

AESTHETIC EDUCATION: A PERCEPTUAL-COGNITIVE MODEL

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ABSTRACT

Here is a puzzle about aesthetic education. In a variety of contexts, we commit significant time, energy, and resources to aesthetic education. We teach (and in many cases publicly subsidize) university courses and degrees that have aesthetic education as their primary aim; we also invest public resources into museums, including enrichment programs that are also designed to afford aesthetic education. It would seem that if our commitment to aesthetic education is rational, then aesthetic appreciation is something that can be done better or worse. However, we also, in a variety of contexts (oddly enough, some of them being the same sorts of contexts that are designed to abet aesthetic education), act as if it is true that there is no disputing taste. We may try to persuade students to come around to particular judgments, but we do not penalize students for judging one way or another.

The aim of this paper is to dissolve the apparent puzzle of aesthetic education by clarifying its aims and advancing a conception of it that deemphasizes the role of taste. I claim that, pace "the default view of aesthetic education" (as I shall call it), the primary purpose of aesthetic education is not to educate taste. It is, rather, to facilitate the development of certain perceptual-cognitive capacities so as to enhance aesthetic experience and improve aesthetic appreciation. Thus, I call the view of aesthetic education advanced here "a perceptual-cognitive model".

Keywords: aesthetic education; aesthetic cognition; aesthetic normativity; aesthetic appreciation; taste.

1. Introduction

Here is a puzzle about aesthetic education. In a variety of contexts, we commit significant time, energy, and resources to aesthetic education. We teach (and in many cases publicly subsidize) university courses and degrees that have aesthetic education as their primary aim; we also invest public resources into museums, including enrichment programs that are also designed to afford aesthetic education. It would seem that if our commitment to aesthetic education is rational, then aesthetic appreciation is something that can be done better or worse. However, we also, in a variety of contexts (oddly enough, some of them being the *same* sorts of contexts that are designed to abet aesthetic education), act as if it is true that there is no disputing taste. We do not, as educators, tell students they are wrong or give them low marks if they remain unimpressed by Woolf's novels, Ozu's films, Monet's paintings, Beethoven's music, and so forth. We may try to persuade students to come around to particular judgments, but we do not penalize students for judging one way or another.

On the face of it, this puzzle about aesthetic education appears to be a manifestation of the general puzzle about aesthetic normativity in a specific context. That is, you might think that the puzzle of aesthetic education boils down to a question about whether aesthetic judgments and aesthetic value are objective or subjective. Thus, Nick McAdoo (1987) explicitly identifies the puzzle of aesthetic education as an instance of Kant's "antinomy of taste", according to which pure judgments of taste are both subjective and universal. According to McAdoo, "The main impediment to [aesthetic education] is [that] 'appreciation' is characteristically understood not only in an objective, but also in a subjective sense" (1987, 307). A slightly different way of putting the dilemma is this: On the one hand, it's easy to make sense of aesthetic education if aesthetic judgments are objective; the question simply becomes how they could be objective-what the source of normativity is. On the other hand, if aesthetic judgments are subjective, the question of normativity dissolves but then it is hard to understand aesthetic education as having a rational basis. For this reason, it may seem, as Alan H. Goldman puts it, "The issue of requiring or even encouraging aesthetic education is tied also to the question of whether certain sorts of taste in art are objectively better than others" (1990, 105).

This common characterization of the puzzle of aesthetic education has affected different disciplines in different ways, but it is fair to say that one upshot is that some humanistic disciplines regard aesthetic education as incoherent at best (because the antinomy cannot be resolved) or even pernicious (because the antinomy is resolved by acknowledging that the apparent objectivity of aesthetic judgments is illusory). Scholars in media studies (broadly conceived to include film and television studies), to take one example, often define their pedagogical project in opposition to aesthetic education. For example, in the 5th edition of a

textbook that bills itself as "the foremost guide to television studies (...) for over two decades", the author tells readers, "*Television [Visual Storytelling and Screen Culture*] does not attempt to teach taste or aesthetics. It is less concerned with evaluation than interpretation. It resists asking, 'Is *The Bachelor* great art?' Instead, it poses the question, 'What meanings does *The Bachelor* signify and how does it do so?''' (Butler 2018, ix). So, the puzzle of aesthetic education, characterized as an instance of the antinomy of taste, raises both a seemingly intractable philosophical question and has practical implications for educators in the humanities.

The aim of this paper is to dissolve the apparent puzzle of aesthetic education by clarifying its aims and advancing a conception of it that deemphasizes the role of taste. I claim that, *pace* "the default view of aesthetic education" (as I shall call it), the primary purpose of aesthetic education is *not* to educate taste. It is, rather, to facilitate the development of certain perceptual-cognitive capacities so as to enhance aesthetic education advanced here "a perceptual-cognitive model".

