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ADVANCES IN EXPERIMENTAL PHILOSOPHY OF AESTHETICS

Advances in Experimental Philosophy of Aesthetics

Advances in Experimental Philosophy

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Advances in Experimental Philosophy of Aesthetics

Edited by Florian Cova and Sébastien Réhault

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Introduction

Florian Cova and Sébastien Réhault

Psychological investigations into the realm of aesthetics and human engagement with art are nothing new. By the end of the nineteenth century, at the very beginnings of experimental psychology, Gustav Fechner had already inaugurated experimental aesthetics with the psychological study of the perception and experience of aesthetic objects (Fechner 1876). Today, venues such as *Psychology of Aesthetics, Creativity, and the Arts* or *Empirical Studies of the Arts* continue to feature such psychological approaches to aesthetic experience, while the beginning of the twenty-first century has seen neuroscience and evolutionary biology join the fray with the all-new fields of neuroaesthetics (Chatterjee and Vartanian 2014) and evolutionary aesthetics (Voland and Grammer 2013).

However, despite this long tradition of psychological research in the field of aesthetics, it has not always been clear whether such investigations had anything to contribute to philosophical reflection on aesthetics and art. Though Schlick (1909/1978) argued that the major problem of aesthetics should be tackled in an empirical way and proposed an evolutionary approach to aesthetic experience, his project did not seem to inspire many philosophers. In a famous quote, Wittgenstein rejected the relevance of empirical research to aesthetics, even though he himself had got his hands dirty by practicing experimental psychology (Wittgenstein and Muscio 1912):

People still have the idea that psychology is one day going to explain all our aesthetic judgments, and they mean experimental psychology. This is very funny—very funny indeed ... Aesthetic questions have nothing to do with psychological experiments, but are answered in an entirely different way. (Wittgenstein 1970: III, §7)

Similarly, Dickie (1962), in a paper entitled "Is Psychology Relevant to Aesthetics?" states in the introductory paragraph itself that "psychology is not relevant to aesthetics."

Still, despite such views, philosophers working in aesthetics and philosophy of art have been paying more and more attention to empirical research outside their field. Far from being the fools Wittgenstein described, none of them thinks that psychology is going to explain *all* our aesthetic judgments. Still, that does not prevent psychology from being relevant to aesthetics in a more modest way. As Zangwill (2009: 19) puts it: "There is surely some scope for empirical research. It would be odd if there were not."

This change of heart has sometimes been interpreted as the result of a broader "naturalistic" turn in philosophy (Meskin et al. 2017), though there might have been reasons internal to the field of aesthetics itself—as, for example, the introduction of psychological concepts such as "make-beliefs" to make sense of our appreciation of fiction (Walton 1990), which opened the door wide to psychological investigations (Leslie 1994), or the greater importance given by psychologists and cognitive scientists to emotions, which are typically supposed to play an important role in art appreciation (Robinson 2005). In any case, one can find the uncontestable proof of this rapprochement in the recent publication of two outstanding interdisciplinary volumes: *The Aesthetic Mind (Philosophy & Psychology)* edited by Elisabeth Schellekens and Peter Goldie (2011), and *Aesthetics and the Sciences of Mind* edited by Greg Currie, Matthew Kieran, Aaron Meskin, and Jon Robson (2014).

So, what new aspects does the current volume bring to the philosophical table, compared to these two volumes? To put it simply, the present volume represents one more step toward the integration of aesthetics with empirical sciences by introducing recent works in *experimental* philosophy. Jesse Prinz (2008) once distinguished between "empirical philosophy" and "experimental philosophy": while empirical philosophers mine the existing scientific literature for data relevant to their own philosophical endeavor, experimental philosophers go one step further and conduct their own studies. Thus, while former volumes presented recent advances in empirical philosophy of aesthetics, the present volume is the first to feature and bring together so many recent works in experimental philosophy of aesthetics.

But why is experimental philosophy of aesthetics any good? Would it not be better to leave experimental work to those who were properly trained in experimental methods, rather than let philosophers tinker with experimental designs? The answer to these questions is simply that letting philosophers do experimental work often opens new avenues of research, because the questions philosophers ask can be different from the ones psychologists and cognitive scientists are interested in. Sure, due to the long tradition of empirical research Introduction 3

in aesthetics described earlier, there is lots of research on art perception, art appreciation, and even art production (or creativity). There are even fascinating studies on the psychology of make-believe (Singer and Singer 1992), fiction (Skolnick and Bloom 2006), and musical expressiveness (Juslin and Sloboda 2001). Still, certain philosophical questions have never (or rarely) been addressed by psychologists, such as the perceived objectivity of aesthetic judgment, people's reliance on aesthetic testimony, the definition of art, or the varieties of imaginative resistance. In such cases, it is up to philosophers to do the experimental work rather than waiting for others to do it for them.

Experimental philosophy has been around for fifteen years now, and is well-developed and entrenched in fields like action theory (Cova 2016), ethics (Alfano and Loeb 2014), or epistemology (Beebe 2015). Still, it has only recently reached the field of aesthetics (see Kamber 2011, Cova and Pain 2012, Meskin et al. 2013 for some of the earliest papers). There might be multiple reasons for this, but Cova, Garcia, and Liao (2015) hypothesize that the main one might be early experimental philosophy's narrow focus on intuitions and thought experiments: because intuitions play a much less prominent role in aesthetics, the field failed to draw the attention of experimental philosophers. Thus, the recent development of experimental philosophy of aesthetics might simply reflect the fact that experimental philosophers are less and less exclusively focused on philosophical intuitions, and have adopted a broader conception of their practice Rose and Danks 2013).

Whatever the reasons, experimental philosophy of aesthetics is now on the rise (see Cova, Garcia, and Liao 2015, or Torregrossa forthcoming for further discussion). The current volume tries to provide a comprehensive picture of the field, and to discuss its promises, limitations, and future. To this aim, the volume is divided in five sections.

The first section is dedicated to aesthetic judgment. The nature of aesthetic judgments has been a central topic in the field of aesthetics, at least since Hume and Kant (Budd 1999) and it is no surprise that it has attracted the attention of experimental philosophers. In his contribution ("Beyond Intersubjective Validity: Recent Empirical Investigations into the Nature of Aesthetic Judgment"), Florian Cova discusses the alleged "intersubjective validity" of aesthetic judgment. Indeed, one of the reasons why aesthetic judgments appear to be so puzzling to philosophers is that we take them to combine seemingly incompatible properties: on the one hand they are subjective, but on the other hand they claim to be right or wrong. However, is this view of aesthetic judgment really widespread and intuitive? Cova showcases recent data that shed doubt on

this idea, and concludes that philosophical approaches to aesthetic judgments might be in the business to solve a false problem, since it is not true that most people consider aesthetic judgments to have those seemingly incompatible properties.

