiss with cases of inappropriate wonder. We get a more plausible and nuanced account of the right objects and right ways by delineating two types of normative evaluations regarding episodes of wonder and their objects: fitting wonder and all things considered (ATC) appropriate wonder. I unpack each below.

Following D'Arms and Jacobson, an object possesses the response-dependent evaluative property *wondrous* if and only if the emotion of wonder is fitting (D'Arms & Jacobson, 2000; Jacobson, 2011). For wonder and many other emotions, moral, prudential, and all things considered evaluations about feeling or expressing the emotion are not relevant to property ascription. A joke can be funny or a film can be wondrous even if it is all things considered not appropriate to laugh, feel amused, stare, or feel wonder due to moral or prudential concerns (D'Arms & Jacobson, 2000).

Fittingness is understood 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. An emotion presents its object as having certain evaluative features, and the emotional episode

<sup>6</sup>Intellectual engagement can similarly involve pursuing epistemic goods for their own sake, but in these cases the subject does not characteristically focus on the particularity or perceptual features of epistemic goods.

<sup>7</sup>This is also suggested below in my discussion of aesthetic virtue. The account of wonder sketched above differs from the work of Fingerhut and Prinz (2018, 2020), who suggest that wonder is only sometimes an aesthetic emotion—for them, wonder also regularly occurs outside of non-aesthetic contexts (see, e.g., Fingerhut & Prinz, 2020, p. 223). Furthermore, compared to my project, their research has the narrower focus of arguing for wonder's central role in positive aesthetic appreciation of artworks (Fingerhut & Prinz, 2018). Although my connection between beauty and wonder suggests that a number of great artworks elicit wonder (and are wondrous), I do not claim that all or most good art elicits (or should elicit) wonder. For a convincing critique of the latter sort of view, see Carroll, 2012, p. 169.

<sup>8</sup>I follow the many contemporary virtue theorists who soften Aristotle's view: the virtuous person engages in the relevant activity *at least primarily* for its own sake (for example, Baehr, 2011, p. 31 and Kidd, 2018, pp. 245, 250 suggest this view).

<sup>9</sup>I follow Kristján Kristjánsson's interpretation (Kristjánsson, 2018, p. 20).

<sup>10</sup>They do not offer details about the right end.

is fitting when this presentation is accurate. Moreover, there are two dimensions of fit: shape and size. The emotion is unfitting or fitting on grounds of shape when its object lacks or possesses the emotion's evaluative features, and it is unfitting or fitting on grounds of size when the response is an over- or under-reaction or is not (D'Arms & Jacobson, 2000).

Applying these ideas, wonder roughly presents its object as having two evaluative features: the object has aesthetic value and is extraordinary. An episode of wonder is fitting with respect to shape when the object actually is extraordinary—that is, when it deviates from the norm in a significant way—and has aesthetic value.<sup>11</sup> Wonder is fitting with respect to size when it is not an over- or under-reaction with respect to these evaluative features.<sup>12</sup> An object is wondrous when it is extraordinary and possesses aesthetic value, and the extent to which it is wondrous corresponds to how extraordinary it is and how much aesthetic value it possesses.

But how can we determine the *actual* aesthetic value and extraordinariness of an object? The notion of correct categories from Kendall Walton's "Categories of Art" (1970) is useful.<sup>13</sup> He explains that the aesthetic features an object *seems* to have depend on the perceptually distinguishable category under which the subject experiences it. This is because the aesthetic impact of the object's nonaesthetic perceptual features varies depending on whether they are standard, variable, and contra-standard for the category.<sup>14</sup> For example, the nonaesthetic perceptual property of flatness is standard for the category of painting but contra-standard for sculpture. Our aesthetic experience of Barnett Newman's *Voice of Fire* (1967) would be quite different if, instead of experiencing it under the category of painting, we experienced it as a sculpture. To apprehend the aesthetic features that the object actually has (i.e., to make a correct aesthetic judgment), the subject needs to perceive the object under the correct categories. Walton explains that meeting the following criteria counts toward an artwork (W) being perceived correctly in a given category of art (C) such as a genre, style, or medium: *i*) W has a relatively large number of nonaesthetic features standard with respect to C and a minimum of contra-standard features. *ii*) Perceiving W in C makes the artwork "come off best." *iii*) The artist who produced W intended or expected it to be perceived in C, or thought of it as a C. *iv*) C is well established in and recognized by the society in which W was produced. He explains that the mechanical process by which a work was produced and its internal structure are also sometimes relevant. In most cases, these 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) (Walton, 1970, pp. 357–9). With a few minor modifications, Walton's guide also applies to categories of nature and non-art artifacts (including human-made environments). For instance, with respect to nature categories such as trees, flamingos, sunsets, desert landscapes, etc., *iii* would not be relevant to consider, and *iv* concerns categories that are well-established scientifically or culturally. The peripheral considerations that Walton notes for artworks (i.e., the internal structure of the object and the process by which the object was produced) are often relevant in the context of nature categories, as these are often of interest to scientists.<sup>15</sup>

<sup>11</sup>"Significant" in my characterization of the extraordinary carries a pair of meanings: 1) that the deviation from the norm is in some way important or notable and 2) the deviation is significant in degree, that is, dramatic or to a marked extent.

<sup>12</sup>To clarify, unfitting wonder is still an experience of wonder; I characterize the latter in terms of how things seem to the subject.

<sup>13</sup>Although some instances of wonder in religious contexts seem to not involve classification (e.g., experiences associated with Buddhist meditation), this sort of wonder also seems resistant to normative evaluations. I thank David Glidden for his insights into this potential kind of wonder.

<sup>14</sup>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 is 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 qualifies for the category (Walton, 1970, pp. 338–9, 352).

