

REMODELING AESTHETIC THEORY:

PORTRAIT OF THE ARTIST AS AN AESTHETIC EXPERT

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For the most part, the Aesthetic Theory of Art—any theory of art claiming that the aesthetic is a descriptively necessary feature of art—has been repudiated, especially in light of what are now considered traditional counterexamples. We argue that the Aesthetic Theory of Art can instead be far more plausibly recast by abandoning aesthetic-feature possession by the artwork for a claim about aesthetic-concept possession by the artist. This move productively re-frames and re-energizes the debate surrounding the relationship between art and the aesthetic. That is, we claim Aesthetic Theory so re-framed suggests that the aesthetic might have a central and substantial explanatory role to play within both traditional philosophical enquiries as well as recent and more empirical enquiries into the psychological and cognitive aspects of art and its practice. Finally, we discuss the directions this new work might take—by tying art theory to investigations of the distinctive sensorimotor capacities of expert artists, their specialized aesthetic conceptual schemata, and the ways these distinctive capacities and schemata contribute to the production of artworks.

INTRODUCTION

The aesthetic has fallen on hard art-theoretic times. Theories according to which possession of some distinctively aesthetic feature is substantively necessary for something's being an artwork (Aesthetic Theories of Art), though once privileged, now are standardly considered to be more or less art-theoretically bankrupt. To be sure, aesthetic features still figure to varying degrees in philosophical enquiry into art and its associated relations.¹ However, scant few think that such features must figure substantively in *what it is to be art*; even those who assign aesthetic features some purportedly essential role end up unloading the bulk of the explanatory burden onto the non-aesthetic features.² Our own assessment of the Aesthetic Theory of Art in what follows is no different. We not only assume that for something to be an artwork that thing need not possess some aesthetic property, satisfy some aesthetic function, be the object of some aesthetic attitude, or engender some aesthetic experience, we also regard

¹ For example, Nick Zangwill's (2001) aesthetic formalism deals with what kind of aesthetic properties an artwork may have, Peter Lamarque's (2001) aesthetic essentialism asks whether artworks that possess aesthetic properties possess them essentially, and Gary Iseminger's (2004) aesthetic functionalism is solely concerned with what art practice and art institutions are good at doing (aesthetic communication). Notice that none of the above positions entails that, necessarily, artworks are aesthetic objects.

² For example, Robert Stecker (1997) and James Anderson (2000) take the aesthetic to be essential for understanding the nature of art. However, each of them also take art to be disjunctively natured and so, subsequently count the aesthetic as constitutive of only one of the disjuncts, which thereby allows their accounts to avoid entailing that artworks must be aesthetic objects (i.e., must possess some aesthetic feature or other).

philosophy of art as better off to the extent it abandons wholesale the position that aesthetic-feature possession—be it in terms of properties, functions, attitudes, experiences—must be constitutive, even in part, of any descriptive account of what it is for something to be an artwork.

That said, the failure of the aesthetic to be constitutive of what it is to be an artwork does not itself entail the failure of the aesthetic *tout court* to figure substantively, if not essentially, in art-enquiry at least when broadly construed. In fact, we aim to show that the aesthetic can revive its art-theoretic fortunes by looking to the promising results of enquiries elsewhere located within the sciences of the mind such as psychology, cognitive science, and neuroscience. More precisely, we discuss the empirical literature on artistic expertise and its link to aesthetic concept development, especially with respect to the following:

- Sensory and motor prerequisites for aesthetic concept possession
- Motor abilities to imbue objects with aesthetic properties
- Sensory abilities to detect finer-grained and higher-order structural properties of artworks
- Specialized knowledge of concepts in art theory and art history
- Cognitive strategies to detect relationships between structural and aesthetic properties

We suggest that by abandoning the descriptive features of artworks in favor of the cognitive demands of art production (at least as specified in the list above), Aesthetic Theory can trade its bankrupt principal claim about the nature of *artworks* for a far more plausible and productive—though no less art-theoretically substantive—claim about the nature of *art practice*.

To this end, we take our project to come in two principal parts. The first part is dedicated to carving out the minimal art-theoretic space within which to recast the connection between art and the aesthetic. In the second part, we delineate the various kinds of empirical work (the impact, scope, and direction thereof) both informing and informed by that recast connection between art and the aesthetic as illuminated within the art-theoretic framework established in the first part. We not only review the science of aesthetic experience and art production, but also highlight a host of new research questions regarding the distinction between artists and non-artists, and the differences between art-production and similar activities. To illustrate these relationships, we focus especially on artistic expertise—on the assumption that the distinctive psychological capacities required for art production will be most expressed in master artists. We provide a *prima facie* compelling way in which Aesthetic Theory can re-emerge with newfound import within the philosophy of art as well as central relevance for the more recent empirical enquiries into the psychological, neural, and evolutionary nature of art and its practice—i.e., as an empirically informed art theory capable of responsibly constraining and directing empirical enquiry into art and art *relata*.