Let me briefly say what I mean by "enhance aesthetic experience" and "improve aesthetic appreciation". For reasons that should become clear as I defend the perceptual-cognitive model of aesthetic education against the default model, I take a deflationary view of both aesthetic experience and aesthetic appreciation. By "enhance aesthetic experience" and "improve aesthetic appreciation", I mean, basically, helping students to more closely attend to and accurately identify the artistically relevant properties (and their relations) of artworks. The account of aesthetic experience underlying this idea is "the content account" developed by Noël Carroll (2010, 2023). According to his most recent statement of the content account, one

[I]s having an aesthetic experience if they are attending with understanding to the formal properties and/or the expressive properties and/or the aesthetic properties of the artwork and/or the interactions thereof and/or to the reflexive relations between said properties and the viewer, listener, or reader. (Carroll 2023, 9)

Likewise, I take aesthetic appreciation not to be a matter of an emotive response or a valuing, but, rather, a matter of attending to and recognizing what the artist(s) have done in the work and how they have done it. On a capacious view of aesthetic experience, aesthetic appreciation might be one aspect of aesthetic experience. I am agnostic about whether we should regard aesthetic appreciation as an aspect of aesthetic experience more broadly, but will use both terms in similar ways. So, to summarise: On my view, aesthetic education is best understood on a perceptual-cognitive model, according to which its aim is to enhance aesthetic experience and improve aesthetic appreciation in deflationary, content-oriented conceptions of those terms. I hasten to add that this account of aesthetic education retains a normative dimension insofar as it (and the conceptions of aesthetic experience and aesthetic appreciation to which it is tied) hold that one can more or less accurately experience and/or appreciate artworks. For reasons I shall explain presently, I think this perceptual-cognitive model of aesthetic education has greater explanatory power than "the education of taste", better meshes with what those in the business of aesthetic education actually do, and can help to avoid the sorts of commonly raised objections to aesthetic education qua the development of taste. In the spirit of Noël Carroll's (2022) recent suggestion that we "forget taste" when it comes to the evaluation of art, my proposal is that we jettison the default view of aesthetic education as the development of taste in favour of an understanding of aesthetic education as aimed at developing perceptual-cognitive capacities that will improve aesthetic experience and aesthetic appreciation.

2. The default view of aesthetic education

It's somewhat surprising that in contemporary, analytic philosophical aesthetics, relatively little has been written about aesthetic education (as a philosophical question rather than a practical matter)—particularly if we set aside work that is specifically focused on Friedrich Schiller's *On the Aesthetic Education of Man* (e.g. Grossman 1968; Tauber 2006; Matherne and Riggle 2020, 2021; Leontiev 2023). In the work that has been done on aesthetic education, aestheticians have largely focused on one particular matter—the education of taste (McAdoo 1987; Goldman 1990; Fenner 2020). Moreover, outside of philosophical aesthetics, it is also common to conceive of aesthetic education as the education of taste. So, I will use the term "the default view of aesthetic education" to refer to the idea that the primary aim of aesthetic education is the education of taste.

Indeed, it is a tacit acceptance of the default view of aesthetic education as the education of taste that, I conjecture, underlies media studies' skepticism (if not outright hostility) towards aesthetic education. Jeremy Butler's textbook, cited above, is representative of the view that aesthetic education simply is not part of media studies' overall pedagogical project. Elana Levine and Michael Z. Newman's *Legitimating Television* draws heavily upon the work of Pierre Bourdieu as well as John Fiske, the latter of whom wrote,

So, those of who are in media education have a responsibility to our students and to our society to first of all try and destroy this

hierarchy of legitimation [of the media]. (Levine and Newman 2011, 153)

Levine and Newman describe their own project as "the work of analyzing patterns of taste judgment and classification [in order to] unmask misrecognitions of authentic and autonomous value, bringing to light their political and social functions" (2011, 7). For Levine and Newman, as for Bourdieu, Kant's antinomy is dissolved by recognizing that the universality of aesthetic judgments is a façade that hides the process by which the taste of the dominant classes is naturalised and reified.

A similar position is expressed, albeit more opaquely, by television scholar Helen Piper (2016), who reads Kant via Terry Eagleton. According to Piper,

[A]esthetic judgment may be problematic not simply because professional criticism is an act of cultural power, but because any judgement (by whomsoever it is made) will lack ethical authority unless underpinned by consensual ideals. (Piper 2016, 167)

Piper characterizes Kant's subjective universality (which she refers to as 'universal subjectivity') as "the old idea of aesthetic value as something that transcends space and time", (2016, 180-181) and claims that it "makes it difficult, if not impossible, to reconcile the aesthetic (certainly the pure aesthetic) with the culturally specific" (170). In view of these considerations, Piper concludes, "such observations raise further questions about the pedagogic responsibilities for scholars of a medium that has such enormous national reach, community potential and (possibly unmet) duties of social recognition" (181).

In short, the dominant view in the field is, roughly, that whatever else media studies pedagogy might involve, it ought not involve aesthetic education. This is because aesthetic education, in turn, involves reifying hierarchies of taste—hierarchies that are not reflective of objectively better or worse taste, but merely of how cultural power gets exercised.

3. Taste

Given that the conception of aesthetic education as the education of taste is the default view of aesthetic education, I want to first try to dispel the concerns raised by media studies scholars and like-minded critics of taste. Despite my advocacy for a perceptual-cognitive model, I realize that many people do think the primary aim of aesthetic education is the development of taste. However, when aesthetic educators concern themselves with development of taste, conceived as the exercise of aesthetic judgment, it is necessarily a secondary

concern. It is necessarily a secondary concern because improving one's aesthetic judgments cannot happen in advance of improving the perceptual-cognitive skills that are central to aesthetic experience and aesthetic appreciation.