<sup>15</sup>In fn. 5 of his article, Walton encourages readers to make minor modifications to his theory for literature. For the modification of delineating nature categories based on science and cultural traditions, see Carlson, 2019, §3.1. For suggestions about applying Walton's rough guide to non-art artifacts, see Carlson, 2014.

Waltonian categories also come with sets of norms, which include what is valued in the category, the category's conventions, what is statistically common, and the possibilities and limitations of the category (Walton, 1970, pp. 349–53). These norms are relevant in discerning the extraordinariness of objects: we consider whether and to what extent the nonaesthetic and aesthetic features of the object deviate from such norms of the correct category in a significant way.

Walton's framework allows an object to have a range of norms and correct categories (Walton, 1970, pp. 362, 341). This is significant because sometimes an object is truly wondrous under certain norms and correct categories but not others. We can clarify whether, in what way, and to what extent an object is wondrous by specifying the category and norm employed. To briefly illustrate, an ordinary American flamingo is extraordinary qua bird but not qua flamingo, and a ragged, gnarled tree might be extraordinary under Japanese *wabi-sabi* norms (which celebrates the aged, the impoverished, and the defective) but not traditional Western ones (Saito, 1997).<sup>16</sup> Moreover, categories and norms can clarify what goes amiss with cases of unfitting wonder, such as a child experiencing an ordinary ferret as an extraordinary rabbit; they show how an emotion can misrepresent its object. Contra Hursthouse's suggested view that objects are simply wondrous or not, there is a more complex story to tell about the wondrousness of objects.

Walton's essay also provides insights into how we can develop the perceptual skill of discerning the wondrousness of objects—a skill which, as I explain below, is an element of virtuous wonder. A central part of developing this skill is becoming familiar with a category. The subject is exposed to a considerable variety of objects in the category and, with such exposure, they gain a robust conception of the category and a corresponding set of norms. Familiarity with art categories involves an understanding of their conventions and history, whereas familiarity with nature categories involves an awareness of their science or cultural history (Walton, 1970, fn. 25). This background knowledge of and familiarity with the category helps the subject reliably apprehend the aesthetic features and extraordinariness of objects in the category (p. 363). Another important part of developing this skill is cultivating perceptual sensitivities, e.g., visual sensitivities for the category of painting, aural sensitivities for the category of bird songs, and gustatory sensitivities in the category of red wine.<sup>17</sup> Having a discriminating eye, ear, or palate enables one to apprehend an object's perceptual nonaesthetic, and aesthetic features. Overall, being familiar with a category and having a robust conception of the associated norms, along with possessing the relevant perceptual sensitivities, enables the subject to skillfully discern the wondrousness of objects in that category.<sup>18</sup>

The second type of normative evaluation regarding episodes of wonder and its objects that is important in fleshing out the notions of the right objects and right ways in the Aristotelian sketch is whether wonder and its object are all things considered (ATC) appropriate. This evaluation is sensitive to a variety of considerations, including moral and prudential ones. Fitting wonder might not be ATC appropriate due to moral or prudential concerns. To see how evaluations of fittingness and ATC appropriateness are independent but both relevant to theorizing about virtuous wonder, I offer three types of cases below. Type 1 cases provide intuitive support for the idea that fitting

<sup>16</sup>This highlights the importance of relativized evaluations when thinking about the wondrousness of objects (an approach that is suggested in Walton, 1970 pp. 362–3; cf. p. 355). My project differs from Allen Carlson's Scientific cognitivism and critiques of this type of view (e.g., Budd, 2002; Carroll, 1993; Parsons, 2006; Saito, 2004) which focus on non-relativized aesthetic evaluations like "The Grand Tetons are majestic" and how to identify *the* aesthetic properties of a natural object. Nonetheless, Scientific cognitivism and its critics are concerned more generally with the normativity of aesthetic judgments of natural objects, and I find some of the ideas from Carlson and others helpful for thinking about fitting wonder.

<sup>17</sup>For the wine example, see Hume, 1910. For similar ideas, see Smith, 1980, p. 45. Walton suggests the importance of these sensitivities in 1970, p. 336. For the idea that aesthetic sensitivity and discernment is typically local to the relevant Waltonian categories, see Hills, 2018, p. 270.

<sup>18</sup>Walton's picture can be fleshed out by Fridland, 2017. She explains how experts know where to look for rich areas of information, spend more time than novices focusing on these areas (to gather more information), and recognize domain-specific patterns which allow them to group information in meaningful ways. Also, experts can apprehend nuances that novices typically miss.

wonder and wondrous objects are important parts of virtuous wonder; if the object is not wondrous, then we are inclined to think that the subject's response is either the exercise of a different virtue or does not involve virtue. Type 2 cases provide intuitive support for the idea that fittingness alone falls short of virtuous wonder; we are disinclined to think that someone possesses virtuous wonder if they often have Type 2 experiences. Type 3 cases reflect what we expect for virtuous wonder: wonder that is both fitting and ATC appropriate.

### 1) 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 view their painting under some newly-contrived, incorrect categories—categories that make the painting seem beautiful and extraordinary.<sup>19</sup> In this case, your experience of wonder is an exercise of virtuous kindness and *phronesis* (practical wisdom), but not virtuous wonder. (Another exercise of virtuous kindness might be to exclaim, “It’s amazing!” when your friend asks what you think).<sup>20</sup>

**LATIN JAZZ:** Novice jazz students experience wonder toward Roy Phillippe’s “Dos Gatos Bailando.” The idiomatic Latin chart is not wondrous and was likely composed with the intent of helping young musicians get a feel for the style, but the students’ wonder is ATC appropriate due to the educational setting; it prompts them to further engage with the jazz chart and learn more about Latin jazz.

### 2) Fitting, not ATC appropriate

**MOUNTAIN DRIVING:** A traveler drives their car down a narrow and winding mountain road and experiences wonder toward the wondrous landscape. They cannot help but look out the side window, drawing their attention away from the road, thereby putting the lives of other drivers and themselves at risk. Experiencing wonder might also distract them from making the necessary turns to get to the cabin that they booked. These moral and prudential considerations make the experience of wonder ATC inappropriate.