PART ONE: REMODELING AESTHETIC THEORY

THE STANDARD AESTHETIC THEORY OF ART

The Aesthetic Theory of Art comes in myriad forms, and each disparate version has its own specific, theoretical baggage, its own merits and demerits. However, uniting them all is the same minimal claim: aesthetic-feature possession is substantively necessary for something's being art. We call the Aesthetic Theory of Art traditionally modeled as such the 'The Aesthetic-Feature Theory of Art' and take its most plausible minimal formulation to be as follows:

The Aesthetic-Feature Theory of Art: For all artworks w , there must be some *aesthetic feature* ϕ , such that, (i) w has ϕ and (ii) the way in which w has ϕ is constitutive of the way in which w is an artwork.³

Note that we employ the term 'feature' merely for simplicity's sake as a broad stand-in for aesthetic properties, functions, purposes, experiences, or attitudes.

The point here is that standard aesthetic theories of art, even granting their minimal specification at its strongest and most plausible, nevertheless all seem to accrue the same standard objections involving the same traditional counter-examples, all of which share the following form:

There is some artwork w such that there is no way in which w has some aesthetic feature ϕ that is constitutive of the way in which that w is an artwork.⁴

For instance, Marcel Duchamp's *Fountain* is widely considered to be the stock counter-example to aesthetic-feature theories of art. That is, *Fountain* is paradigmatically an artwork but either has no aesthetic features whatsoever or any such feature so had (e.g., the elegance of its porcelain curvature) nonetheless fails to be constitutive of the way in which *Fountain* is an artwork. Furthermore, there is standardly assumed to be a set of non-negligible size comprising relevantly *Fountain*-like works of contemporary art (especially within the ranks of conceptual/performance art). As such, Aesthetic Theories of Art, insofar as it attempts to ground an essential connection between art and the aesthetic in terms of aesthetic features of artworks, cannot but fail when faced with the sufficiently pervasive number of putative artworks seemingly lacking any (art-constitutive) aesthetic features.⁵

³ This would also cover more nuanced aesthetic theories such as Nick Zangwill's Creative Theory of Art (2007) according to which "something is a work of art because and only because someone had an insight that certain aesthetic properties would depend on certain nonaesthetic properties; and because of this, the thing was intentionally endowed with some of those aesthetic properties in virtue of the nonaesthetic properties, as envisaged in the insight" (36).

⁴ This is of course trivially true where w has no ϕ .

⁵ In reply, one might attempt to forcibly broaden the aesthetic so as thereby to include such non-perceptual, and traditionally non-aesthetic, features as cleverness, humor, wit, irony, etc.—e.g., Jame Shelley (2003) and Noel

Although we agree that Aesthetic Theories of Art, insofar as they are tethered to aesthetic-feature possession of artworks, cannot help but be art-theoretic dead-ends, we argue that the aesthetic's art-theoretic fortunes can be more productively invested in the nature of art production and art practice. Our ultimate aim here is not to champion some particular theory about the connection between art and the aesthetic but merely to highlight a way in which empirical enquiry into art and the aesthetic may productively inform art theory so that art-theoretic enquiry itself may more productively inform any such empirical enquiry into art-relevant areas.

AN ALTERNATIVE MODEL FOR AESTHETIC THEORY

As an alternative to the bankrupt *aesthetic-feature* based theory of art, we claim the connection between art and the aesthetic can instead be productively recast as an *aesthetic-concept* based model, the minimal specification of which we provide below.

The Aesthetic-Concept Theory of Art: For all artworks w , there must be some *aesthetic concept* Φ , such that, the possession/employment of that Φ is constitutive of the production of that w .⁶

In order to transition from enquiry into the nature of artworks (within which the aesthetic appears to be explanatorily bankrupt) to an enquiry within which the aesthetic may be productively employed such as the nature of art production, we must abandon the dead-end of aesthetic-feature possession for *what it is to be an artwork* and opt instead for the *prima facie* promise of aesthetic-concept possession for *what is it to be an artist*. Fortunately, making such a transition looks to require little more than endorsing the above in concert with a few basic and uncontroversial art-theoretic assumptions. To this end, consider the following:

- a) Artworks must be products of intentional action.
- b) To be an artist for an artwork just is to be the source of the intention-directed activities of which that work being art is the product.⁷
- c) So, artworks must have artists.

We take the above to be uncontroversial if not *prima facie* evident. As such, when taken together with the aesthetic-concept model, it follows that:

Carroll's response (2004). One might also attempt to bifurcating *art* into the *visual* and the *narrative* (Zangwill 2003) and thereby show only the latter to succumb to traditional counter-examples. We assume neither strategy effective nor particularly proportionate a response.

⁶ Notice that Aesthetic-Feature Theory trivially entails the above in that according to the former, ϕ must be some aesthetic feature and as such trivially satisfies the latter in that Φ just is the ϕ -concept and *ipso facto* an aesthetic concept. However, the Aesthetic-Concept Theory does not entail the Aesthetic Feature Theory—that aesthetic concept possession/employment is constitutive of art production does not itself entail that artworks themselves must have any aesthetic features whatsoever.

⁷ For more on the nature of art's intention-dependence, see (Mag Uidhir 2010).

- d) Artists (at least in their productive capacity as such) must possess/employ some aesthetic concept in the production of art (i.e., for the intention-directed activities of an artist to be that for which an artwork can be the product, that artist must possess/employ some aesthetic concept therein).

So, while artworks need not have aesthetic features, artists must have aesthetic concepts. That is, the connection between art and the aesthetic is not a connection between artworks and their aesthetic features but instead between artists and their aesthetic concepts. While the presence or absence of aesthetic features itself provides no explanatory insight into the nature of art, perhaps if agents must in some sense have aesthetic concepts in order to be artists, then we should expect the presence or absence of such concepts itself to offer some explanatory insight into the nature of art production.