The same kind of tension surrounds the question of aesthetic testimony: on the one hand we seek and produce aesthetic testimony, but on the other, we seem to give it much less credence than to nonaesthetic testimony. Or, at least, that's what some philosophers argue. In his contribution ("Aesthetic Testimony and Experimental Philosophy"), James Andow presents three studies investigating the credence people give to aesthetic testimonies, compared to nonaesthetic testimony. His results show that there is indeed an asymmetry between the ways people treat both kinds of testimony, with people being less likely to rely on aesthetic testimony, partly because they think that (a) there is more disagreement about aesthetic matters, and (b) people more often misrepresent their opinions and abilities as a judge when it comes to aesthetic matters.

One other explanation, however, might be that aesthetic testimony is seen as less reliable. In their contribution ("Impure Aesthetics"), Angelika Seidel and Jesse Prinz show that aesthetic judgments can be contaminated and shaped by many factors that seem to have nothing to do with the formal features of their objects (such as scale and position, authorship, or moral content). They conclude that the study of aesthetic appreciation should not limit itself to perceptual processes.

The second section is dedicated to the nature of art and artworks. In their contribution ("Why Is That Art?"), Richard Kamber and Taylor Enoch present the results of a survey in which art professionals were asked to classify thirteen objects as art or nonart, and to justify their decision. They systematically confront leading philosophical theories of arts to their participants' answers and justifications to conclude that very few of them are in line with their participants' answers.

As for the nature of artworks, George Newman and Rosanna Smith's contribution ("Artworks Are Evaluated as Extensions of Their Creators") summarizes empirical evidence showing that people do not consider artworks as mere objects: rather, artworks are perceived as an extension of their creators, so that their appreciation depends on their physical and mental connection to their creators. In their contribution, Newman and Smith go one step further by offering new experimental evidence suggesting that people might even see artworks as living entities.

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The third section discusses the role played by imagination and emotions in aesthetic appreciation. Very few people would deny that emotions play a major role in art appreciation. However, this raises a lot of questions, particularly when it comes to our engagement with fictions. First, there is the paradox of fiction: How is it possible to feel emotions toward fictional characters that we know do not exist? One solution to this paradox is to simply forego the idea that we feel genuine emotions for these characters: rather, what we feel are quasiemotions, mental states that are similar to emotions in certain dimensions (e.g., their phenomenology) but differ in others (e.g., their functional roles). But what independent reasons do we have to distinguish between everyday emotional episodes and what we feel for fictional characters? In his contribution ("Being Quasi-Moved: A View from the Lab"), Jérôme Pelletier presents the results of recent studies providing such independent reasons by showing that participants' emotional reactions are less intense when they believe the narratives they are presented with are fictional. On this basis, he advances a dual model account of our emotions toward fictional entities.

Second, there is imaginative resistance. "Imaginative resistance" is the name that has been given by philosophers to instances in which we find ourselves unable to imagine what a narrative asks us to imagine (see Gendler and Liao 2016 for an overveiew). Traditionally, imaginative resistance has been connected to questions of values: there would be something special about axiological claims that would make it hard, if not impossible, to imagine worlds in which claims that run contrary to our deepest-held convictions are true (Liao et al. 2014). However, in their contribution ("The Content-Dependence of Imaginative Resistance"), Hanna Kim, Markus Kneer, and Michael Stuart argue that imaginative resistance is not specific to axiological claims, but rather has to do with what they call the "weirdness" of what we are required to imagine. They present the results of a study in which they compared the respective effects of types of claims (axiological vs. non-axiological) and their content on imaginative resistance. Their results problematize some popular conceptions of imaginative resistance, and stress the importance of distinguishing between different versions of the problem (and phenomenon) of imaginative resistance.

Speaking of imagination, what exactly is imagination? In his contribution ("Aphantasia and the Decay of Mental Images"), Steve Humbert-Droz draws on the case of aphantasics (people who claim not to have mental images) to discuss the role of mental images in our lives and in appreciation of fictions. He also discusses whether imagination can survive without mental images, and what consequences this has for a proper philosophical account of imagination.

Finally, since Kant and Burke, feelings of awe and the sublime have played an important role in philosophical descriptions of our aesthetic experience. However, one question is whether such experience can only be elicited by natural objects, and not by artworks. In their contribution ("The Beautiful, the Sublime, and the Self"), Margherita Arcangeli, Jérôme Dokic, and Marco Sperduti draw on data from psychology and neuroscience to advance an account of feelings of sublime: according to them, sublimity experiences are immersive episodes that blur the distinction between the self and the world. Drawing on this account, they explore how the claim that works of art are able to elicit feelings of sublime could be experimentally put to test.

The fourth section is dedicated to the link between aesthetics and language, and the way different levels of linguistic analyses (syntax, semantics, and pragmatics) can be used to further our understanding of aesthetic experience and aesthetic judgment. At the syntactic level, Constant Bonard ("Lost in Musical Translation") develops an empirical approach to the idea that music is structured as a language and has a syntax of its own, the rules of which can differ from one musical culture to another. Comparing Western to Carnatic music, he investigates how familiarity with each kind of music impacts our understanding of their syntax and, in turn, our ability to grasp the kinds of emotion they express.

At the semantic level, Isidora Stojanovic ("An Empirical Approach to Aesthetic Adjectives") surveys recent theoretical and empirical work on the semantics of aesthetic adjectives. Her focus is a recent series of experiments by Liao and Meskin (2017), who claim that aesthetic adjectives pose an empirical challenge to the standard taxonomy of adjectives. She argues that their claim cannot be established on the basis of the results that they observe, and discusses various semantic and pragmatic factors that may explain those results.

Finally, at the pragmatic level, Alessandro Pignocchi ("The Continuity between Art and Everyday Communication") puts forward an account of art reception that draws an analogy between art reception and pragmatic understanding. Drawing on relevance theory, Pignocchi describes our engagement with artworks as a process in which we try to understand what the artist's intentions were and what s/he was trying to communicate to us. He also discusses the way his hypothesis could be experimentally put to test.

The fifth and last section is dedicated to metaphilosophical matters: the relevance of experimental philosophy of aesthetics for philosophical practice, its methodological shortcomings, but also its usefulness in our efforts to make academic philosophy more accessible to the public. In "Are Aestheticians' Intuitions Sitting Pretty?" Jonathan Weinberg explores the possible consequences

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of experimental philosophy of aesthetics for philosophical methods and practices in the field of aesthetics. In the past years, results in experimental philosophy have often been taken to undermine the use of intuitions in other fields of philosophy (such as ethics or epistemology) and to require philosophers to deeply revise their methodology. Should we expect experimental philosophy of aesthetics to do the same for aesthetics? Not necessarily. Indeed, Weinberg discuss several reasons for which the use of intuitions in aesthetics might avoid the pitfalls observed in other fields. As a result, the use of experimental philosophy in aesthetics might yield less "negative" implications than in the fields mentioned above.