**NEW ACQUAINTANCE:** A guest at a party meets for the first time someone who has a wondrous appearance (perhaps they have unique body modifications). The guest’s wonder is ATC inappropriate on moral grounds, as their stare makes the new acquaintance feel uncomfortable or objectified.

**NAZI FILM:** A filmgoer in the 1930s feels fitting wonder towards Leni Riefenstahl’s Nazi propaganda films *Triumph of the Will* (1935) and *Olympia* (1938). These wondrous films feature innovative film techniques (e.g., aerial shots, extreme camera angles, and slow-motion sequences). However, experiencing wonder is ATC inappropriate due to moral considerations.

<sup>19</sup>See Walton, 1970 (p. 360 and fn. 23) for a similar example.

<sup>20</sup>Even though the mediocre painting is not wondrous, it might have aesthetic value that warrants aesthetic appreciation. There are plenty of instances of aesthetic appreciation that do not involve the appreciator experiencing wonder—for similar ideas, see fn. 7 above. Thanks to an anonymous reviewer for helping me clarify this point.

## 3) Fitting, ATC appropriate

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

There are three points to make here. First, when thinking about ATC appropriate wonder, moral and prudential considerations should also be considered in relation to the following distinction: merely feeling wonder and expressing wonder. Significantly, merely feeling wonder might be ATC appropriate while expressing it is not (D'Arms & Jacobson, 2000, pp. 77–8). So, an additional consideration is whether the subject 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 not ATC appropriate to even feel this emotion—the object is not ATC appropriate. This idea brings out new dimensions of the cases above. If the driver from MOUNTAIN DRIVING can stifle their expression of wonder (e.g., staring out of the side window), then merely feeling wonder toward the landscape is both fitting and ATC appropriate.<sup>21</sup> 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 likely has other harmful consequences.<sup>22</sup>

Second, I should clarify that ATC appropriateness is independent of fittingness in terms of not only shape but also size. For example, feeling and expressing intense fitting wonder towards the very wondrous landscape (MOUNTAIN DRIVING) is ATC inappropriate for the reasons noted above, but a toned down (unfitting) episode of wonder perhaps is ATC appropriate. In the latter sort of case, the moral and prudential considerations are salient to the subject, which tempers their emotional response.

The third point, which anticipates my discussion below of virtuous wonder, is that we need to make a qualification about cases like BASILICA. Following an Aristotelian conception of virtue, a person who *by chance* regularly experiences fitting and ATC appropriate wonder does not possess virtuous wonder. Virtue responsibility holds that agents are to some degree responsible for their character traits; they cannot be virtuous simply by chance (Battaly, 2008). Virtuous wonder includes both the skill of discerning wondrousness and the higher-order virtue of *phronesis*, the latter of which makes the subject sensitive to all the relevant considerations. Together, they reliably guide agents toward experiencing both fitting and ATC appropriate wonder.

## 2. Virtuous Wonder

Like Hursthouse and Pedersen, I draw on Aristotle's formulation about emotional dispositions that are proper to virtue. But my characterization of virtuous wonder is more detailed. It incorporates insights from §1 and helps us see how this trait is an intellectual and aesthetic virtue:

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

The idea of aiming to better understand and appreciate what makes such objects distinctive and finally valuable corresponds to Aristotle's right end. The appropriate wondrous object and

<sup>21</sup>However, D'Arms and Jacobson plausibly 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" (D'Arms & Jacobson, 2000, p. 77).

<sup>22</sup>For similar ideas, see Baumgarten, 2001.

appropriate degree (all things considered) in my characterization correspond to Aristotle's right things and right way.<sup>23</sup> While not explicit in my characterization or Aristotle's original formulation, an important Aristotelian idea is that agents who possess virtuous wonder are guided by the skill of discerning wondrousness and *phronesis* in reliably experiencing wonder toward the right objects and in the right way, all things considered.

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. Nevertheless, the idea of experiencing wonder toward the right things captures both. Experiencing wonder toward the right things can include wondrous people along with a variety of other kinds of wondrous objects (artworks, etc.). The right times to experience wonder simply are the ones that concern the right objects, as wonder is object-focused. Finally, I use "experiences wonder" rather than "feels wonder" to capture both feeling and expressing the emotion appropriately.

### 3. Intellectual and Aesthetic Virtue

My characterization of virtuous wonder in §2 helps us see what type of virtue this trait is. To show that virtuous wonder is an intellectual virtue and to better understand its nature, I discuss below how my characterization of it conceptually fits into a Zagzebskian account of intellectual character virtues. I draw upon Linda Zagzebski's ideas about intellectual virtue as well as Lani Watson's work on virtuous curiosity, which adopts a Zagzebskian framework, to highlight some important details regarding virtuous wonder and to distinguish it from virtuous curiosity.

Zagzebski's account of intellectual virtue is modeled on Aristotle's moral virtues, which she interprets as having motivational and success components. She holds that intellectual virtues also have this structure: a motivational component that drives the activity of inquiry and a reliable success component that requires a degree of success or skill in realizing that motivation (Battaly, 2008; Watson, 2018; Zagzebski, 1996, 1999).<sup>24</sup> I discuss 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" (Zagzebski, 1999, p. 106; Zagzebski, 1996, p. 131). The emotion-dispositions involved in intellectual virtues initiate, direct, and drive inquiry (Zagzebski, 1996, pp. 130–1; Watson, 2018, p. 156). As I noted in §1, the emotion of wonder typically plays such roles in inquiry. Zagzebski also distinguishes two kinds of motivations: a common, underlying motivation and a distinctive, immediate motivation. How do these apply to virtuous wonder?