So, although my primary aim is to develop a perceptual-cognitive model of aesthetic education, let me begin by trying to assuage some concerns that media studies scholars have raised about taste.¹ The first thing to say is that media studies' reading Kant via Bourdieu and Eagleton results in a number of distortions of Kant's views. Most significantly, in this context, Levine and Newman and Piper follow Bourdieu and Eagleton, respectively, in conflating aesthetic judgments (as a class) with a more specific sort of aesthetic judgment-namely, the pure judgment of taste (see, e.g., Zangwill 2001). As readers of this journal are likely to recall, Kant proposes three kinds of aesthetic judgement-judgments of the agreeable, judgments of taste [or judgments of beauty], and judgments of the sublime. Furthermore, Kant claims that judgments of taste may be "pure" or "impure." Pure judgments of taste are subjectively universal; they are judgements with which everyone ought to agree, involving disinterested satisfaction in an object that is not subsumed under a concept of an end or purpose. A judgment of taste is impure if it involves "charm and emotion", or if it takes as its object "dependent" (also called "adherent") beauty. For unlike in making a judgment of "free beauty", in making a judgment of dependent beauty, one subsumes the object under a concept of an end or purpose. As Paul Guyer has put it, Kant holds that "in 'pure' judgements of taste our pleasure in beauty is a response only to the perceptible form of an object, not to any matter or content it may have" (2014, 435). Thus, Kant's examples of "free beauty" are natural objects (e.g. flowers and birds), as well as artifacts such as "designs a la grecque, foliage for borders, wallpapers (...) and all music without words" (ibid).

The features of aesthetic judgments that media studies scholars worry about disinterestedness, universality, autonomy—feature in Kant's account of pure judgments of taste. But, somewhat remarkably, these aesthetics skeptics (as Sarah Cardwell (2013) has called them) overlook the fact that, on a plausible reading of Kant's own account, the representational arts possess dependent beauty and are thus not the objects of pure judgements of taste. But if representational artworks, like films and television programs, are instances of dependent beauty rather than free beauty, then there is no obstacle to making (impure) aesthetic judgments of them that take into account their socio-historical contexts, cultural or political functions, and so forth (Zangwill 2001).

¹ I will not attempt to assuage Carroll's concerns about taste because I think they are all on the mark if we understand *taste* as he does—i.e. "a hedonic concept linked to pleasure" (2002, 4).

Moreover, and aside the question of how to interpret Kant, it is not clear why media studies scholars assume that aesthetic judgments take the form of Kantian pure judgments of taste. One is hard pressed to identify a single scholar or critic who, regardless of Kant's actual view, advocates the aesthetic appreciation of art on Kant's model of pure judgments of taste. Certainly, there are Kantian ideas that have influenced various norms of aesthetic criticism. For example, a commonplace of aesthetic criticism holds that one's aesthetic appreciation of an artwork requires one to bracket off various sorts of instrumental value the work might have (e.g. as a financial investment, as a status symbol, etc.) But this is hardly tantamount to making a pure judgment of taste and does not, in any case, enjoy universal acceptance amongst philosophers of art (see, e.g., Carroll 2010, 2023; Wolterstorff 2015). Consider another example: as mentioned earlier, there is a puzzling question about the normativity of aesthetic judgments. Kant characterizes this in terms of a claim to universality. But this is hardly the only way one might think about the normativity of aesthetic judgments, and it is far from clear that this conception of aesthetic normativity attends most, or even much, aesthetic criticism. And it seems even more implausible that this conception of aesthetic normativity underpins the efforts of those who do engage in aesthetic education precisely because it is not as if professors frequently insist that students ought to assent to their aesthetic judgments. In short, there are good reasons to think that if taste is involved in aesthetic education, then it is rather different from that which is involved in Kantian pure judgments of taste.

If the Kantian sense of taste is not what's at stake in aesthetic education, could the development of a more capacious sense of *taste* still be aesthetic education's primary aim? I take it this is a central part of Alan Goldman's proposal:

The main and final point of aesthetic education, then, is not knowledge in itself or knowledge required to make correct evaluations, but the preparation of the faculties for intensely meaningful and enjoyable experiences of artworks that can afford them to those trained to appreciate them. (Goldman 1990, 116)

Despite Goldman's attempt to shift focus from aesthetic "evaluation" to aesthetic "experience", his invocation of "enjoyable experiences" nevertheless recalls Kant's emphasis on the satisfaction or pleasure attending the judgment of taste. This is not an idiosyncratic feature of Goldman's proposal; even shorn of any Kantian baggage—say, for example, on a Humean conception—the fundamental difficulty with *taste* in the context of aesthetic education is its essential emotive, subjective dimension.

As I hope to show in what follows, we would do better to conceive of aesthetic education as the development of perceptual-cognitive skills *without* invoking

the experience of pleasure (or another emotive experience). I have not presented a knock-down argument to show that taste is never an aim of aesthetic education, let alone that it cannot be developed via aesthetic education. Rather, I have tried to highlight the fact that it is hard to make sense of aesthetic education as the development of taste in the absence of a resolution of Kant's antinomy. While there is no shortage of proposed solutions, there is no widespread acceptance of any of them.

Despite this, we *do* invest significant time and money in aesthetic education, which ought to make us wonder if, in fact, there isn't an entirely different account of aesthetic education that has just as much, if not more, explanatory power, but is more parsimonious and avoids the sorts of intractable philosophical debates that attend *taste*. I now turn to developing such an account.