Also, as an empirical approach, experimental philosophy of aesthetics is open to methodological criticisms. In "Beauty and the Agreeable: A Critique of Experimental Aesthetics," Nick Zangwill criticizes experimental philosophy of aesthetics as it is currently practiced, mostly for its overreliance on vignettes and questionnaire methodology, but also for its failure to properly operationalize philosophical concepts and questions. Drawing on a particular case study (recent research on the norms of aesthetic judgment by Cova and Pain 2012), Zangwill calls for drastic methodological improvements in the practice of experimental philosophy of aesthetics.

Finally, experimental philosophy might be a useful tool to make aesthetic questions accessible to a wide audience. Indeed, experimental philosophy offers an alternative mode of engagement for public philosophy, in which the public can play a participatory role. In "Experimental Philosophical Aesthetics as Public Philosophy," Shen-yi Liao and Aaron Meskin report back on two coffee-tasting events—one on aesthetics and epistemology, and the other on aesthetics and ethics—where they explored the possibility of doing experimental philosophical aesthetics as public philosophy. One can only hope their example will foster further attempts in the same vein.

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Part One

The Nature of Aesthetic Judgment

Beyond Intersubjective Validity: Recent Empirical Investigations into the Nature of Aesthetic Judgment

Florian Cova

1. Introduction: Aesthetic judgment and intersubjective validity

Understanding the nature of aesthetic judgment and the norms that apply to it is one of the main tasks of philosophical aesthetics. In fact, according to some, it is the *main* task of aesthetics. This suggests that there is something problematic about aesthetic judgments—something that requires particular investigation. But what exactly?

According to most philosophical accounts of aesthetic judgments, the most puzzling feature of aesthetic judgments, the one that calls for an explanation, is their apparent *intersubjective validity* (Budd 2007). By intersubjective validity, here we simply mean the fact that aesthetic judgments seem to claim validity not only for the one who utters them but also for *others*. To put it otherwise, it seems that when I judge that something is beautiful or ugly, I thereby judge that those that do not agree with me are *wrong*. As Kant puts it:

When [a man] puts a thing on a pedestal and calls it beautiful, he demands the same delight from others. He judges not merely for himself, but for all men, and then speaks of beauty as if it were a property of things. Thus he says that the thing is beautiful; and it is not as if he counts on others agreeing with him in his judgment of liking owing to his having found them in such agreement on a number of occasions, but he demands this agreement of them. He blames them if they judge differently, and denies them taste, which he still requires of them as something they ought to have; and to this extent it is not open to men to say: Every one has his own taste. (Kant 1790/1928: 52)

As such, intersubjective validity is not a puzzling feature; most of our judgments do seem to share it. For example, if I claim that "it rains outside," then it seems that this judgment has intersubjective validity—because this judgment is about the world, I expect it to be valid (in this case: *true*) not only for me, but also for others. Judging that "it rains outside" commits me to judge that those who do not share this judgment are wrong.

However, not all judgments have intersubjective validity. For example, if I claim that some cake I just ate is "yummy," I might only be expressing a particular experience (such as when I say "yuk!" or "ouch!"), or describing some fact that is relative to me (e.g., that the cake is yummy *to me*). In this case, I might be perfectly okay with others expressing a different judgment; I do not expect from others that they share my judgment, nor do I fault them when they don't.

The problem with aesthetic judgments, according to most philosophers, is that they look like typical judgments that do *not* have intersubjective validity: as the judgment that something is yummy, they seem to express a particular personal experience of a natural or artificial object. As such, we would expect them not to demand agreement from others. But, contrary to this expectation, it seems that we impose norms on aesthetic judgments: we argue about the aesthetic qualities of objects, we distinguish between good and bad taste, and we rank works of art according to their aesthetic merits. Thus, aesthetic judgments seem to be both subjective (i.e. expressing a particular personal experience) and intersubjectively valid (i.e. demanding that other agree with them, and as such susceptible to be right and wrong) (see Schellekens 2009).

This tension is perfectly illustrated by the following YouTube comment, which I extracted from a dispute about the quality of a given videogame:

Well I'll be goddamned. You're actually, legitimately, literally 100% objectively wrong about a subjective thing. This is like dividing by 0. How'd you fucking do this?

Though I guess that Zangwill (2010) might have a more rigorous way to characterize it:

In respect of normativity, judgments of taste are like empirical judgments and unlike judgments of niceness or nastiness, but in respect of subjectivity, judgments of taste are unlike empirical judgments and like judgments of niceness or nastiness. So we have a three-fold division: empirical judgments, judgments of taste, and judgments of niceness or nastiness. And judgments of taste have the two points of similarity and dissimilarity on each side just noted.

As Kant recognized (more or less following Hume), all this is a point from which to theorize. The hard question is whether, and if so how, such a subjectively universal judgment is possible. On the face of it, the two characteristics are in tension with each other. Our puzzle is this: what must be the nature of pleasure in beauty if the judgments we base on it can make claim to correctness? This is the Big Question in aesthetics. Kant set the right agenda for aesthetics.

So, how are we to account for the apparent intersubjective validity of aesthetic judgment? Are we going to suppose that aesthetic judgments indeed *are* intersubjectively valid and try to explain why and how (e.g., Goldman 1995, Zangwill 2005)? Or are we going to claim that this appearance is only an illusion and try and develop an appropriate error theory (e.g. Genette 1997)? Both options are tempting but in this chapter I will argue that there is a third way: to simply reject the problem, rather than trying to solve it.

2. Intersubjective validity revisited

2.1. Cova and Pain (2012)'s studies

As we just saw, explaining the apparent intersubjective validity of aesthetic judgments is considered by some to be the "Big Question" of aesthetics. This means that the apparent intersubjective validity of aesthetic judgment is more often than not considered as the starting point from which all account of aesthetic judgment must develop (even if the conclusion is that this apparent subjective validity is merely an illusion). Indeed, that aesthetic judgments *seem* to have intersubjective validity is often taken as a datum, something that would be part of common sense:

When one is touched by the beauty of a sunset, a Beethoven string quartet, a novel by James Joyce, or a painting by Giorgio Morandi, one cannot help thinking that the experienced feeling of pleasure ought to be shared by others. Notwithstanding its logical singularity, the pure judgement of taste—i.e. the judgement of beauty—requires or "demands" everyone else's agreement. Yet the demand for universal agreement is very peculiar, since it cannot be based on conceptual arguments or proofs and is only determined by one's own feeling of pleasure or displeasure. (Vandenabeele 2008: 410)

But is that the case? Is it true that most of us spontaneously perceive our aesthetic judgments as being intersubjectively valid? This is the question Nicolas Pain and I asked ourselves. To answer it, we probed people's beliefs

about the intersubjective validity of aesthetic judgments through three studies (Cova and Pain, 2012). In the first two studies, we gave French undergraduates fifteen vignettes describing several kinds of disagreements between two interlocutors coming from different cultures: typical subjective disagreements (e.g. disagreement about whether some food tastes good or bad), typical factual disagreements (e.g. disagreement about whether Proust is the author of *In Search of Lost Time*), and aesthetic disagreements (e.g. whether a given painting, song, or landscape is beautiful or ugly—this included famous works of arts such as Da Vinci's *Mona Lisa*, or Beethoven's *For Elise*). Here is a sample vignette describing an aesthetic disagreement:

Agathe and Ulrich are enjoying their holidays in their country house. As they wander in the garden, they hear a nightingale singing. Agathe says: "This is a very beautiful singing." Ulrich answers: "No. It's not beautiful."