To Zagzebski, the motivation common to 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 various ways. Some describe it as a love of epistemic goods or, as Watson puts it, a motivation to "improve epistemic standing" (2015, p. 276; 2018, p. 156).<sup>25</sup> The motivations and aims noted in my characterizations of both wonder and 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 which is generated by and manifests this underlying concern for improving epistemic standing (Zagzebski, 1996). While the distinctive motivation of virtuous curiosity is, according to Watson, "to acquire epistemic goods that [the subject] lacks, or believes that she lacks" (Watson, 2018, p. 158), the distinctive motivation characteristic of virtuous wonder is to better understand and appreciate what makes the object distinctive and finally valuable.

<sup>23</sup>See Swanton, 2018, pp. 513–4 for support for this connection.

<sup>24</sup>At least in these respects, Zagzebski's account of intellectual virtues can be understood as neo-Aristotelian (see, e.g., Brady, 2018, p. 50).

<sup>25</sup>In all these cases, the common motivation concerns aiming at information, truth, justification, knowledge, or understanding.

Furthermore, Zagzebski suggests that the relevant emotion of the motivational component is experienced in the right circumstances, for example, experienced toward the right objects (1996, pp. 126, 136–7; 1999, p. 106). My characterization in §2 highlights how virtuous wonder involves experiencing wonder toward the right objects. However, I explain below how this aspect of virtuous wonder is better understood as the success component rather than part of the motivational component.

Zagzebski holds that possessing intellectual virtue requires not only the right motivations but also a degree of skill or success in realizing these motivations, including actually acquiring epistemic goods like knowledge (1996). But this success condition is too strong and goes against the responsibilist conception of virtue. Zagzebski's requirement prevents a person who happens to live in an epistemically unfriendly environment from being able to acquire intellectual character virtues. A second problem with Zagzebski's success condition is highlighted when we consider the distinctive motivation of virtuous wonder: it is misguided and awkward to (non-arbitrarily) set some threshold level of understanding or appreciation that determines whether the subject is successful.

Watson avoids these two problems. She 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. In Watson's modified Zagzebskian view, the reliable success condition concerns starting one's inquiry off on the right foot. In the case of virtuous curiosity, this requires the skill of identifying *worthwhile* epistemic goods—the distinctive skill of this virtue (Watson, 2018). Although Watson focuses on what is distinctive of virtuous curiosity, she suggests that *phronesis* is also required to reliably start off on the right foot. Agents need to be sensitive to all the relevant considerations and exercise good judgment to determine which epistemic goods are truly worthwhile (2018, fn. 6, 8). Watson's modification holds onto Zagzebski's view about the role of skill in the success component while avoiding the aforementioned problems. Unlike Zagzebski, Watson does not additionally require the virtuously curious person to actually acquire epistemic goods. Applying Watson's modification to virtuous wonder, the skill of discerning wondrousness—the distinctive skill of virtuous wonder—and *phronesis* are required for the agent to reliably experience wonder that is both fitting and ATC appropriate, thereby starting off on the right foot in inquiries prompted by wonder. This picture associates Zagzebski's condition of experiencing the relevant emotion in the right circumstances (e.g., toward the right objects) with the success condition rather than part of the motivational component.

The foregoing discussion is fruitful in a few respects. First, it shows that virtuous wonder is an intellectual virtue. For example, it illustrates how we can understand my characterization of virtuous wonder, which draws on Aristotle's formulation about emotional dispositions that are proper to virtue, in terms of Zagzebskian motivational and success components of intellectual virtue.<sup>26</sup> The emotion-disposition of wonder and the characteristic aim to better understand and appreciate what makes the object distinctive and finally valuable is the motivational component. Reliably experiencing wonder toward appropriate wondrous objects and to the appropriate degree, all things considered—which requires the skill of discerning wondrousness and *phronesis*—is the success component insofar as it starts the agent off on the right foot in their inquiries. Second, my discussion reveals insights into the relation between the common and distinctive motivations of virtuous wonder and how they interact with *phronesis* and the skill of discerning wondrousness. Third, we see how virtuous curiosity and virtuous wonder are different but each can play an important role in initially motivating virtuous inquiry (Baehr, 2011, p. 19). Finally, as I illustrate

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<sup>26</sup>One might ask why I do not characterize virtuous wonder in a way that more closely follows Watson's account of virtuous curiosity, e.g., the person possessing virtuous wonder is *characteristically motivated to better understand and appreciate what makes ATC appropriate wondrous objects distinctive and finally valuable* (cf. Watson, 2018, p.159). My answer is that this picture occludes Aristotle's notion of the right way and the idea that virtuous wonder is an *emotion*-disposition.

below, the Zagzebskian motivation-success framework is similarly helpful in thinking about virtuous wonder's status as an aesthetic, moral, and environmental virtue.

The motivation-success framework can also be applied to theories of aesthetic virtue such as Matthew Kieran's account of appreciative virtue to show that virtuous wonder is an aesthetic virtue.<sup>27</sup> To Kieran, the virtuous appreciator is motivated to appreciate an aesthetic object at least primarily for its own sake (2010, 2011). Further, Kieran suggests that each individual appreciative virtue has a distinctive motivation. For example, the appreciative virtue of humility involves being motivated to remain open to "the possibility that the appreciative activity of others may have picked up on something worth considering and thereby reveals something importantly new about a work," whereas the appreciative virtue of courage involves the distinctive motivation "to be true to one's own responses and not cave in to received opinion or social influence without appreciative justification" (Kieran, 2011, pp. 41–2; cf. Zagzebski, 1999, p. 106). The success component consists in the motivation component being reliably directed toward the right things—i.e., aesthetically relevant features of objects of aesthetic merit—which requires the exercise of perceptual and other appreciative skills (Kieran, 2011, pp. 33, 38, 40–2; Kieran, 2010, pp. 248, 249, 260). The perceptual skill of discerning wondrousness and *phronesis*, which are parts of the success component of virtuous wonder, fit the success component of Kieran's appreciative virtues; they involve fixing on appropriate aesthetic features of aesthetically valuable objects. The aim to better understand and appreciate what makes the object of wonder distinctive and finally valuable is the distinctive motivation of virtuous wonder, which is generated by and manifests the common, underlying motivation to appreciate the aesthetic object at least primarily for its own sake.