4. Perceptual learning

A prima facie plausible conception of aesthetic education emphasizes the process of honing students' perceptual capacities. From secondary school art courses to postgraduate art history seminars, students are encouraged to attend to particular qualities (and their relations) of artworks: Notice the tonal contrast between the foreground and background of the photograph; see how the use of empty space balances the frame; look at the pattern of brushstrokes; listen for the resolution of the suspension; and so forth. In these instances, educators seek to help students learn what to attend to and how. Moreover, in his discussion of aesthetic education, Goldman highlights the significance of being able to attend to certain relations amongst a work's properties-"formal, referential (representational and expressive), and historical" (1990, 113). Noting that perceptual and cognitive processes sometimes overlap and intermingle (including in one way I am about to describe), I want to focus, for the moment, on perception, saving a discussion of the involvement of more thoroughly cognitive capacities in the apprehension of referential and (art-) historical properties for the next section.

Learning to direct one's attention in particular ways is one of several ways in which perceptual learning can occur. Following Eleanor Gibson (1963) and Kevin Connolly (2019), whose recent account builds upon Gibson's, I understand *perceptual learning* to involve "long-term changes in perception that are the result of practice or experience" (Connolly 2019, 7). My claim is that a central component of aesthetic education is perceptual learning. In order to pump our intuitions about the plausibility of perceptual learning, philosophers have invoked contrasts between how a spoken language sounds to a native speaker versus a non-speaker, how the relationship between pieces on a chess board appears to a grandmaster versus an amateur, how wine tastes for a

connoisseur versus a novice taster, and how Beethoven's 9th Symphony sounds to a conductor versus a non-musician (see Connolly 2019 for discussion). Importantly, though, there is also a substantial body of evidence for perceptual learning from research in psychology and neuroscience (see e.g., Goldstone and Byrge 2015; Prettyman 2018), including some studies suggesting that artistic expertise affects the perception of artworks (e.g. Vogt and Magnussen 2007; for a review of the literature as it pertains to aesthetics, see Ransom 2022).

In order to see more clearly how perceptual learning might occur as a result of experience or training in artistic contexts, let me briefly outline three of the main mechanisms by which perceptual learning is thought to occur-attribute differentiation, unitization, and attentional tuning (Goldstone and Byrge 2015; Connolly 2019). In instances of attribute differentiation, one becomes able to discriminate amongst multiple properties or features that, prior to experience or training, one perceived as a single property or feature. Some well-known studies of attribute differentiation involve the perception of color. Most people experience a single, overall perception of color. However, evidence suggests that, with training, people can learn to discriminate between brightness (the amount of black or white added to a color) and saturation (the luminance of the color), and selectively attend to these individual features of colors (Goldstone and Byrge 2015, 823). Although there are no studies that have replicated these findings in the context of art appreciation, specifically, it is certainly plausible that the ability to differentiate between these two features of color is relevant for art appreciation and that developing this capacity is one of the aims towards which an educator might strive.

Consider another example of how attribute differentiation might work in an artistic context: In cinema, a "cut" is the joining together of two distinct pieces of film footage (or "shots"). The number of shots and cuts in a film can vary considerably, but a contemporary Hollywood feature film typically has well over 1000 shots.² Because the goal of the classical Hollywood style is to immerse the viewer in the world of the story, many cuts are designed to be imperceptible such that viewers perceive a continuous flow of story events across space and time. For this and other reasons having to do with the neurobiology of our visual system, most people tend to notice many fewer cuts than a film actually has (e.g. Magliano and Zacks 2011; Smith 2012; Heimann et al. 2017). But, if we want to appreciate how narrative events have been sequenced, or how a filmmaker cues particular responses by patterning cuts in specific ways, we need to be able to notice them—to differentiate between one

 $^{^2}$ In a 2010 survey of 10 Hollywood films released every 5th year between 1935 and 2005, inclusive, James Cutting and colleagues (2010) found that the median number of shots was 1,132. Generally speaking, however, shots (and cuts) have become more plentiful as average shot-length has decreased over time. So, for example, the film in Cutting's sample with the most shots was a 2005 release, which had 3,099 shots.

shot and the next. And this is precisely one of the skills that film teachers aim to develop in their students.

The next mechanism of perceptual learning is unitization; it is the inverse of attribute differentiation. In cases of unitization, experience or training allows one to perceive multiple objects or features as a single percept. In describing unitization, several commentators note empirical evidence that suggests it occurs in medical settings where a professional with sufficient training learns to see a particular array of figures under a microscope or on a radiograph as, say, a malignant growth (e.g. Kranse et al. 2013; Seitz 2017). In an artistic context, we might think of the ability to hear distinct notes as comprising a particular interval or several distinct chords as a progression. Most of us have probably, at one time or another, had the experience of listening to a relatively unfamiliar type of music with someone who has had significant exposure to it or has expertise. Whereas I might hear "Coltrane changes" (chord substitutions for standard jazz chord progressions), my wife hears only a string of random chords. Or, perhaps when your Javanese friend hears a harmonic progression in a Javanese Gamelan piece, you only hear random notes. Fittingly, the process of learning to perceive intervals, chords, melody, rhythm, and other features of music is referred to as "ear training". For the trained musician need not stop and think about whether the notes they hear constitute a tritone; the learning they have undergone is *perceptual* insofar as they simply hear a tritone (it is cognitive as well, insofar as they know it is a *tritone*, but what's important here is that they perceive it as such).