Consider again the traditional counter-examples, this time directed at the Aesthetic-Concept Theory. Should Duchamp's possession/employment of some aesthetic concept in the production of *Fountain* be constitutive of the way in which *Fountain* is an artwork, then while *Fountain* may indeed remain a traditional and powerful counterexample to Aesthetic-Feature Theory, it looks to pose no troubles at all for Aesthetic-Concept Theory. Even granting that *Fountain* has no aesthetic features, obviously Duchamp having and employing certain aesthetic concepts (or at least the general concept AESTHETIC itself) in the production of *Fountain* is constitutive of the way in which *Fountain* is an artwork. Accordingly, on the concept-based model, although no aesthetic-feature possession need figure for the way in which something is an artwork, aesthetic-concept possession must nevertheless figure for the way in which something gets to be an artwork—i.e., the intention-directed activities of which that artwork is the product. In other words, an artwork with no aesthetic features nevertheless remains work for which the agent directing its production (i.e., its artist) must possess if not actively employ some aesthetic concept.

The above at least *prima facie* suggests that *aesthetic-concept* possession may be substantively necessary for *artistic-concept* possession. For instance, we can plausibly suppose that for something to be an artwork requires that thing to fall under some art-relevant category or sortal description (e.g., *painting*, *poem*, *novel*, *symphony*, *sculpture*, *performance*, etc.). We can further plausibly suppose that something to fall under such a category or sortal description requires that thing do so in virtue of having its production directed or guided by the relevant category or sortal corresponding concept. For example, for an agent to plausibly be said to be engaged in the production of sculpture, presumably that agent not only must be in possession of the concept SCULPTURE and actively employ that concept in directing the constitutive activities of which a thing falling under the sortal *sculpture* is the product. Of course, to make the required connection from art to the aesthetic requires the additional claim that with respect to art production, the employment of the art-relevant category or sortal concepts (e.g., PAINTING, SCULPTURE,

POEM, ART) must be governed by the possession/employment of some aesthetic concept(s)(e.g., BEAUTY, ELEGANCE, SYMMETRY, AESTHETIC).

Notice that the above claim does not entail, for example, that in order to possess and employ the concept SCULPTURE, one must also possess some aesthetic concept or other, but rather only that in making a sculpture (or at least one capable of also being an artwork), one must possess/employ some aesthetic concept or other. Presumably, those without the relevant aesthetic concepts (or lacking aesthetic concepts altogether) may nevertheless coherently and successfully think about, refer to, and pick out sculpture. However, those without the relevant *aesthetic* concepts (absent deference to those with) cannot make something that is a sculpture or at least cannot make a thing that is a sculptural artwork, such that, the way in which that thing is a sculpture must be constitutive of the way in which that thing is an artwork. If the nature of sculpture production and practice, rather than the nature of sculpture itself, is substantively dependent upon the aesthetic, then so too must be the production of sculptural artworks. So, the extent to which an artwork must fall under some relevantly similar sortal or category (e.g., belong to some art form, fall under some relevant artifact sortal) is the extent to which art production and art practice must substantively depend upon the artist's possession or employment of aesthetic concepts.

For example, suppose it plausible to claim that Fred Sandback needn't have actively employed aesthetic concepts in order to create his minimalist sculpture *Untitled* (from *Ten Vertical Constructions*) (1997) composed of a single piece of red yarn stretched from floor to ceiling. Far less plausible, however, would be the claim that Sandback, in order to understand what it is to be a *minimalist sculpture* (or even a sculpture *simpliciter*)—at least to a degree sufficient to competently produce such a work—needn't have possessed any aesthetic concepts whatsoever. After all, the Aesthetic Theory of Art, regardless of stripe, takes its principal motivating force from the intimate and pervasive relationship between the aesthetic and art history, art movements, art forms, and art criticism. As such, lacking aesthetic concepts altogether ought to thereby preclude even the minimal understanding of art history, its movements, its forms, and its criticism—and to that extent the minimal understanding of art itself—required to engage in its making. But again, the mere fact that art and the aesthetic may be inextricably linked in several respects needn't thereby entail that all artworks must have aesthetic features or even that artists must *actively employ* aesthetic concepts to make art. Rather, the link between art and the aesthetic need entail only that artists (i.e., as the agents directing the production of artworks) must possess aesthetic concepts.

To better frame the aesthetic so reformulated on the concept model, we provide a few objections to the alternative concept-based model, and then offer a few considered replies. Our aim in so doing is to constrain our expectations as to precisely what the minimal formulation of the Aesthetic-Concept Theory of Art could plausibly entail.