For each kind of disagreement, participants were asked to indicate which of the four following possibilities best described the situation:

- (a) One of them is right while the other is wrong.
- (b) Both are right.
- (c) Both are wrong.
- (d) Neither is right or wrong. It makes no sense to speak in terms of correctness in this situation. Everyone is entitled to his own opinion.

As expected, most respondents chose (a) for typical factual disagreements and (d) for typical subjective disagreements, thus showing that they spontaneously made a difference between judgments that have intersubjective validity and those that do not. However, it also turned out that most respondents chose (d) for aesthetic disagreements. In fact, the likelihood of choosing (d) did not significantly differ between subjective and aesthetic disagreements. This suggests that, contrary to received philosophical wisdom, our participants did not view aesthetic judgments as possessing intersubjective validity.

However, we should not jump to the conclusion that people do not ascribe intersubjective validity to their *own* aesthetic judgments. Maybe participants did not choose answer (a) in the situation describing an aesthetic disagreement because they were not personally involved. To control for this possibility, we designed a third study in which French undergraduates were first instructed to describe an object they personally found very beautiful, then asked to imagine that someone was disagreeing with them, claiming that said object was not at all beautiful. Here again, respondents were asked to choose, among answers (a) to

(d), the one that best described the situation according to them. As with the first two studies, we found that very few respondents (10%) chose answer (a), and that most of them instead chose answer (d). Again, this strongly suggests that, contrary to what is generally assumed by philosophers, people do not attribute intersubjective validity to aesthetic judgments.

2.2. Objection I: Demographic limitations

However, these studies suffer from one important limitation: they relied on a very specific sample. All participants were undergrads recruited in Paris' Quartier Latin. As critics have pointed out, it would be foolish to draw broad inferences about general attitudes from such a limited sample (Henrich, Heine, and Norenzayan 2010, Réhault 2013). One may also wonder whether these answers merely reflect some kind of superficial relativism common among Western students (Pouivet 2006).

Fortunately, we now have data that address both these issues. The *Intellectual Humility & Cultural Diversity in Philosophy* project, coordinated by Stephen Stich and Edouard Machery, collected data on philosophical intuitions from six geographical areas: Europe (Bulgaria, France, Germany, Italy, Lithuania, Portugal, Spain, Switzerland, UK), Middle East (Iran, Israel), Central and North America (Mexico, United States), South America (Columbia, Brazil), East Asia (China, Hong Kong, Japan, South Korea), and finally South and Southeast Asia (India, Indonesia). As part of this project, I included the following vignette, similar to the one used in Cova and Pain (2012):

- **Question 1.** Describe something (e.g., a natural object, or some work of art) that you find very beautiful.
- **Question 2.** Now, imagine that you meet someone and this person says to you that he does not find this thing beautiful at all. In your personal opinion, which of the following best describes this situation:
 - 1. One of you is correct while the other is not.
 - 2. Both of you are correct.
 - 3. Neither is correct. It makes no sense to talk about correctness in this situation.

Question 3.	How certain are you of your response to Question 2 on a
0-100 p	ercent scale, with low numbers indicating that you are not sure
and hig	numbers indicating that you are sure?
I am	percent certain of my response.

	Central & North America	South America	Europe	Middle East	East Asia	South & Southeast Asia
Answer 1 (%)	5.6	6.3	4.8	6.9	6.6	22
Answer 2 (%)	40.3	25	35.2	31.3	54	34.5
Answer 3 (%)	54.2	68.8	60	61.8	39.4	43.5

Table 1.1 Answer rate per geographical area (Cova et al., forthcoming)

Answer 1 = "One of you is correct while the other is not," Answer 2 = "Both of you are correct," Answer 3 = "Neither is correct. It makes no sense to talk about correctness in this situation."

Overall, 2,392 respondents answered this vignette. The results per geographical areas are summarized in Table 1.1. As one can see, the answer according to which aesthetic judgments have intersubjective validity (i.e. Answer 1) was the least chosen in every single geographical area. Thus, the results obtained by Cova and Pain (2012) seem to generalize that most people do not attribute intersubjective validity to their aesthetic judgments.

2.3. Objection II: Methodological limitations

Still, it is not because the results can be replicated on a (much) larger scale that the way we interpret them is right: that people massively avoid Answer 1 might not show that they reject the intersubjective validity of aesthetic judgment. As pointed out by Zangwill (Chapter 13 in this volume), the questions asked in Cova and Pain (2012) are not about aesthetic judgments, and whether they are true or false, but about the interlocutors, and whether they are right or wrong. These are two different questions: the first is *alethic*, while the second is *epistemic*. Indeed, it could be that people consider that one can say something *true* without necessarily being *right*: maybe being *right* requires one to also be justified in claiming that something is true. Thus, that people consider neither interlocutor to be right or wrong might say nothing about the validity of judgments themselves.

To test for this alternative interpretation of our results, I recruited 318 participants through Mechanical Turks (194 men, 124 women; $M_{\rm age}$ = 35.7, $SD_{\rm age}$ = 12.0; all United States residents with HITs success rate > 95 percent and more than 50 HITs completed). After being asked their gender and age, participants were randomly assigned to the *Beautiful*, *Agreeable*, or *Steel* condition. They

received the following series of questions, which changed according to the condition:

Question 1. Please describe something you consider to be [beautiful/agreeable/made of steel].

Now imagine that you see someone who tells you, about this very same thing: "No, it is not [beautiful/agreeable/made of steel]."

Question 2. In your personal opinion, which of the following best describes this situation:

- 1. One of you say something true while the other say something false.
- 2. Both of you say something true.
- 3. Both of you say something false.
- 4. Neither of you say something true or false.

Question 3. In your personal opinion, which of the following best describes the two judgments (yours and the other person's) made in this situation:

- 1. One judgment is better than the other.
- 2. Both judgments are equally good.
- 3. Neither.

Results for Questions 2 and 3 are presented in Figure 1.1. As one can see, the pattern of answers for "beautiful" is the same as the pattern of answers for "agreeable," but differs widely from the pattern of answers for "made of steel." For Question 2, the rate of Answer 1 ("one true, the other false") does not differ significantly between "agreeable" and "beautiful" (41.7% vs. 37.9%; $\chi^2(1, N=206)=0.18, p=0.67, w=0.03)$, but differs significantly between "beautiful" and "made of steel" (37.9% vs. 71.4%; $\chi^2(1, N=215)=23.12, p<0.001, w=32.8)$. Similarly, for Question 3, the rate of Answer 1 ("one judgment better than the other") does not differ significantly between "agreeable" and "beautiful" (44.7% vs. 39.8%; $\chi^2(1, N=206)=0.32, p=0.57, w=0.04)$, but differs significantly between "beautiful" and "made of steel" (39.8% vs. 70.5%; $\chi^2(1, N=215)=19.31, p<0.001, w=30)$. This suggests that even when we ask participants about the truth of aesthetic judgments, or about which judgment is better, most of them treat aesthetic judgments in the same way they treat judgments about what is agreeable, and not like paradigmatic factual judgments.