Unitization is, thus, plausibly a common mechanism by which perceptual learning occurs as part of ear training and music education more broadly. Moreover, there is some empirical evidence supporting the intuition such examples are designed to pump—i.e., that musical training frequently results in the ability to actually hear sounds differently (see, e.g., Fujioka et al. 2004; Pantev and Herholz 2011).³ The question of direct evidence for musical training on perceptual learning notwithstanding, it seems undeniable that a central aim of musical education is, precisely, to facilitate perceptual learning.

The third mechanism by which perceptual learning is thought to occur is *attentional tuning* (sometimes called *attentional weighting*). In cases of attentional tuning, "perception becomes adapted to tasks and environments (...) by increasing the attention paid to perceptual features that are important, and/or by decreasing attention to irrelevant dimensions and features" (Goldstone and Byrge 2015, 819). A number of studies of visual perception in athletes have

³ However, one commentator cautions, "the information this research has provided on auditory perceptual learning *per se* and its mechanisms is qualified by the fact that most training is multimodal and sensorimotor in nature, and by the relative paucity of experimental studies allowing the control of confounding variables" (Irvine 2018, 11).

shown that highly experienced athletes, including soccer plays and fencers, focus their visual attention on features of their opponents' bodies in ways that allow them to perceive indications of where or how their opponents will move next. For example, one study has shown that, when defending, expert soccer players focus their attention on the hips of their opponents longer than non-experts (Williams and Davids 1998; for a review, see Connolly 2019).

Why think that such cases of attentional tuning are instances of perceptual learning? Several philosophers have marshalled evidence from empirical studies to argue that, as Ned Block puts it, "the phenomenal appearance of a thing depends on how much attention is allocated to it" (quoted in Connolly 2019, 89). Kevin Connolly points out that *where* one attends, as well as how much attention is allocated, also affects one's perception of "low-level" features (2019, 89). Of course, one might still wonder whether such perceptual effects involve long-term changes in perception rather than the ability to exercise one's attention in a specific way (like deploy a particular skill) when wanted.

Although there may not be a knock-down argument for the perceptual learning view, its plausibility can be bolstered by marshalling a few hypothetical examples which seem to be best explained by the perceptual learning thesis. Remaining with sports for a moment: The baseball great Ted Williams, who had 20/10 vision, reported that, in the batter's box, he could see the individual stiches on a baseball and, thus, the part of the ball he wanted to strike with the bat. Given that a fastball travels from a pitcher's hand to home plate in approximately half a second, it's hard to conceive of Williams's attentional weighting as deliberately or consciously engaged; more plausibly, he came to automatically see the ball in this particular way as a long-term effect of his (storied) training regimen.⁴ The rest of us mere mortals probably make use of attentional tuning in more mundane ways. After years of experience, we may be able to *just hear* that a song is in ³/₄ time or has a I-IV-V chord progression, or *just see* checkmate in two moves, that a child is lying, that we need to apply the break to slow down in time to exit, or that a card player is bluffing.

Empirical evidence of attentional tuning in the context of artistic appreciation is somewhat limited, but several studies have shown that experts and non-experts attend to different features of artworks and for different durations (e.g. Nodine, Locher, and Krupinski 1993; Vogt 1999; Kapoula and Lestocart 2006; Vogt and Magnussen 2007; Pihko et al. 2011). In the context of artistic appreciation, we can, as above, enumerate a variety of cases in which attentional tuning is plausibly the best explanation of the ability of trained artists and critics to perceive features of artworks that novices are unlikely to notice or unable to perceive at all.

⁴ On automaticity and perceptual expertise, see Stokes 2021.

Indeed, part of the reason we read art criticism is that we are interested what experts perceive *in* a work—especially when we have the sense that there are salient perceptual features of a work that we have missed or sensed but couldn't quite identify. That is, part of the value of good criticism is the critic's ability to lucidly report what they perceived in a work in a way that helps us novices attend to those features. Consider this blog entry from the singular David Bordwell:

Some viewers and critics think the jarring quality of [*The Bourne Ultimatum* (2007)] proceeds from rapid editing. The cutting is indeed very fast (...). But there are other fast-cut films that don't yield the same dizzy effects (...). Something else is up. Partly, it's not the pace of the editing but the spasmodic quality of it. Cuts here seem abrasive because they interrupt actions and camera movements. Pans, zooms, and movements of the actors are seldom allowed to come to rest before the shot changes. This creates a strong sense of jerkiness and visual imbalance. (Bordwell and Thompson 2011, 167-168)

You can probably think of your own examples of turning to a trusted critic in the knowledge that, thanks to their expertise or training, are able to attend to artworks in ways that allow them to perceive salient features that you cannot. Although I have little musical training (and none on piano), I recognize that Yuja Wang's playing is astonishing. So, after watching a performance or listening to a recording of hers, I will turn to the review of an expert critic knowing that they have perceived qualities of the performance that I have not. If you are at all like me, you may regularly read the very *best* critics of an artform in which you *do* have some training because their expertise still regularly allows them to perceive artistic features of which you perhaps have only a fleeting recognition.