OBJECTIONS & REPLIES

One might object that any purported connection between the possession/employment of *artistic* concepts and that of *aesthetic* concepts results from conflating the notion of what is required to be (or make) a *good artwork* with what is necessary to be (or make) *artwork simpliciter*. Perhaps artists who lack or fail to employ aesthetic concepts may be incapable (perhaps even necessarily incapable) of creating good art; this by itself isn't enough to ground the required link. For instance, suppose an artist suffers head trauma such that she loses the ability to form or employ aesthetic concepts, and further suppose that her work after the accident to be correctly regarded as terribly trivial, mediocre, and uninspiring. Merely from this it does not follow that her work cannot continue to be correctly regarded as art—upon hearing the news of the artist's accident and subsequent cognitive loss, no one ought to conclude that all post-accident work can't but fail to be art. Such a metaphysical shift could not result from such cognitive losses. Even were we to grant that aesthetic concept possession on the part of the artist is necessary for the artist to produce artworks with good-making features, to ground the link between art and the aesthetic, the Aesthetic-Concept Theory of Art must entail the claim that *artworks must have good-making features*. Unfortunately, such a claim looks demonstrably false—those arguing to the contrary just haven't been exposed to really bad art.⁸

Furthermore, if works needn't possess aesthetic features to be art and artists needn't intend that their works possess aesthetic features, then artists need neither employ nor possess aesthetic concepts to make art. For example, possessing the concept RED isn't necessary for possessing the concept SPORTS CAR. To be sure, many sports cars are in fact red, and perhaps when asked to imagine a sports car, everyone imagines it red, and maybe even the first sports cars must have been red. Moreover, red sports cars may even be *paradigmatically* sports cars, fully exemplifying sports-car-ness—maximizing flashiness, speed, and a devil-may-care attitude. None of this, however, even remotely suggests that sports cars must be red, that sports cars must be normally seen as being red, that SPORTS CAR entails RED, or that one need possess/employ the concept RED in order to make a sports car. Defining art in terms of the aesthetic (however minimally defined) is analogously like defining sports cars in terms of redness (however minimally defined)—likewise for conditions on art production. Redness or its absence may substantially, even essentially, figure in sports-car evaluation—can't be a good sports car unless red, or *ceteris paribus* red sports cars are better than non-red ones—but redness rightly fails to figure descriptively for either sports cars themselves or their production. So, despite the aesthetic figuring heavily for art evaluation and art history, the aesthetic fails even in part, either *qua* feature or *qua* concept, to figure descriptively for both art and art production.

⁸ See Davies (2003) and Dickie (1997).

The above objection assumes that any Aesthetic Theory of Art, be it feature-based or concept-based, in the attempt to both capture the extension of art while also grounding its putative value, inevitably must fudge the extension in favor of the value explanation.⁹ However, that Aesthetic Theories of Art on the standard aesthetic-feature model may entail or be motivated by highly controversial, if not outright specious, essentialist claims involving the possession of good-making aesthetic features, the alternative concept-based model need not and ought not. Furthermore, focusing on aesthetic-concept possession and its relation to art production allows Aesthetic Theory so modeled to avoid any evaluative/descriptive conflation and thereby remain value-neutral. In fact, although Aesthetic-Concept Theory of Art need say nothing about what it is to be *good art*, it nevertheless looks to provide an intuitive base for such an account (e.g., minimally, one must possess certain positive aesthetic concepts in order to make good art).

What of the case of the artist with no aesthetic concepts? Just as we can imagine artworks lacking aesthetic features, surely so too can we imagine artists lacking aesthetic concepts. In reply, consider that while there may be an artist having impaired discriminative capacities such that she can no longer reliably pick out aesthetic features via those now impaired discriminative capacities, that artist still may nevertheless possess aesthetic concepts—but her aesthetic concepts are now deferential. That is, her concepts would in a sense be incomplete, and so she must defer to the experts, at least more than she did prior to the impairment. Luckily the artworld happens to be full of such experts, one of which may even be her pre-impairment self. Should a botanist lose her discriminative capacities with regard to elms, she doesn't lose the concept ELM; she simply now needs to defer to the kind of expert she used to be, perhaps even deferring to herself should he consult her pre-loss notes (Fodor 1994). The same goes for the artist. This is exactly what we should expect.

Consider a world in which the inhabitants are aesthetically inverted—things that we find beautiful, dainty, and elegant, they find ugly, coarse, and inelegant. It makes sense to wonder how their art (and art history) might differ from our own. Now consider a world in which the residents are wholly conceptually closed to the aesthetic. Such questions now seem incoherent, not just because their artworld may be too strange and alien but rather that such a world just wouldn't have art. To be sure, there may be some objects in that world perceptually indistinguishable from actual-world artworks; however, this doesn't itself entail or even suggest that their world contains artworks. To determine that, we must first figure out whether the inhabitants of that world can make artworks. This in turn requires figuring out whether those inhabitants have the appropriate concepts, form the appropriate intentions, and successfully execute the appropriate actions directed by those appropriate intentions informed by those appropriate concepts. Of course, we take it that worlds lacking aesthetic *features* may still have

⁹ For more on this, see Zangwill (1995).

inhabitants possessing aesthetic *concepts*, and therefore, such worlds may still have artworks. However, worlds where the inhabitants lack aesthetic concepts altogether cannot be worlds with artworks.