One might object that using this method, we still find a much higher rate of participants who choose Answer 1, and thus endorse the intersubjective validity of aesthetic judgment (37.9% or 39.8% depending on the question—almost half of them). However, the fact that an even higher rate of participants

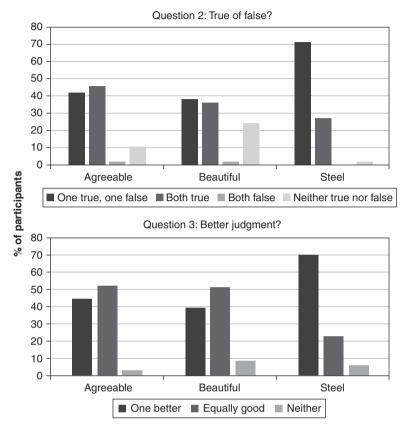


Figure 1.1 Participants' answer to Questions 1 and 2 (section 2.3)

choose Answer 1 when asked to think about something agreeable shows that these answers should be interpreted with caution. Indeed, that participants choose Answer 1 in these questions might not show they consider aesthetic judgments to have aesthetic validity: they might simply interpret the question as an invitation to express their own subjective judgment (by endorsing one of the judgments and rejecting the other). For example, if A says that a hamburger is "yummy" and I ask B whether it's true and B answers "no," B might simply be expressing that he does not find the hamburger yummy, without committing himself to the idea that there is a matter-of-the-fact about the "yumminess" of hamburgers. Similarly, participants who choose Answer 1 to Questions 2 and 3 might just interpret the question as asking whether they share the same advice as one of the two interlocutors and not as asking whether one judgment is true for everyone and the other false for everyone. So, it turns out that the methodology we used in Cova and Pain (2012), asking people

whether interlocutors were right or wrong, might have been superior; at least it yielded the expected low rate of Answer 1 in case of paradigmatic subjective judgments.

3. What now?

According to a wide philosophical consensus, the most puzzling feature about aesthetic judgments was the fact that they seemed to combine the subjectivity of certain judgments with the intersubjective validity of others. Accounting for this apparent puzzling combination of properties has been taken by many as the main task for philosophical accounts of aesthetic judgment. However, if the results I have presented in the previous section are to be trusted, aesthetic judgments do not appear to most of us as having intersubjective validity. Thus, the main *explanandum* for philosophical accounts of aesthetic judgment seems to have disappeared.

Does it mean that there is no longer anything to discuss about aesthetic judgment and that its nature is now clear to us? Not really. Even if people do not attribute intersubjective validity to aesthetic judgments, they still continue to make a difference between good and bad aesthetic taste, and to engage in debates about the aesthetic value of natural objects and works of art. Thus, we still need an account of aesthetic judgment that makes sense of these phenomena, which constitute the true *explananda* for and adequate account of aesthetic judgments. Assuming that common sense views aesthetic judgments as being intersubjectively valid provided a good and simple explanation of such behaviors (despite the fact that aesthetic judgments were intersubjectively valid itself called for further explanation). Thus, now that we are done with the idea that people take aesthetic judgments to have intersubjective validity, we are in want of a proper explanation for these phenomena, and our task should be to find one.

As empirical investigations in the nature of aesthetic judgment are in their infancy, we are probably a long way from reaching such an account. So, the reader should not expect the present chapter to answer all these fascinating questions. Rather, in the following sections, I present recent empirical research on aesthetic judgment that might provide some preliminary insights on the nature of aesthetic judgment and help us understand why people discriminate between aesthetic judgments and aesthetic tastes, even if they do not take aesthetic judgments to have intersubjective validity.

4. Study 1: Causal assumptions in folk aesthetic judgment

One way to understand how aesthetic judgments can be disputed and are open to debate might be to focus on the kind of information they aim to convey. Indeed, to the extent that we formulate such judgments, it is reasonable to think that they have some communicative purpose. However, to the extent that the information they convey is correct or incorrect, this might provide us with a way to hierarchize aesthetic judgments: aesthetic judgments can be debated on the basis of the information they purport to convey, and some people might be said to have better aesthetic judgments than others on the basis that they more often convey correct information. Note that this does not presuppose than aesthetic judgments have any truth-value: onomatopoeia such as "ouch!" or "yuck!" have no truth-value, but can still be used to communicate information. Thus, focusing on the communicative intent behind aesthetic judgment might provide us with a way to reintroduce the idea that some aesthetic judgments are better than others, while retaining the idea that they are not intersubjectively "true."

So, what do we try to communicate when we utter an aesthetic judgment such as "this painting is beautiful"? What information are such utterances supposed to convey? Given the results presented in section 2, one simple solution would be to conclude that aesthetic judgments such as "this painting is beautiful" amount to no more than shouting "yuck!" or "boo!" and expressing thereby a particular feeling. That is, aesthetic judgments would only convey information about our own mental state and affects.

One traditional objection to this approach is that, contrary to expressions such as "yuck!" or "boo!", judgments such as "this painting is beautiful" seem to be about a given object (here: the painting). Thus, they are not just about me and my experience. One traditional way to interpret them is consequently to read them as ascribing some kind of mind-independent aesthetic property (beauty) to the object (the painting). However, in light of the data reported in the previous section, this is not without difficulty.

Another interpretation, then, is that such statements actually describe a certain relationship between me and the object I judge as beautiful. On the one hand, the judgment according to which "this painting is beautiful" *does* convey information about my own experience (that I have a particular subjective experience): saying that something is beautiful while I experience it as ugly

would amount to lying. On the other hand, it also tells something about the object by conveying the information that this object is the *causal source* of my experience. Thus, under this interpretation, it is possible to accommodate both the idea that aesthetic judgments are about my personal experience and the idea that they are about the object that is said to be beautiful.

If this interpretation of aesthetic judgments is right, that is, if aesthetic judgments convey the information that the object they claim to be beautiful is the causal source of the experience they express, then people should be ready to reject certain aesthetic judgments as wrong or misguided if those judgments misidentify the source of a given experience.

4.1. Method

To put this prediction to test, I recruited 153 participants through Mechanical Turks (eighty-five men, sixty-seven women, one other; $M_{\rm age}=34.3$, $SD_{\rm age}=10.3$; all US residents with HITs success rate > 95% and more than 50 HITs completed). Participants were randomly assigned to either the *Control* or *Experimental* condition, then were presented with a short vignette. Participants in the *Control* condition received the following vignette:

Karen and Helena are two friends. They are discussing about architecture. Karen asks Helena whether she has already seen the Eiffel Tower, and whether it was beautiful.