Or perhaps, like the Salieri of Peter Schaffer's *Amadeus* (1984), you have enough training in an artform to appreciate the astonishing ability of singular experts like Mozart to *just hear* that a particular interval or phrasing will work for a piece. Needless to say, not all perceptual learning leads to perceptual expertise—whether in art, sport, or some other context. And no doubt that some individuals, like Ted Williams, David Bordwell, Yuja Wang, and W.A. Mozart, are gifted with immense innate capacities that allow them to reach a level of expertise that most of us will never approach no matter how much training we have. But expertise is a scalar concept, and the empirical studies suggest there are substantive differences in how attention is tuned by those with extensive training and experience in a given domain in comparison to laypersons. As Dustin Stokes puts it in a recent, empirically informed philosophical account worth quoting at length: For many kinds of expertise, the exceptional performance of the expert involves sensory perception in some important way. The expert knows where to look, how to listen, what she is tasting, and so on. She sees things more quickly, distinguishes patterns that others cannot detect at all, and rapidly makes comparisons between perceptible features that others can scarcely understand. This kind of achievement clearly involves experience and learning, and often requires explicit, time-consuming training specific to the relevant domain. It is also intuitive that this kind of expertise is, in a rich sense, genuinely perceptual. Put simply, it is plausible that many experts are better perceivers in the domain(s) of their expertise. (Stokes 2021, 242)

In the context of aesthetic education, educators are, in Stokes's sense, perceptual experts, and one of their central aims is to abet perceptual learning that will help students attend more closely to relevant artistic features. Thus, although I have identified three plausible mechanisms of perceptual learning—attribute differentiation, unitization, and attentional tuning—the cultivation of particular sorts of attention, broadly speaking, is the upshot of successful cases of perceptual learning.

At this point, an interesting question naturally arises. If the goal of facilitating perceptual learning in sport is to become more competitive and, in the context of artistic creation, to become a better musician, composer, painter, or whatever, what could be the aim of fostering perceptual learning in the context of artistic appreciation? Here we need to return to the term "aesthetic education". What is distinctive about aesthetic education, I think, is that unlike in any other context, the ideal upshot of perceptual learning is enhanced aesthetic experience and fuller aesthetic appreciation. That is, the rationale for facilitating perceptual learning in the classroom is that it will afford students more complete aesthetic experiences of artworks and help them more fully appreciate them.

Recently, Bence Nanay (2016) has developed a sustained account of the role of distributed attention in many paradigm cases of aesthetic experience. In part, Nanay's aim is to rehabilitate the idea of "aesthetic attention". However, Nanay distinguishes his use of this term from the sense in which Jerome Stolnitz (1960) used it (and which George Dickie (1964) famously critiqued)—i.e. as *disinterested attention* or attention to an object for its own sake. Rather, the sort of attention that Nanay characterizes as *aesthetic* is "focused with regards to the perceptual object" (2016, 29). Nanay is careful not to claim that such attention is either necessary or sufficient for aesthetic experience. However, he argues that, in some cases, such attention is needed "to appreciate the unity and integration of what we experience aesthetically" (2016, 29). Of course, artworks

are particular *sorts* of perceptual objects (though not all artworks are perceptual objects); they are designed and shaped with particular intentions and they aim at particular effects. It is for these reasons that William P. Seeley characterizes artworks as "attentional engines": "They are artifacts designed to direct our attention to those features sufficient to categorize them so that we can recover their artistically salient content" (2020, 50). So, attention is also important to aesthetic education in another way: it is not only central to perceptual learning *in general*, but, furthermore, to our aesthetic engagement with artworks.

Two potential objections should be addressed. First, if attention really is centrally involved in many paradigm cases of aesthetic experience, then, surely, no cultivation of it is necessary since evidently people with no aesthetic education still have aesthetic lives full of rich aesthetic experiences. Second, if artworks are, in fact, typically designed to direct attention in particular ways, then, once again, the development of attention seems unnecessary. There is some truth in both of these objections. It is true that people with standard, functional perceptual capacities already have the ability to direct their attention in whatever ways are minimally necessary to have aesthetic experiences. It is also true that a great number of artworks, especially what Noël Carroll (1998) terms mass artworks, are designed to direct our attention in ways that make them legible. Just as standard, functional perceptual capacities are sufficient for aesthetic experience, they are also sufficient for engagement with at least some forms of art. Notwithstanding the elements of truth in these objections, both neglect the fact that aesthetic appreciation can be more or less thoroughgoing and aesthetic experience can be more or less rich.

In view of the ease of legibility of mass art, as described by Carroll, let us take movies as an example of art that is immediately accessible in some ways, but which can be more fully appreciated if one's attentional skills are refined. In the discipline of film studies, the textbook *Film Art*—first published by David Bordwell and Kristin Thompson (1979), and in later additions also published with Jeff Smith (2024) —stands out as a paradigm case of an effort to tune attention with the aim of enhancing students' aesthetic appreciation and aesthetic experiences of cinema. Consider this passage:

In watching a narrative film, we usually don't notice style; we're too busy following the story. Suppose, though, we want to notice stylistic patterning—to enhance our appreciation, or to understand how we might also create films. How can we study style? One suggestion is apparent: *Look and listen carefully*. (Bordwell, Thompson, and Smith 2020, 307)

And, in fact, much of the 300 pages that precede this passage go into exacting detail, replete with specific examples and still images, about how one might attend to cinema in a way that brings these patterns into sharp relief.