Finally, one might worry that our position so far sketched is committed to some sort of intrinsic connection between concepts—thereby inheriting the problems with such accounts—and so will only appeal to those not already seduced by an atomistic view of concepts (e.g., Fodor 1994, 1998). While one might choose to adopt such a view, our position herein by no means depends on their being such intrinsic connections—Aesthetic Theory of Art reformulated on our view is simply theory about the relationship between things in our heads (*aesthetic concepts*) and things in the world (*artworks*), such that, in order to make artworks, we must be a certain way cognitively (e.g., being capable of forming certain intentions with certain contents, having certain discriminative capacities, or being able to see the world a certain way).¹⁰

PART TWO: NEW WORK FOR AESTHETIC THEORY

One obvious way to strengthen the art-theoretic case for Aesthetic Theory recast as the aesthetic-concept model would be to show that the kinds of cognitive features underwriting aesthetic concept possession are the same kinds of cognitive features readily employed in art making. After all, we doubt many would be surprised to learn that the discriminative and productive capacities underwriting aesthetic concept possession are cognitively or neurologically related to (or even the same as) those processes employed in the host of techniques and tools associated with art production. For art instruction typically requires reflection on the aesthetic features of a great many works of art, differentiation of artistic styles and movements (together with their distinctive relationships to particular aesthetic features), and practice in producing aesthetic features in a variety of forms. Such lessons extend to even the traditional counterexamples to the aesthetic-feature theory of art. Before Duchamp created *Fountain*, he enjoyed an art education typical of upper-class France at the time, and it is plausible that his dissatisfaction with the aestheticism prevalent in that tradition—bred of his extensive familiarity with it—played a substantive causal role in the formation of his intention to create an artwork devoid of intentionally-determined aesthetic features, and thereby in *Fountain's* status as art.

The principal task then for the newly reformulated Aesthetic Theory of Art is to study the role that aesthetic concepts play in artistic training and in the production of artworks. The principle, thus proposed, raises the following research questions. First, if possession of aesthetic concepts (in some form) is taken as a necessary condition for producing art, what are the competence conditions for aesthetic concepts? How are they acquired, and how can they be elaborated or specialized by artistic

¹⁰ Whether intrinsic conceptual connections constrain concept possession such that one must possess aesthetic concepts to possess artistic concepts (or at least those concepts employed in art production) or aesthetic concepts unmediated must be employed in art production we take to be questions best answered elsewhere.

training? Second, what role do aesthetic concepts play in the acquisition of artistic concepts and in the production of artworks? Are they substantively necessary for the production of art; and if so, in what way? And third—connecting the first and second questions—how do expert artists differ from non-artists, and do their distinctive forms of expertise advert to specialized aesthetic concepts and competencies? What kinds of training or practice have expert artists received, and what role do aesthetic concepts play in their distinctive perceptual, motor, and conceptual abilities? These investigations would thereby connect art theory itself to existing work in psychology, neuroscience, and anthropology of aesthetic experience and artistic expertise.

To this end, we first consider the competence conditions for aesthetic concepts. It is perhaps uncontroversial to suppose some kind of link to sensory capacities in which they could be based. For a basic condition on competence with a concept is that one possess at least some capacity to distinguish category members from non-members, and one could not acquire or exercise a capacity to categorize exemplars according to their aesthetic properties if one lacked any form of access to the structural properties of objects and experiences on which such properties supervene.¹¹ This project breaks down, however, once we try to say *which* structural features of objects or experiences are necessary for falling under an aesthetic category in order to specify the competence conditions for aesthetic concepts. While we might label a particular drawing dainty in virtue of a particular pattern of curving lines, that pattern of lines is certainly not necessary for daintiness, for daintiness may be expressed in a potentially open-ended number of distinct ways. That pattern may not even be sufficient for daintiness, given that the same pattern of lines in another drawing may instead strike us as garish or derivative. Indeed, it has long been suggested that no (non-aesthetic) necessary or sufficient conditions can be provided for aesthetic concepts (Sibley 1959). If the aesthetic-concept model requires us to settle on their necessary and sufficient conditions, then, it seems we have not after all made much progress over the old aesthetic-feature model, after all. We will have simply traded the problem of identifying the aesthetic features common to all artworks for the related (and probably equally hopeless) problem of identifying the necessary and sufficient conditions for the aesthetic concepts.

We might hope to make more progress on the nature of aesthetic concepts by asking instead *what kind* of concepts they are, hoping to identify aesthetic concepts not by their contents, but rather by a distinctive form. The standard options here also seem to offer little solace, however. The major theories of concepts available from the empirical literature would suggest that concepts can be one of (or perhaps a hybrid of) three types: exemplars, prototypes, and theories (Machery 2010). But by the time she has reached even a moderate competence in art, the artist will likely have acquired aesthetic conceptual

¹¹ Granted this access could be indirect or deferential, but it must bottom out somewhere in an agent with the capacity to perceptually identify the presence of the aesthetic features to which the concepts refer.

structures taking all of these forms. For in the course of her studies, she will typically have been exposed to a number of artworks, and can produce many learned exemplars which strike her as *beautiful* or *disordered*. She can also likely describe features possessed by the prototypical e.g. *graceful* painting, which might include both aesthetic features such as being *balanced* and *effortless* as well as non-aesthetic features such as being brightly-colored and having smooth brushstrokes. And she will likely, despite the difficulties canvassed in defining aesthetic concepts in non-aesthetic terms, have also acquired some theoretical knowledge of aesthetic concepts (rightly or wrongly), such as that *beauty* requires things like *symmetry* and *proportion*.