However, another aspect of Kieran's account concerning the motivation component requires careful consideration. It is plausible to understand the activity of aesthetic appreciation in terms of a governing motivation oriented towards aesthetic goods and to distinguish types of virtues in terms of different types of motivations (aesthetic, moral, epistemic, etc.) (e.g., Woodruff, 2001). But Kieran's suggestion about the psychology of the virtuous appreciator is implausible: that they necessarily treat epistemic goods as primarily instrumental, as a means to aesthetically appreciate the object. He explains that virtuous aesthetic appreciation is facilitated by the subject not only discriminately attending to the aesthetically relevant features of the object but also gaining an aesthetic understanding of the object, which involves learning aesthetically relevant facts about it and how they connect up and explain its aesthetic effects. These epistemic goods can deepen the subject's aesthetic appreciation of the object (Kieran, 2010, p. 260). Although Kieran is right that there are important connections between epistemic goods and aesthetic appreciation, the relation is not always primarily instrumental. This is highlighted in the case of virtuous wonder. While the subject might recognize the instrumental value of both epistemic and aesthetic goods insofar as each supports the other in the activities of inquiry and appreciation, they value both primarily for their own sakes. Moreover, as I indicated in §1, the aims to understand and appreciate the object and the corresponding activities of inquiry and appreciation do not compete in the case of wonder. Rather, these activities are intimately connected and the two aims overlap in the sense that they do not pull the subject in opposing directions.<sup>28</sup> The motivation characteristic of wonder—which has epistemic and aesthetic dimensions—fits the motivation component of appreciative virtues. Virtuous wonder is an aesthetic virtue.

<sup>27</sup> Along these lines, Zagzebski notes that her definition of virtue, which features the motivational and success components, is "broad enough to include the intellectual as well as the traditional moral virtues. It may also be broad enough to include virtues other than the moral or intellectual, such as aesthetic...virtues" (Zagzebski, 1996, p. 137).

<sup>28</sup> For the idea of overlapping epistemic and aesthetic aims, see Woodruff, 2001, p. 27. Cf. Alison Hills's examples of aesthetically virtuous artists who have competing interests that pull them in different directions, such as commitments to spend time with family (Hills, 2018). It is worth noting that Kieran does acknowledge that the virtuous appreciator can have a mix of motivations (where some are not aesthetic) (Kieran, 2011, p.41). In such cases, we might say that non-aesthetic motivations are *shaped* by the governing aesthetic motivation(s) (Hills, 2018, p. 258).

#### 4. Moral and Environmental Virtue

The motivation-success framework can also help us understand in what sense virtuous wonder is a moral and environmental virtue. There are *prima facie* reasons to think that virtuous wonder is an interpersonal moral virtue. Some theorists plausibly suggest that when the object of wonder is a person or something that possesses moral status, wonder provides moral motivation to genuinely engage with and care about the object, and this can be reflected in how the subject pursues their inquiry or aesthetic appreciation.<sup>29</sup> Along these lines, I noted earlier 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 at least primarily for its own sake and on its own terms. One possible 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 (cf. Małecki, 2020). Overall, these motivations fit the underlying, common motivation of interpersonal moral virtues: to promote the well-being of others (Battaly, 2014; Baumgarten, 2001).

But these features of wonder, at best, guide the agent away from only *some* immoral actions, and this is the case even when wonder is fitting—wonder does not have what D’Arms and Jacobson call a moral shape (D’Arms & Jacobson, 2000, pp. 87–8). Having this moral motivation to care about the wondrous object’s welfare and genuinely engage with it for its own sake does not preclude the experience of wonder from being immoral. For instance, expressing wonder toward a wondrous person might be morally insensitive and make them feel objectified or uncomfortable (e.g., NEW ACQUAINTANCE). The higher-order virtue of *phronesis* makes the agent alive to all the relevant considerations in a given situation and reliably gets them started on the right foot and guides them toward moral interactions with others in how they go about their inquiring and appreciating. 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, *phronesis is doing all the work* with respect to the success condition of moral virtue. Without *phronesis*, the agent has unreliable guidance toward moral interactions with others; they risk having many immoral interactions like NEW ACQUAINTANCE. So, virtuous wonder is an interpersonal moral virtue in only a qualified sense.<sup>30</sup>

These insights can help us sort out conflicting views about virtuous wonder’s status as an environmental virtue. Ronald Sandler, who indicates that this trait is an environmental virtue, has a rather inclusive view of environmental virtues: they are traits that involve appropriately responding to environmental goods and values, which include aesthetic goods like natural beauty and epistemic goods (Sandler, 2013). Someone possessing virtuous wonder responds appropriately to these environmental goods—in particular, they aesthetically appreciate the natural beauty around them and engage intellectually with it, aiming to understand it (Sandler, 2005, 2013).

Compared to Sandler, Liezl van Zyl has a narrower, more demanding view: environmental virtues concern “promoting the flourishing of living creatures and/or preserving non-living

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<sup>29</sup>The idea that wonder provides moral motivation is to some extent suggested in Bennett, 2001, Moore, 2005, La Caze, 2013, and Nussbaum, 2001, 2006. For a similar view with respect to curiosity and a discussion of the connection between epistemic goods and care, see Baumgarten, 2001.

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 the inquiry prompted by wonder should not have an investigative, probing, mastery-oriented stance when the object of wonder is a person (see La Caze, 2013, pp. 23, 31. For her positive view about how wonder prompts genuine engagement with others, see pp. 56–7).