Film Art's emphasis on teaching students how to attend to films is complemented by explanations of the various ways films themselves are designed to guide attention in the sorts of ways Carroll (1998) and Seeley (2020) describe. In one interesting passage, Bordwell, Thompson, and Smith note that Tim J. Smith's eye tracking research provides some empirical evidence for the hypothesis that films regularly direct viewers' gazes by manipulating various aspects of mise-en-scene, including lighting and staging. But of course, lighting and staging are just two of many aspects of film form that filmmakers use to guide attention. William P. Seeley and Noël Carroll (2013; 2014) argue that another key cinematic technique here is "variable framing"-the way in which a film changes our vantage point on the objects and events of the story world. For many years, film scholars and educators gave less attention to sound. But recently that has changed thanks to recent scholarship on the topic, as well as the relative affordability of multi-channel surround sound systems in university screening rooms. With a decent sound system, I can now ask my class to try to attend to the 360-degree panning of the sound of helicopter in the opening sequence of Apocalypse Now (1979).

Thus far, my focus has been upon the development of perceptual skills and the engagement with the formal properties of artworks in aesthetic education. But, of course, we also bring our cognitive capacities to our experience of art, and, as I indicated at the outset, it is plausible that the development of cognitive skills and knowledge is another central aim of aesthetic education. As Seeley puts it,

Consumers need a lot of background knowledge to *see-with* an artwork. At a minimum they need an understanding of the productive and evaluative norms and conventions that define different categories of art. Artistic norms and conventions are tools that guide how we *see what is shown* with an artwork. (Seeley 2020, 31)

5. Developing art-historical knowledge

Recall Alan Goldman's claim, which served as a jumping off point for this discussion, about aesthetic education as learning to direct one's attention to three sorts of relations within artworks: formal, referential (representational and expressive), and historical (1990, 113). So far, my focus has largely been on the perception of formal features and relations. But the apprehension of many other properties, including representational, expressive, and historical properties

requires us to deploy our cognitive resources (primarily, in this context, knowledge)—and, as Seeley suggests, sometimes those cognitive resources in fact bear upon how we actually perceive a work's properties.

Let me briefly sketch some of the sorts of knowledge that aesthetic education aims to develop and how such knowledge directs our attention to (and abets our apprehension of) various features and their relations. First, consider the material basis of an artform. In degrees devoted to arts ranging from cinema to music to painting, it is not uncommon for students to be required to spend some amount of time in practice-based courses-even if their focus is, say, musicology, art history, dramaturgy, film studies, and so forth. One of the reasons for this is, to paraphrase David Bordwell, such courses help them "think like artists" by illuminating the various affordances and constraints offered by the material basis of the artform in which they are working (on the relevance of constraints for artistic creation, see Smith this issue). It's hard to appreciate the bravura of the long take(s) (of scenes involving hundreds of extras) of Russian Ark (2002) or Roma (2018) if one doesn't have a sense of what's physically and practically involved in choreographing an extended take for a mobile camera. A similar point holds for the performance of musical and theatrical pieces. Wang's performances, for example, are bold and dazzling in part because of the speed and clarity with which she is able to play intricate phrasings across the length of the piano. As Kendall Walton puts it,

The energy and brilliance of a fast violin or piano passage derives not merely from the absolute speed of the music (together with accents, rhythmic characteristics, and so forth), but from the fact that it is fast *for that particular medium*. (Walton 2008 [1970], 207)

In some cases, the nature of a work's expressive properties has a direct connection to the material base of the artform. The sombre, ominous, stark qualities of *films noir* are partly engendered by the use of black and white film stocks and low-key lighting setups. The warmth and resonance of an electric guitar solo might derive from choices about string gauge, pickups, and amplifier. The richness of color in Venetian paintings of the Cinquecento partly owes to a particular method of applying paint.

Of course, artists don't ply their materials in vacuums; rather, they work within particular art-historical contexts in which the use of materials is governed by widely shared norms and conventions. So, the artistically salient features of any work (including representational and expressive properties) are also partly determined by the artistic norms and conventions operative in the context of creation. Thus, another aim of aesthetic education is to familiarize students with those norms and conventions. As Seeley and others have pointed out, oftentimes particular groups of norms and conventions comprise particular categories of art—genres, styles, and so forth. In film studies, we teach students about the norms of spatio-temporal continuity in the classical Hollywood style, and the narrative conventions of the horror genre. In English literature courses, we detail the stylistic conventions of post-modernist literature. And in art history classes, we explain the norms of depicting depth in painting across various cultures and eras.

Importantly, the knowledge of such categories of art, and, more specifically, the norms and conventions constituting them, as well as the historical relations between various categories sometimes have top-down effects on how we perceive particular works (and their features). As E.H. Gombrich put it, "A style, like a culture or climate of opinion, sets up a horizon of expectation, a mental set, which registers deviations and modifications with exaggerated sensitivity" (2000 [1960], 60.) This is part of the point of Kendall Walton's (2008 [1970]) famous thought experiment involving an alien society that has an artform known as 'guernicas'" (2008 [1970], 204). Instances of this artform have the "colors and shapes of Picasso's *Guernica*, but the surfaces are molded to protrude from the wall like relief maps of different kinds of terrain" (2008 [1970], 204). Walton suggests that, for a member of this society, Picasso's work would count as a "guernica", yet

Its flatness, which its standard for us, would be variable for members of the other society, and the figures on the surface, which are variable for us, would be standard for them. (Walton 2008 [1970], 205)

Moreover, he concludes,

This would make for a profound difference between our aesthetic reaction to *Guernica* and theirs. It seems violent, dynamic, vital, and disturbing to us. But I imagine it would strike them as cold, stark, lifeless, or serene and restful, or perhaps bland, dull, boring—but in any case *not* violent, dynamic and vital. (Walton 2008 [1970], 205)

Those of us who have grown up on movies that are shot and cut with the freneticism of *The Bourne Ultimatum* (2007) will need to place a film like *His Girl Friday* (1940) in a related, but slightly different category. Compared to *The Bourne Ultimatum*, *His Girl Friday* may strike one as neither fast nor energetic. But His Girl Friday is fast and energetic for a Hollywood screwball comedy, which is the relevant comparison category.