Given these difficulties, perhaps we can take another tack, one that offers a test of the Aesthetic-Concept Theory without requiring us to settle the nature of the aesthetic concepts themselves. A promising line of thought notes that if the theory is true, we should expect aesthetic concepts to loom large in the training of artists and in the scientific explanations of the ways in which their cognitive abilities differ from those of non-artists. These differences will be most apparent when comparing expert artists to novices—for we should expect that the distinctive qualities of artists will be most expressed in those individuals who have reached the highest levels of artistic training or achievement. A way of approaching this question is to study the ways in which expert artists differ from novices—for presumably the dimensions along which they systematically develop the cognitive features characteristic of expertise will be those dimensions relevant to their status as expert artists. To seek out such differences, we should look to the expert artist's distinctive character and natural talents, education and experience, sensorimotor capacities, conceptual schemata, and declarative art-historical knowledge.

ARTIST AS AESTHETIC EXPERT

We begin with a general overview of the cognitive science of expertise. Depending upon domain and training, expertise can manifest in a variety of forms (see Ericsson and Lehmann 1996 for a general review). Experts are often thought to possess natural talents exceeding those of non-experts, including superior perceptual capacities, motor control, and general intelligence. In domains involving physical dexterity, experts exhibit many physical and motor-control adaptations, including greater strength, endurance, speed, and finer motor control. But the cognitive aspects of expertise are some of the most striking and most studied by psychologists. Experts have long been known to possess superior memory capacities to non-experts, such as chess grandmasters' oft-studied memory for complex board positions and game records. The enhanced memory of experts has long been thought to be based in their enhanced perceptual and conceptual abilities, which includes drawing finer discriminations than novices, trafficking in specialized higher-order and abstract concepts, and labeling events and outcomes in the vocabulary of a body of domain theory. Experts also display competence with a variety of

specialized problem-solving strategies, strategies often unavailable to novices because their implementation requires the experts' enhanced perceptual and conceptual capacities. And in these respects, art is no exception; artistic expertise across a variety of the visual and performing arts has been extensively studied by psychologists, and displays many of these general features. We briefly review these distinctive forms of artistic expertise, highlighting at each step the role of the aesthetic in their acquisition and deployment.

NATURAL GIFTS & PREDISPOSITIONS

Across many different arts, expert artists have been thought to possess exceptional natural talents and dispositions. Indeed, students are typically selected for artistic training by educators due to purported evidence of extraordinary early promise (Davis 1994). In music, vocal range and tone quality are determined to some degree by the natural shape of the vocal chords and cannot be enhanced, beyond a certain point, by training. The biographies of famous musicians and composers are replete with examples of their early promise, and a number of the most famous composers were child prodigies. Many examples include superior sensory abilities demonstrated from an early age; Mozart, for example, was documented as possessing the gift of absolute pitch—the ability to identify and reproduce an arbitrary note on the musical scale—as early as the age of seven (Deutsch 2006).

There is, however, an emerging consensus that the importance of innate talents in artistic expertise has largely been overstated (Lehmann & Ericsson 1997; Howe et al. 1998). The most distinctive aspects of expertise are rather the product of explicit training and deliberate practice—for even distinctive sensory talents like absolute pitch have been shown to be largely trainable (Sergent & Roche 1973; Takeuchi & Hulse 1993). A significant body of literature has demonstrated that expertise will only be acquired as the result of extensive, deliberate practice on activities offering repetitive tasks with learnable structure and the sort of prompt, reliable feedback that allows one to diagnose the causes of error (see Weinberg et al. 2010 for a review). Thus, we move on to these other, trained forms of expertise.

SPECIALIZED MOTOR ABILITIES

Let us then consider the distinctive motor capacities of artists. Expert artists are extensively trained in a variety of techniques to effect the mechanical production of artworks. And by practicing these techniques to the point of automaticity, they can fluently combine these movements and motor strategies in order to reliably achieve aesthetic outcomes that would be unavailable to art novices. In particular, evidence suggests that artists have specialized abilities to imbue objects with the structural features that will elicit desired aesthetic judgments in an audience, even audiences not sharing the specialized and idiosyncratic training of the artist. Takahashi (1995), for example, examined artists' ability to reliably

induce thematic and aesthetic judgments in viewers. She instructed art students to create abstract drawings that expressed emotional themes like *anger, tranquility, depression, femininity, or illness*. She found a surprising degree of agreement in the thematic labeling of these artworks by viewers without a background in art. Moreover, the artists elicited these judgments in viewers by combining structural features in ways that reliably elicited stable ratings of those artworks along aesthetic scales such as *pleasant-unpleasant, beautiful-ugly, open-closed, rising-falling, blunt-sharp, delicate-rugged, and distinct-vague*. Takahashi's findings thus suggest that artistic training specifically engenders an ability in the artist to elicit thematic judgments in viewers of even abstract artworks by using the structural features of said artworks to endow those works with particular combinations of aesthetic features—consonant with what one would expect from the Aesthetic-Concept Theory of Art.