Helena has indeed been to Paris and seen the Eiffel Tower. She remembers she found it very beautiful and took pleasure in admiring it. So she says to Karen: "Yes. It was very beautiful. I really liked it."

While participants in the *Experimental* condition received the same two paragraphs, plus one additional paragraph at the end:

However, what Helena does not say to Karen is that she was "high" when she saw the Eiffel Tower, because she was on drugs most of the time she visited Paris. Also, what Helena does not know is that, had she not been on drugs at this moment, she would not have enjoyed seeing the Eiffel Tower, and she would not have thought it was beautiful.

Thus, both conditions described Helena making an aesthetic judgment about the Eiffel Tower. However, in the *Experimental* condition, this aesthetic judgment was based on an experience that was not caused by the Eiffel Tower itself (but rather by drugs).

Then, in both conditions, participants were asked to answer the following questions:

Question 1. When Helena says to Karen that the Eiffel Tower is beautiful, does she say something TRUE or FALSE?

- 1. She says something true.
- 2. She says something false, though she is convinced of saying something true.
- 3. She says something false, and she is aware of it.
- 4. What she says is neither true nor false.

Question 2. When Helena says to Karen that the Eiffel Tower is beautiful, is she right or wrong? (On a seven-point scale, from -3 = "Completely wrong" to 3 = "Completely right").

Question 3. When Helena says to Karen that she really liked the Eiffel Tower, does she say something TRUE or FALSE?

- 1. She says something true.
- 2. She says something false, though she is convinced of saying something true.
- 3. She says something false, and she is aware of it.
- 4. What she says is neither true nor false.

Question 4. When Helena says to Karen that she really liked the Eiffel Tower, is she right or wrong? (On a seven-point scale, from -3 = "Completely wrong" to 3 = "Completely right").

My prediction was that participants would be more likely to rate Helena's aesthetic judgments as false, and Helena as being wrong in the *Experimental* condition.

4.2. Results

Figures 1.2 and 1.3 summarize participants' answers to all four questions depending on the condition (*Control* or *Experimental*).

As can be seen in these figures, participants' answers differed between the two conditions. In the *Control* condition, most participants judged Helena's aesthetic judgment as either "true" (60.5%) or "neither true nor false" (30.3%). Very few people actually judged Helena's judgment to be "false" (9.2%). However, in the *Experimental* condition, a lot more participants tended to consider Helena's aesthetic judgment to be "false" (46.8%)—a statistically significant difference,

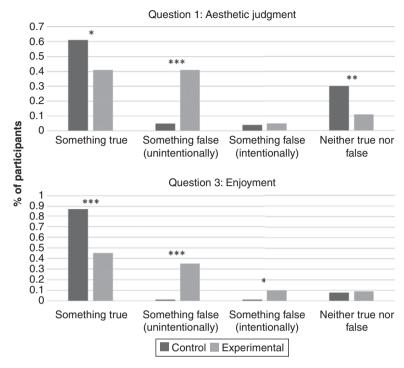
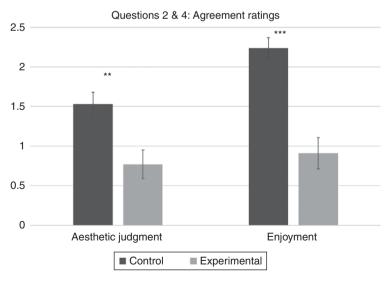


Figure 1.2 Participants' answer to Questions 1 and 3 (Study 1)



Error bars indicate standard error of the mean.

Figure 1.3 Participants' answers to Questions 2 and 4 (Study 1)

 $\chi^2(1, N = 153) = 24.85$, p < .001, w = .40. In line with these results, participants were less likely to consider Helena right in the *Experimental* than in the *Control* condition—here again, a statistically significant difference, t(151) = 3.21, p = .001, d = .52.

Now, these results cannot be explained by the view that aesthetic judgments attribute mind-independent properties to the objects they signal as "beautiful." Nor can they be reconciled with the view that they simply express one's inner experience. However, they are readily explained by the fact that aesthetic judgments convey one additional information beyond the mere fact that one is experiencing something—they imply that this particular experience finds its source in the particular object that is judged "beautiful."

Of course, not all participants' answers seem to be in line with this conception of aesthetic judgment. After all, a lot of participants still consider Helena's aesthetic judgment to be "true" in the *Experimental* condition. Once again, a very simple explanation is that some participants interpret Questions 1 and 2 as asking them about their own aesthetic appreciation of the Eiffel Tower. After all, in most contexts, asking someone whether *X* is right in saying that *p* amounts to asking them whether they think that *p*. One easy way to test that would simply be to use a similar scenario, in which the Eiffel Tower is replaced by something that participants are likely to consider not to be beautiful. In this case, we should observe the rate of "true" answers in the *Experimental* condition to be considerably lower than what it is here.

In any case, the fact that (some) participants consider aesthetic judgments to convey some kind of information about the source of one's own experience allows the possibility for aesthetic judgments to be "wrong" while being subjective: people can be mistaken about the source of their experience. And this provides us with a first way in which some people may have better aesthetic judgments than others—some people (e.g. critics) might be better at identifying the source of their experience, while others might be easily swayed and led to attribute to objects feelings that come from elsewhere (peer pressure, hype, advertising, etc.). For example, in everyday discussions about popular culture, it is common to find the claim that one's aesthetic appreciation is "blinded by nostalgia" (or that one is wearing "nostalgia goggles"): maybe you think movies were better before, not because they were better, but only because nostalgia leads you to ignore the flaws of past movies. You are only projecting the good memories and feeling associated with childhood onto the movies you watched then. A good art critic would thus

be someone who would be able to tease apart what in his or her experience comes from properties of the work itself, and what can be considered as the product of external factors.

5. Study 2: Whose experience?

So far, we have considered that aesthetic judgments conveyed information about the (aesthetic) experience of those who uttered them. But is it always the case? Might not it be possible that aesthetic judgments sometimes convey information about someone else's experience?

This seems to be the case for other kinds of "subjective" judgments. Take the following trivial example: when giving baby food to my six-month-old daughter, I sometimes tell her: "This looks really good, you will enjoy it." What do I claim when I tell her "this is good"? Do I claim that I like said baby food? This would clearly be a lie. But I don't feel like I am lying to my daughter in those instances. So what am I claiming? Probably that the food will bring *her* some kind of positive (gustatory) experience.

Of course, some of my readers might enjoy baby food (I know some people who do). In this case, let's take a more radical example. There are dog owners who speak to their dogs. On some occasions, they might call their dogs to eat by saying things like "Come here! I have something good for you!" or "There is something delicious waiting for you!" In such instances, are those dog owners claiming that they *like* dog food? Or are they willfully lying to their dogs? Again, this seems unlikely.