<sup>30</sup>Also see Swanton, 2018, p. 516, who briefly indicates that virtuous wonder is an environmental and intellectual virtue, but not a moral virtue (in a narrow, interpersonal sense).

There is an important distinction to make here between morally sensitive ways of appreciating and inquiring on the one hand and actions we perform to protect objects whose value we first recognized through an experience of wonder on the other. An example of the latter is someone protecting a painting that elicited wonder and that they now value from thieves. Such acts are better understood as exercises of courage or other moral virtues (or moral vices) rather than the exercise of virtuous wonder. I thank Myisha Cherry for raising this sort of case.

entities” (van Zyl, 2021, pp. 85, 87). She indicates that while wonder can help agents see the natural world as worthy of attention and allows them to gain insight into the nature and needs of natural entities—which can shape how they relate to and interact with the natural world in a general way (p. 88)—wonder does not have the right sort of connection to environmental action to be an environmental virtue. It does not reliably motivate specific actions that preserve or promote the flourishing of natural entities.<sup>31</sup>

My foregoing discussion challenges Van Zyl’s point that wonder does not reliably motivate specific environmental actions and her suggestion that a sense of wonder cannot be an environmental virtue. Wonder characteristically motivates the activities of appreciation and inquiry, and it is plausible that the subject is typically motivated to do such things in ways that promote the flourishing or preservation of the object of wonder since wonder involves valuing the object. However, like my point above about moral virtue, the *success* of being sensitive to environmental considerations in our appreciation and inquiry is explained by the exercise of *phronesis* (and perhaps other virtues). To illustrate, someone experiencing fitting wonder but who lacks *phronesis* might have the motivation to preserve and promote the flourishing of the object but is unsuccessful in starting their appreciation and inquiry off on the right foot. They are insensitive to the fragile habitat in which the wondrous object thrives, and they disturb the habitat when they step off the established footpath to explore the object. This point about *phronesis* and *success* supports Van Zyl’s general worry about wonder’s connection to environmental action. But contra Van Zyl, virtuous wonder is an environmental virtue in a qualified sense. It involves appropriately responding to environmental goods (aesthetically appreciating and inquiring about them) and being motivated to promote the flourishing or preservation of wondrous natural entities, but it relies on *phronesis* to reliably guide the agent toward successful environmental actions.

There are two further points to make about the kind of virtue that virtuous wonder is. First, there is an additional way in which virtuous wonder is a moral and environmental virtue in only a qualified sense: wonder only sometimes concerns moral and environmental goods. We often experience wonder toward artifacts that do not have moral status, e.g., fractals and other mathematical objects. In contrast, virtuous wonder characteristically concerns epistemic and aesthetic goods. Second, one might think that there are two separate kinds of wonder—aesthetic and intellectual—and that a person could possess the aesthetic virtue of virtuous wonder but not the intellectual virtue of virtuous wonder (or vice versa).<sup>32</sup> Such an individual would have perceptual skills and familiarity with only Waltonian categories of art, for instance. I acknowledge that it is common for people to have perceptual skills and familiarity with a somewhat narrow range of Waltonian categories and that this does not necessarily prevent them from possessing virtuous wonder; I adopt the contemporary view that virtues need not be exhibited across all realms of a person’s life.<sup>33</sup> Virtuous wonder and the skill of discerning wondrousness are exercised in the relatively small number of categories with which the subject is familiar and in which they have relevant perceptual sensitivities. However, it does not follow that we have two separate virtues here—one aesthetic and the other intellectual. Wonder involves engaging with its objects both intellectually and aesthetically, whether the object is a painting, philosophical idea, etc.

<sup>31</sup>Van Zyl holds that wonder’s connection to environmental action is too strong for virtues of connoisseurship—which are “minor” environmental virtues concerned with appreciation and responding well to value rather than tasks and environmental actions (van Zyl, 2021, pp. 77, 85)—but not strong enough for proper environmental virtues.

<sup>32</sup>I thank Alan T. Wilson for raising this worry.

<sup>33</sup>Virtuous wonder (like many 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 (Cassam, 2016, p. 174).

## 5. Conclusion

In sum, this paper challenges and refines other theorists' views about virtuous wonder's status as a moral and environmental virtue and vindicates suggestions in the literature that this trait is an aesthetic and intellectual virtue. It also supports the suggestion made at the outset that wonder plays an important role in various realms of human life—e.g., intellectual, aesthetic, and environmental. Clarifying virtuous wonder's status as an intellectual, aesthetic, moral, and environmental virtue helps us better understand how this trait contributes to a flourishing life.<sup>34</sup> However, there are further questions to explore regarding the nature of this virtue: What are its concomitant vices?<sup>35</sup> How does it relate to the virtues of open-mindedness and intellectual humility? Along with my insights into the nature of virtuous wonder provided here, answering such questions can provide resources for thinking about how we can cultivate this character virtue.