DISTINCTIVE SENSORY CAPACITIES

Skilled artists have often been noted to make finer-grained and more accurate sensory discriminations than non-artists (we have already noted, for example, the example of absolute pitch). Furthermore, artists are often able to perform higher-order perceptual tasks better than non-artists; trained visual artists, for example, score higher than novices on the rod-and-frame test, which involves the capacity to find true vertical with a tilted rod in a tilted frame (Gaines 1975, 994). And while many studies have focused on the visual arts, the same holds true for haptic, olfactory, and gustatory arts. A study by Valentin, Dacremont, and Cayeux (2011) demonstrated that expert perfumers and flavorists possessed enhanced short-term odor recognition for scents and flavor recognition as a function of their expertise, supporting greater recall memory and superior resistance to order effects. Furthermore, these specialized perceptual abilities are reflected in their neuroanatomy. Skilled artists reliably devote more of their sensory cortex to the modalities involved in their distinctive art form as a product of time spent in deliberate practice; skilled violinists, for example, have greatly elaborated cortical representations devoted to the digits of the left hand, which are involved in the fingering of the strings (Elbert et al. 1995).

While highlighting these superior sensory abilities, we reiterate that the *current* possession of superior sensory capacities is not necessary, on the Aesthetic-Concept Theory of Art, in order to be an artist or to create (even excellent) artwork. Beethoven, to consider a famous example, composed his greatest works after the onset of his deafness. But again, surely he required his earlier sensory facility in order to acquire his expertise, and no one supposes that he would have been capable of composing the Ninth had he not previously excelled in auditory perception. This appears borne out by his own words in the 1802 *Heilingstadt Testament*, where he laments that he had lost “the one sense which should have

been more perfect in [him] than in others, a sense which [he] once possessed in highest perfection, a perfection such as few surely in [his] profession enjoy or have enjoyed.”

While we have separated out sensory and motor capacities in this exposition, such a division is likely arbitrary. Rather, it is more likely that the sensory and motor capacities of artists are intimately related (hence favor amongst psychologists for the portmanteau “sensorimotor”), and both develop in proportion to the amount of deliberate practice devoted to recognizing and producing specific features in art works. Recent work by Seeley & Kozbelt (2008) suggests that those trained in foundational techniques of producing visual art actually perceive the world differently than those with no such training:

...artists develop specialized spatial schemata and related motor plans that guide attention and enhance perception of stimulus features diagnostic for the identities of objects and scenes in ordinary contexts...it is a matter of the selective deployment of learned perceptual strategies originally derived from, and dedicated to, the processes of artistic production (21-22).

On this model, the learned perceptual strategies involved in art production piggyback on those more basic processes and capacities grounding aesthetic concept possession and employment, such that, development of the former may entail refinement of the latter.¹² So, while the results of such studies may not tell us what aesthetic concepts are, they do seem to indicate what aesthetic concept possession requires. Specifically, it requires the same cognitive architecture that provides the framework for these learned perceptual strategies, such that, lacking aesthetic concepts looks to be sufficient for lacking the foundational perceptual strategies typically associated with art production. Just as we might suspect that, absent any deference, a fully color-blind person cannot be a colorist, we might similarly suspect that a fully “aesthetically-blind” person, likewise absent any deference, cannot be an artist.

SPECIALIZED CONCEPTUAL SCHEMATA & THEORETICAL KNOWLEDGE

One of the most distinctive forms of expertise across many domains is the presence of specialized conceptual schema and theoretical knowledge. Specialized conceptual schema can include finer-grained, higher-order, and abstract concepts unavailable to novices, as well as hierarchical classifications of these concepts into taxonomies and elaborate causal models of the domain. For example, chess experts will recognize and distinguish a Najdorf from a Dragon variation of the Sicilian defense (which differ in the placement of a supporting pawn), and can use such higher-order and hierarchically-organized

¹² We possess many color concepts but you had better not ask us what color goes best with mauve, to quickly distinguish between Kelly green and Forest green, or to come up with innovative color combinations—we need training to do those things. Similarly, we possess many aesthetic concepts but don’t ask us to make anything beautiful, to pick out complex instances of vivacity or garishness, or to combine structural features in aesthetically innovative ways—we need training to do those things.

knowledge to more efficiently remember board positions and formulate game strategy. Furthermore, these specialized concepts will facilitate the acquisition of specialized theoretical knowledge of chess, such as that a Najdorf variation defense is likely to be followed by an English or Perenyi attack.¹³

Similarly, artistic expertise is also distinguished by the acquisition of specific forms of conceptual and theoretical knowledge, especially involving aesthetic concepts. A popular recent paradigm for measuring artistic expertise has been the aesthetic fluency paradigm (Smith & Smith 2006; Silvia 2007), a knowledge-based assessment which scores subjects' familiarity with prominent figures and terms from art history. Interestingly, such theoretical knowledge appears to influence even physiological aspects of aesthetic experience in experts; for example, subjects with high aesthetic fluency were more likely to experience "aesthetic chills" when listening to music or watching films (Silvia & Nusbaum 2011; Nusbaum & Silvia 2011). Moreover, as with chess experts, expert artists' conceptual structures enable their distinctive sensorimotor and memory capacities; Valentin et al. (2011) hypothesized that the enhanced memory and judgment of trained perfumers and flavorists was supported by their specialized conceptual repertoire and enhanced ability to verbalize odor elements. Furthermore, many distinctive artistic concepts seem to presuppose aesthetic concepts. It has been argued that particular artistic styles (and perhaps even the very notion of style itself and its relation to art practice) entail aesthetic concept possession/employment, such that, in order to make an artwork (at least a visual artwork) one must have the cognitive wherewithal to move beyond basic pictorial representation (Abell & Currie 1999; Dilworth 2005).