One interpretation of what is going on here is that I am not speaking of my own experience, but of my daughter's possible experience: I tell her that the baby food I am going to give her is likely to provide *her* some pleasurable gustatory experience. If so, aesthetic judgment might not always be used to speak about the utterer's experience, but also about some object's power to induce a particular type of experience in someone else (the "target" of the judgment).

5.1. Method

To put this prediction to test, I recruited 104 participants through Mechanical Turks (57 men, 47 women; $M_{\text{age}} = 35.9$, $SD_{\text{age}} = 12.0$; all US residents with HITs

success rate > 95% and more than 50 HITs completed). Participants were presented with the following vignette:

Sarah is the mother of two daughters: Ann and Claire. Ann and Claire are both 5 years old, for they are twins.

For their fifth birthday, their grandmother, Sarah's mother, has them sent a giant unicorn plush. Sarah receives the unicorn while her daughters are in school. It is a very huge, pink, fluffy, sparkling and glittering unicorn.

Sarah finds it particularly ugly. But she knows Ann will definitely like it: Ann really likes this kind of stuff, and will probably find it beautiful. Claire, on the contrary, hates everything that is pink, and will probably find it ugly.

Sarah puts the unicorn in her daughters' bedroom. Ann is the first to come back to school. When she arrives, Sarah tells her: "There is something beautiful in your bedroom."

Question 1. When Sarah tells Ann that there is something beautiful in her bedroom, does she say something TRUE or FALSE?

- 1. She says something true.
- 2. She says something false, though she is convinced of saying something true.
- 3. She says something false, and she is aware of it.
- 4. What she says is neither true nor false.

Question 2. How much do you agree with the following statement: "When Sarah tells Ann that there is something beautiful in her bedroom, she is lying to Ann"? (On a seven-point scale, from -3 = "Completely disagree" to 3 = "Completely agree")

Then, once they had answered both questions, participants were presented with a second row of questions:

A few minutes later, Claire comes back from school. When she arrives, Sarah tells her:

"You should have a look at your bedroom. There is something beautiful waiting for you here."

Question 3. When Sarah tells Claire that there is something beautiful in her bedroom, does she say something TRUE or FALSE?

- 1. She says something true.
- 2. She says something false, though she is convinced of saying something true.

- 3. She says something false, and she is aware of it.
- 4. What she says is neither true nor false.

Question 4. How much do you agree with the following statement: "When Sarah tells Claire that there is something beautiful in her bedroom, she is lying to Claire"? (On a seven-point scale, from -3 = "Completely disagree" to 3 = "Completely agree")

5.2. Results

Figure 1.4 presents participants' answer to all four questions. As one can see, the number of participants who answered that Sarah said something "true" was significantly lower when Sarah spoke to Claire than when she spoke to Ann, $\chi^2(1, N=104)=8.96$, p=.003. Similarly, people were more likely to agree with the claim that Sarah lied when she spoke to Claire than when she spoke to Ann, t(206)=5.25, p<.001, d=.73. This means that whether Sarah's aesthetic claim is true depends on *who* she is talking to. Again, these results cannot be explained either by the thesis that aesthetic judgments only express one's subjective experience, or by the thesis that aesthetic judgments ascribe mind-independent aesthetic properties to objects.

Rather, the simpler explanation for these results is the following: when we make aesthetic judgments, we are not always talking about our own aesthetic experience. We can use aesthetic judgments to talk about the aesthetic experience of *others*. Thus, when Sarah tells Ann that there is something beautiful in her room, she clearly aims to convey the following information: that Sarah will find in her room something she is likely to experience as beautiful.

This suggests that aesthetic judgments can be used in at least two ways: either (i) to convey the information that a certain object elicited in us a certain aesthetic experience, or (ii) to convey to a given audience that a certain object is likely to elicit a certain aesthetic experience in them. When film critics formulate aesthetic claims, they probably use them in the second way: their goal is not only to report their own aesthetic of a film, but also to tell their audience that the film is worth watching because it will likely provide them with a certain aesthetic experience. Good critics will thus be those who convey the right information, that is, who are able to direct their audience toward movies that will actually provide them such an experience, because they are able to perceive the properties more likely to elicit (or hinder) this kind of experience.

Thus, in one sense of this expression, a person with good aesthetic taste might simply be someone with the ability to know whether a given object will provide

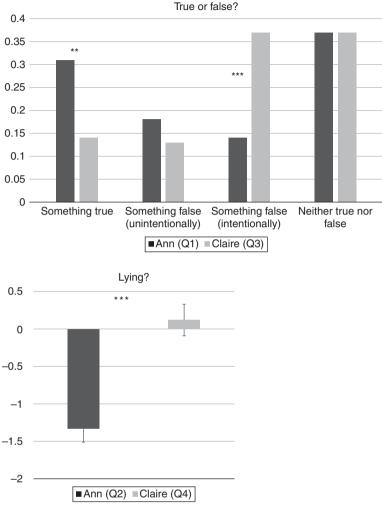


Figure 1.4 Participants' answers to Questions 1 to 4 (Study 2). Top panel presents the percentage of participants selecting each answer for Questions 1 and 3. Bottom panel presents participants' agreement with the claim that Sarah lied to her daughter (Ann or Claire). Error bars indicate standard errors of the mean

the adequate aesthetic experience to a given audience. Kantians will of course balk at this suggestion, because it is the very hypothesis Kant rejects in *Analytic of the Beautiful*, §7, by arguing that people with such an ability only ground their judgment in general empirical rules rather than universal ones. However, since we have rejected Kant's main argument, that aesthetic judgments are generally

perceived as having some kind of universal validity, nothing prevents us from exploring this possibility.

Of course, it would be weird to say that someone who can predict what others will enjoy based on a big collection of empirical data, without knowledge of the works themselves, has a good aesthetic taste. It seems that good aesthetic judgment at least requires some acquaintance with the work itself. So, maybe a more plausible conception would be something along these lines: someone who has good aesthetic taste is someone who, when engaging with a work of art, is able to perceive the property that will make this work likely to elicit certain aesthetic experience in a given audience.

6. Conclusion

In this chapter, I presented empirical evidence that, despite a wide consensus in the philosophical literature about aesthetic judgment, most people do not see aesthetic judgments as having universal or even merely intersubjective validity. Thus, philosophers should not worry about explaining this apparent subjective validity, since there is none. However, I also argued that there were still pressing questions about aesthetic judgment, and that answering would require a new account of aesthetic judgment that would explain the distinction people made between aesthetic judgments, and between good and bad aesthetic tastes, without reintroducing the notion of intersubjective validity.

I then sketched a possible avenue of research: maybe we could reintroduce some hierarchy between aesthetic judgments by looking at the information they aim to convey and communicate. To some, this approach might have seemed shallow, because it never captures the idea that one can be faulted for enjoying certain things. However, it is not the only possible approach. Elsewhere, I have sketched another approach, according to which aesthetic judgments are also used as cues to several intellectual and moral virtues and vices, so that certain aesthetic judgments might be considered as inferior to others because they are taken to reflect certain intellectual and moral vices (see Goffin and Cova 2018). This approach might combine with the one presented in this chapter, as well as many others that have not been developed yet. After all, even without intersubjective validity, there might be many ways for an aesthetic judgment to be inferior or superior to others.