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## References

- Aristotle. (1985). *Nicomachean Ethics*. Translated by T. Irwin. Hackett Publishing.
- Baehr, J. (2011). *The inquiring mind: On intellectual virtues and virtue epistemology*. Oxford University Press.
- Battaly, H. (2008). Virtue epistemology. *Philosophy Compass*, 3(4), 639–663.
- Battaly, H. (2014). Intellectual virtues. In S. van Hooft (Eds.), *Handbook of Virtue Ethics*. (pp. 177–187). Acumen.
- Baumgarten, E. (2001). Curiosity as a moral virtue. *International Journal of Applied Philosophy*, 15(2), 169–184.
- Bennett, J. (2001). *The enchantment of modern life: Attachments, crossings, and ethics*. Princeton University Press.
- Brady, M. S. (2018). The role of emotion in intellectual virtue. In H. Battaly (Ed.), *The Routledge handbook of virtue epistemology* (pp. 47–57). Routledge.
- Brady, E. (2023). Cryosphere aesthetics. In E. K. W. Man, & J. Petts (Eds.), *Comparative everyday aesthetics: East-west studies in contemporary living* (pp. 107–122). Amsterdam University Press.
- Budd, M. (2002). *The aesthetic appreciation of nature*. Oxford University Press.
- Carlson, A. (2014). The dilemma of everyday aesthetics. In L. Yuedi & C. L. Carter (Eds.), *Aesthetics of everyday life: East and west* (pp. 48–64). Cambridge Scholars Publishing.
- Carlson, A. (2019, Summer). Environmental aesthetics. In E. N. Zalta (Ed.), *The Stanford encyclopedia of philosophy*. <https://plato.stanford.edu/archives/sum2019/entries/environmental-aesthetics/>
- Carroll, N. (1993). On being moved by nature: between religion and natural history. In S. Kemal, & I. Gaskell, (Eds.), *Landscape, natural beauty and the arts* (pp. 244–266). Cambridge University Press.
- Carroll, N. (2012). Recent approaches to aesthetic experience. *Journal of Aesthetics and Art Criticism*, 70(2), 165–177.
- Carson, R. (1956, July). Help your child to wonder. *Women's Home Companion*.
- Cassam, Q. (2016). Vice epistemology. *The Monist*, 99, 159–180.
- D'Arms, J., & Jacobson, D. (2000). The moralistic fallacy: On the 'Appropriateness' of emotions. *Philosophy and Phenomenological Research*, 61(1), 65–90.
- Darbor, K. E., Lench, H. C., Davis, W. E., & Hicks, J. A.. (2016). Experiencing versus contemplating: Language use during descriptions of awe and wonder. *Cognition and Emotion*, 30(6), 1188–1196.
- Einstein, A. (1954). *Ideas and opinions* (Ed. C. Seelig and Trans. S. Bargmann). Crown.
- Evans, H. M. (2012). Wonder and the clinical encounter. *Theoretical Medicine and Bioethics*, 33(2), 123–136.
- Fingerhut, J., & Prinz, J. (2018). Wonder, appreciation, and the value of art. In J. F. Christensen, & A. Gomila, (Eds.), *The arts and the brain: Psychology and physiology beyond pleasure* (pp. 107–128). *Progress in Brain Research*. Elsevier.
- Fingerhut, J., & Prinz, J. (2020). Aesthetic emotions reconsidered. *The Monist*, 103, 223–239.

<sup>34</sup>My discussion also highlights how virtuous wonder is a distinctive virtue insofar as it spans different domains. Cf. aesthetic, epistemic, and moral courage, where authors tend to draw on the structure of courage in general and fill in the details differently for each kind of courage (see, e.g., Wilson, 2020, Kidd, 2018).

<sup>35</sup>Some plausible candidate vices of excess include being gullible and overly excitable. Candidate vices of deficiency include being cynical, overconfident, and apathetic.