This latter point takes us beyond a descriptive, psychological question about topdown effects on our perception of artworks to normative questions about the categories in which artworks *should* be placed and, in relation, what aesthetically relevant features they actually have. As Walton notes, "One way of approaching this problem is to deny that apparently conflicting aesthetic judgments of people who perceive a work in different categories actually do conflict" (2008 [1970], 210). But here we see another common aim of aesthetic education—namely, the cultivation of art-historical knowledge that facilitates the *correct* categorization of artworks and, thus, better apprehension of the aesthetically relevant features of those works. Walton argues that normativity about artistic categories tacitly underlies our ordinary, appreciative practices:

[O]ne who asserts that a good performance of the *Adagio Cantabile* of Beethoven's *Pathétique* is percussive, or that a Roman bust looks like a unicolored, immobile man severed at the chest and depicts one as such, is simply wrong, even if his judgment is a result of his perceiving the work in different categories from those in which we perceive it. (Walton 2008 [1970], 211)

Interestingly, Walton goes on to assert that rather than privileging our own aesthetic judgments, we also admit when we have judged incorrectly if we subsequently recognize that we perceived a work in the wrong category. According to Walton,

We are likely to regard cubist paintings, or Japanese *gagaku* music, as formless, incoherent, or disturbing on our first contact with these forms largely because, I suggest, we would not be perceiving the works as cubist paintings, or as *gagaku* music. But after becoming familiar with these kinds of art, we would probably *retract* our previous judgments, admit they were mistaken. (Walton 2008 [1970], 211)

I think Walton is right about this if the 'we' in the sentence refers to people who already have a fair amount of aesthetic education and/or experience engaging with unfamiliar artforms. But, in fact, I submit, part of the point of aesthetic education is precisely to help students recognize that artworks can be categorized and perceived more or less correctly, and, furthermore, that we can and *should* make more accurate judgments about works partly by learning about the categories in which they are correctly perceived.

Consider, for example, the familiar experience of showing experimental film to students whose familiarity with cinema does not extend far beyond the multiplex. Common responses include comments like: "That's not a movie", "That's the worst movie I've ever seen", and "That was the most boring movie I've ever seen". It hardly matters if one shows them work by Hollis Frampton, Maya Deren, Gunvor Nelson, Michael Snow or Su Fridrich; the responses follow a similar pattern. The reason is that relatively few of the features that students assume to be "standard" (to use Walton's terminology) for cinema are present in experimental film (character, narrative structure, narrative causality, etc.). And, in fact, sometimes students are vocally frustrated that experimental films so radically defy their expectations.

In such contexts, the aim of aesthetic education is to provide students with the relevant art-historical knowledge that allows them to reconceptualize the categories in which they perceive films. That is, we try to get them to see the films with which they are familiar as belonging to a more specific category then "movies"—namely, the classical Hollywood style. And (again, staying with Walton's terminology) we teach them what features are standard, contrastandard, and variable for that category. We also teach them about the arthistorical context in which experimental film arose and help them become more familiar with instances of that category, so they can also start to recognize *its* standard, contra-standard, and variable features. The aim is, I submit, not to get students to *like* experimental film (though we may hope that some of them will come to like it); rather, it is to provide them with the knowledge that allows them to see it in the correct context and, as a result, attend to its artistically relevant features. The hope is that students will be in a better position to aesthetically appreciate such works.

6. Conclusion

In the preceding discussion, I have suggested that there are a variety of benefits to conceiving aesthetic education as primarily involving the development of perceptual-cognitive skills rather than the cultivation of taste. One advantage of the perceptual-cognitive model I have sketched is that it dissolves an apparent puzzle about aesthetic education that looks like a version of Kant's antinomy of taste. A second merit is that the perceptual-cognitive model more accurately describes what aesthetic educators actually do. A third asset is that, even when aesthetic educators do aim at developing taste (qua critical judgment), they necessarily do this by attempting to hone students perceptual-cognitive skills.⁵ I concluded the previous section by suggesting that one underlying purpose of the perceptual-cognitive model of aesthetic education is to improve aesthetic appreciation. In this sense, the perceptual-cognitive model still has a normative dimension. Aesthetic appreciation (of which critical evaluation is a part) can be done better or worse, more or less accurately. But the perceptual-cognitive model avoids the challenges of Kant's antinomy of

⁵ Moreover, this view of aesthetic education meshes with an intuitively plausible view of education in general, according to which educators aim not to tell students what to think, but to teach them *how* to think so that they might arrive at more informed, accurate conclusions. Thanks to Murray Smith for mentioning this to me in personal correspondence.

taste (and media studies scholars' objections to *taste*) by grounding normativity in facts about features an artwork actually has rather than perceivers' emotive responses to it. Only by conceiving of the normativity of aesthetic education in this way (as grounded in facts about what artworks are actually like) can we dissolve the apparent puzzle of aesthetic education, let alone make a practical case to those who hold the pursestrings about its value.

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