DISTINCTIVE COGNITIVE STRATEGIES

Finally, expert artists have also been found to engage in distinctive cognitive strategies when compared to non-artists. Many of these strategies pertain directly to artistic creativity. Indeed, Gaines' (1975) study of 30 master artists found they were "more flexible in their perceptions of the environment and least likely to fall into rigid patterns of perceiving" compared to children and adult non-artist controls (1992). Their ability to avoid rigid patterns of thinking was thought to be based in a tendency to "constantly scan the environment for more extensive and visually complex groupings of stimuli" and be drawn to groupings that are "odd and unusual" (ibid, 993). One of the master artists in this study

¹³ It is worth noting that the analogies to chess expertise drawn above may actually constitute direct examples of aesthetic expertise, as it has been argued that chess is itself an art form replete with aesthetic features (Humble 1993). Indeed, Duchamp—the bugbear of the Aesthetic Theory himself—turned towards chess towards the end of his career, proclaiming that "all chess players are artists" and that chess is to be preferred to the visual arts as it possesses "all the beauty of [visual] art...[but] it cannot be commercialized" (Soltis n.d.). However, while certain traditional aesthetic terms may frequently be used to evaluate chess moves, positions, or the games themselves—e.g., *beauty*, *vivacity*, *originality*, *harmony*, *elegance*, *symmetry*, *simplicity*, and *richness*—many if not most of the standard evaluative/appreciative terms in chess would standardly be considered outside the traditional domain of the aesthetic—e.g., *sharp*, *violent*, *quiet*, *cute*, *surprising*, *stubborn*, *daring*, *aggressive*, *conservative*, *timid*, etc.

repeatedly said, "I'm going to try and see this in a way that no one else has guessed or seen" (ibid, 993). A later study conducted by Schlewitt-Haynes et al. (2002) on visual artists' tendencies to engage in these "visual games" found constant engagement in re-analysis, pattern-seeking, and especially aesthetic experimentation in the creation of novel imagery involving sensory experience. One artist in Schlewitt-Haynes et al.'s study reported that, for example:

"...over the years I've learned how to see things in more detail. First, the overall first glance—the general shape and texture, the color and the effect of the object on its surroundings and seeing how it adds to or detracts from the area it takes up. I often ask myself if it has a positive or a negative influence on its surroundings. Perhaps if it was a different shape or texture or color, it might be better. . . . I ask how would I change it?" (Schlewitt-Haynes 2002, 367)

The idea that expert artists possess specialized abilities for reanalysis and aesthetic creativity is supported by EEG studies, which suggest that trained artists exhibit much greater synchrony between diverse cortical areas when engaged in processes of visual composition and analysis compared to non-artists (Battacharya & Putsch 2006). Such synchrony between distant areas is hypothesized to support the distinctive ability of artists to synthesize diverse ideas, forms, and concepts in the creation of new artistic styles and forms.

So while expertise in many domains with static structure may consist precisely in the acquisition of the *rigid* patterns of analysis and production that are most predictive of success, expertise in the arts may consist precisely in *not* falling into such patterns. This finding explains both why the aesthetic should simultaneously play a central role in art practice and yet why the task of identifying a fixed set of aesthetic features shared by all artworks should be so hopeless and misguided. Indeed, it appears that *distinctively* artistic expertise substantially consists in precisely the use of their specialized sensorimotor and conceptual capacities to create new forms of expression and aesthetic experience. For while the draftsman and copyist share the artist's highly-refined sensorimotor and conceptual repertoire, only the artist is distinguished by her ability to employ this repertoire to defy prior aesthetic conventions and create new ones.

CONCLUSION

In summary, the empirical literature on artistic expertise links it substantially to aesthetic concept development in that expert artists have been found to possess:

1. Exceptional natural ability in the sensory and motor prerequisites for aesthetic concept possession,
2. Trained motor abilities to more reliably imbue objects with aesthetic properties,
3. Highly-attuned sensory abilities to detect finer-grained and higher-order structural properties of artworks in which aesthetic properties may be based,

4. Specialized knowledge of concepts in art theory and art history, many of which directly presuppose aesthetic concepts (such as concepts of artistic style), and
5. Distinctive cognitive strategies to detect relationships between structural and aesthetic properties, and to develop novel conventions between them.

In short, insofar as Aesthetic Theory of Art remains a theory about the descriptive features of artworks, Aesthetic Theory must fail. As an alternative, we suggest that Aesthetic Theory ought not target the descriptive features of artworks but instead shift its focus to the cognitive demands of art production specified in the list above. However, this ought not be seen as somehow vindicating the spirit of Aesthetic Theory or as championing the priority of the aesthetic over other art-theoretic considerations. Our goal here is simply to show there to be new work for Aesthetic Theory both traditionally within the philosophy of art and non-traditionally without (e.g., the psychological, cognitive, and evolutionary aspects of art and its practice).¹⁴ The remodeled Aesthetic Theory holds only that art requires for its production beings having certain discriminative and productive capacities in virtue of which they are able to pick out aesthetic features in the world as well as imbue things in the world with them—thereby trading the phantasmal descriptive necessity of aesthetic features for the eminently more plausible and productive position about the relationship between aesthetic concept possession and the production of artworks.

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¹⁴ For examples, see Prinz (2002), Solso (2003), and Dutton (2009).

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