- Fisher, P. (1998). *Wonder, the rainbow, and the aesthetics of rare experiences*. Harvard University Press.
- Fridland, E. (2017). Motor skill and moral virtue. *Royal Institute of Philosophy Supplement*, 80, 139–170.
- Fuller, R. C. (2006a). *Wonder: From emotion to spirituality*. University of North Carolina Press.
- Fuller, R. C. (2006b). Wonder and the religious sensibility: A study in religion and emotion. *The Journal of Religion*, 86(3), 364–384.
- Furtak, R. A.. 2018. “Emotional knowing: The role of embodied feelings in affective cognition. *Philosophia*, 46, 575–587.
- Gould, C. S. (2005). Glamour as an aesthetic property of persons. *Journal of Aesthetics and Art Criticism*, 63(3), 237–247.
- Hepburn, R. W. (1980). The inaugural address: Wonder. *Aristotelian Society Supplementary*, 54, 1–23.
- Hills, A. (2018). XI – Moral and aesthetic virtue. *Proceedings of the Aristotelian Society*, 118, 255–274.
- Hume, D. (1910). Of the standard of taste. In C. W. Eliott (Ed.), *English essays from Sir Philip Sidney to Macaulay* (pp. 215–236). P.F. Collier & Son Co.
- Hursthouse, R. (2007). Environmental virtue ethics. In R. L. Walker, & P. J. Ivanhoe (Eds.), *Working virtue: Virtue ethics and contemporary moral problems* (pp. 155–171). Oxford University Press.
- Inan, I. (2012). *The philosophy of curiosity*. Routledge.
- Ivanova, M. (2017). Aesthetic values in science. *Philosophy Compass*, 12, 1–9.
- Jacobson, D. (2011, Spring). Fitting attitude theories of value. In E. N. Zalta (Ed.), *Stanford encyclopedia of philosophy*. <https://plato.stanford.edu/archives/spr2011/entries/fitting-attitude-theories/>.
- Kidd, I. J. (2018). Epistemic courage and the harms of epistemic life. In H. Battaly (Ed.), *The Routledge handbook of virtue epistemology*, 244–255. Routledge.
- Kieran, M. (2010). The vice of snobbery: Aesthetic knowledge, justification and virtue in art appreciation. *The Philosophical Quarterly*, 60(239), 243–263.
- Kieran, M. (2011). The fragility of aesthetic knowledge: Aesthetic psychology and appreciative virtues. In E. Schellekens & P. Goldie (Eds.), *The aesthetic mind: Philosophy and psychology* (pp. 32–43). Oxford University Press.
- Korsmeyer, C. (2011). *Savoring disgust*. Oxford University Press.
- Kristjánsson, K. (2017). Awe: An Aristotelian analysis of a non-Aristotelian virtuous emotion. *Philosophia*, 45(1), 125–142.
- Kristjánsson, K. (2018). *Virtuous emotions*. First edition. Oxford University Press.
- La Caze, M. (2013). *Wonder and generosity: Their role in ethics and politics*. State University of New York Press.
- Lazarus, R. S. (1991). *Emotion and adaptation*. Oxford University Press.
- Malecki, W. P. (2020). Against wonder. *Studia Philosophica Wratislaviensia*, 15(2), 45–57.
- Matravers, D. (2013). Wonder and cognition. In S. Vasalou (Ed.), *Practices of wonder cross-disciplinary perspectives* (pp. 166–178). James Clarke Company, Limited.
- McShane, K. (2013). Neosentimentalism and the valence of attitudes. *Philosophical Studies*, 164(3), 747–765.
- Moore, K. D. (2005). The truth of the Barnacles: Rachel Carson and the moral significance of wonder. *Environmental Ethics*, 27(3), 265–277.
- Nehamas, A. (2007). *Only a promise of happiness: The place of beauty in a world of art*. Princeton University Press.
- Nussbaum, M. C. (2001). *Upheavals of thought: The intelligence of emotions*. Cambridge University Press.
- Nussbaum, M. C. (2006). *Frontiers of justice: Disability, nationality, species membership*. Belknap Press.
- Parsons, H. L. (1969). A philosophy of wonder. *Philosophy and Phenomenological Research*, 30(1), 84–101.
- Parsons, G. (2006). Freedom and objectivity in the aesthetic appreciation of nature. *British Journal of Aesthetics*, 46(1), 17–37.
- Pedersen, J. B. W. (2019). *Balanced wonder: Experiential sources of imagination, virtue, and human flourishing*. Lexington Books.
- Plato. (1997). In J. M. Cooper, & D. S. Hutchinson (Eds.), *Complete works*. Hackett.
- Rieger, A. (2017). The beautiful art of mathematics. *Philosophia Mathematica*, 26(2), 234–250.
- Robinson, J. (2012). Emotional responses to music: What are they? How do they work? And are they relevant to aesthetic appreciation? In P. Goldie (Ed.), *The Oxford handbook of philosophy of emotion* (pp. 651–680). Oxford Handbooks. Oxford University Press.
- Rubenstein, M. -J. (2008). *Strange wonder: The closure of metaphysics and the opening of awe*. Columbia University Press.
- Ryle, G. (1954). Pleasure. In *Proceedings of the Aristotelian society, supplementary volumes* (Vol. 28, pp. 135–146).
- Saito, Y. (1997). The Japanese aesthetics of imperfection and insufficiency. *Journal of Aesthetics and Art Criticism*, 55(4), 377–385.
- Saito, Y. (2004). Appreciating nature on its own terms. In A. Carlson, & A. Berleant (Eds.), *The aesthetics of natural environments* (pp. 141–155). Broadview Press.
- Sandler, R. (2005). Introduction: Environmental virtue ethics. In *Environmental virtue ethics* (pp. 1–12). Rowan & Littlefield.
- Sandler, R. (2013). Environmental virtue ethics. In H. LaFollette (Ed.), *The international encyclopedia of ethics* (pp. 1665–1674). Blackwell.
- Schellekens, E. (2007). The aesthetic value of ideas. In P. Goldie & E. Schellekens (Eds.), *Philosophy and conceptual art* (pp. 71–91). Oxford University Press.
- Schinkel, A. (2017). The educational importance of deep wonder. *Journal of Philosophy of Education*, 51(2), 538–553.

- Schinkel, A. (2020a). Education as mediation between child and world: The role of wonder. *Studies in Philosophy and Education*, 39(September), 479–492.
- Schinkel, A. (2020b). *Wonder and education: On the educational importance of contemplative wonder*. Bloomsbury.
- Scruton, R. (2009). *Beauty*. Oxford University Press.
- Shelley, J. (2003). The problem of non-perceptual art. *British Journal of Aesthetics*, 43(4), 363–378.
- Sherry, P. (2013). The varieties of wonder. *Philosophical Investigations*, 36(4), 340–354.
- Sibley, F. (1965). Aesthetic and nonaesthetic. *The Philosophical Review*, 74(2), 135–159.
- Smith, A. (1980). *Essays on philosophical subjects*. Clarendon Press.
- Swanton, C. (2018). Virtue ethics and virtue epistemology. In H. Battaly (Ed.), *The Routledge handbook of virtue epistemology* (pp. 508–521). Routledge.
- Tobia, K. P. (2015). Wonder and value. *Res Philosophica*, 92(4), 1–26.
- van Zyl, L. (2021). Wonder and environmental virtue. In G. Pettigrove & C. Swanton (Eds.), *Neglected virtues* (pp. 75–94). Routledge.
- Vasalou, S. (2013). Wonder: Toward a grammar. In S. Vasalou (Ed.), *Practices of wonder cross-disciplinary perspectives* (pp. 16–63). James Clarke Company, Limited.
- Vasalou, S. (2015). *Wonder: A grammar*. State University of New York Press.
- Walton, K. (1970). Categories of art. *Philosophical Review*, 79(3), 334–367.
- Watson, L. (2015). What is inquisitiveness. *American Philosophical Quarterly*, 52(3), 273–287.
- Watson, L. (2018). Curiosity and inquisitiveness. In H. Battaly (Ed.), *The Routledge handbook of virtue epistemology* (pp. 155–166). Routledge.
- Wilson, A. T. (2020). The virtue of aesthetic courage. *British Journal of Aesthetics*, 60(4), 455–469.
- Woodruff, D. M. (2001). A virtue theory of aesthetics. *The Journal of Aesthetic Education*, 35(3), 23–36.
- Zagzebski, L. (1996). *Virtues of the mind: An inquiry into the nature of virtue and the ethical foundations of knowledge*. Cambridge University Press.
- Zagzebski, L. (1999). What is knowledge? In J. Greco & E. Sosa (Eds.), *The Blackwell guide to epistemology* (pp. 92–116). Wiley-Blackwell.