Supplementary Materials

Materials and data for the study presented in this chapter can be found at osf. io/xbawq/

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Aesthetic Testimony and Experimental Philosophy

James Andow

Aesthetic testimony is testimony about aesthetic properties. For example, in a straightforward case, one person might tell another that something is beautiful. Philosophical discussion about aesthetic testimony centers on the question of whether there are any important differences between aesthetic testimony and testimony about nonaesthetic descriptive matters. In particular, the focus is often on the respective epistemic credentials of aesthetic and nonaesthetic testimony relative to firsthand judgments in the respective domains. Most are inclined to think that in some way and to some degree we typically treat aesthetic testimony as being epistemically inferior to testimony about nonaesthetic matters. Assuming an asymmetry in the way we typically treat aesthetic and nonaesthetic testimony, the philosophical debate then asks a number of questions. Is aesthetic testimony actually epistemically inferior? If so, in what ways, and what explains its inferiority? If not, why do our ordinary ways of thinking, talking, and engaging with aesthetic testimony treat it as being inferior? In this chapter, I consider various ways in which experimental philosophy can contribute to these debates. Drawing on extant work and some new empirical studies, this chapter provides an overview of what experimental philosophy has told us so far, and summarizes the implications for philosophical debate.²

1. Empirical foundation of the debate

One main motivation given for the claim that aesthetic testimony is epistemically inferior is that its inferiority is betrayed in our ordinary ways of engaging with and thinking about testimony. The relevant picture of our ordinary ways of

engaging with and thinking about testimony is typically based on armchair reflection alone. Thus, the philosophical debate draws heavily on empirical claims, which experimental philosophy can help verify.

In particular, the debate is premised on an observation made from the armchair: while we are fairly happy to rely on testimony in most areas of our lives—not generally thinking that beliefs or claims to knowledge are somehow suspect in the event that the relevant beliefs are based on testimony—we are less happy with the idea of aesthetic beliefs formed on the basis of testimony. The idea is not that we are just as happy to rely on testimony as we are to rely on firsthand experience. We naturally accept that testimony comes with the risk that someone in the chain of testimony has made a mistake or attempts to mislead. Rather, the idea is that generally we don't turn up our noses at testimony and, perhaps given some minimal assurances about the character of our informant and the basis of their belief, we are quite happy to say that we know what we have gleaned in that way. The idea is also not that testimony plays no role in our aesthetic lives. When deciding what film to see, I'll check out some reviews online and perhaps ask a friend who knows about these things. At the coffee shop, I'll ask the barista what the various blends are like before making my selection. Rather, the empirical claim that motivates the philosophical debate is the idea that there are some things people are less willing to do with testimony in the realm of the aesthetic. Various observations are brought to bear on this. For example, although they won't be my focus in this paper, certain observations about assertions are used to motivate the debate: it sounds pretty odd to claim to know that the final act is visually glorious, if you haven't seen the film; and there's something peculiar going on if I tell everyone I meet that my friend's new husband is the most handsome man in Sheffield if I have never met this man nor seen any image of him.

In other words, the idea is that people are content to let testimony about the aesthetic guide their behavior and to inform their beliefs about the *formal* or *descriptive* properties of artworks and the like, but when it comes to basing beliefs about aesthetic properties on the say-so of others, we are more cautious: either we don't like to do it, or else we are reluctant to attribute knowledge to those whose aesthetic beliefs are formed in this way. The thought is that there seem to be some striking differences between the ways we interact with testimony in our aesthetic lives and the way we do it in the rest of our lives (with perhaps some exceptions, e.g., moral matters). Given this premise, philosophical wrangling can begin. What explains this difference? How are we to make sense of this difference? The asymmetry in the ways we treat aesthetic and nonaesthetic

testimony is typically treated as supporting a presumption in favor of views that claim that (for some reason and in some way) aesthetic testimony is in fact epistemically inferior to other types of testimony.

Most in the philosophical debate agree that in some way, and to some degree, aesthetic testimony is not treated as having the same value as testimony about nonaesthetic matters.³ Thus, *one* role for the experimental philosopher is simply to confirm whether this general picture is empirically accurate. However, this is not the most important role the experimental philosopher has to play, as settling this issue will not by itself settle many debates in the philosophical literature. A more important role for the experimental philosopher is to ask about the nature of the differences in the way that people typically treat aesthetic and nonaesthetic testimony. This is because although philosophers in the debate agree that (generally speaking) there is some asymmetry in the way people treat aesthetic and nonaesthetic testimony, they disagree about how best to account for such a difference. By getting a clearer picture of the nature of this asymmetry, experimental philosophers can help arbitrate in this debate, as certain types of asymmetry would fit better with certain types of accounts.

2. Optimism and pessimism

Any summary of the philosophical debate on aesthetic testimony needs to say something about "optimism" and "pessimism" as it is typical to use the distinction between optimists and pessimists about aesthetic testimony as the main way of taxonomizing the debate. This is a little unfortunate as the terms are used in various different ways in the literature. However, we can get a good sense of the main battlegrounds in the debate by looking at a few different ways in which the terms "optimism" and "pessimism" can be used.

One way to use the distinction is to say something about what aesthetic testimony can or cannot do. For example, Robson (2012) talks about the distinction concerning whether it is *possible* to acquire aesthetic knowledge via testimony. However, this way of drawing the distinction need not be in terms of *knowledge*. For example, Robson (2013), drawing on Hopkins (2007), talks about making the distinction in terms of whether is it possible for testimony to be a *proper basis for aesthetic judgment*. One might also focus on whether aesthetic testimony can or cannot *justify* aesthetic beliefs.

As Robson (2012) notes, it is somewhat misleading to talk about "optimism" and "pessimism" in this way. Very few in the debate would genuinely count as

pessimists if we construed the distinction in terms of possibility—few think that testimony-based aesthetic knowledge is really *impossible*. So it might be tempting to use the pessimism/optimism distinction in a different, second way. One might use the terms to label the positions that (i) there is no epistemic difference between aesthetic and nonaesthetic testimony (optimism), and (ii) there is a difference, and aesthetic testimony is inferior (pessimism). However, again, this would not be very helpful as there is a broad consensus in the debate that aesthetic testimony is, in some respect, epistemically inferior to nonaesthetic testimony (Robson 2012, Laetz 2008) (not just about whether it is typically treated as being inferior).

A third way to use "pessimism" and "optimism" is to track where on the scale between the extremes of "aesthetic testimony always provides X" and "aesthetic testimony can never provide X" someone thinks the correct outlook falls (Robson 2012: 3), where "X" might stand for "sufficient grounds for proper belief" or "sufficient grounds for knowledge" or something similar. Since the assumption is that the epistemic credentials of nonaesthetic testimony are high, optimism and pessimism represent different attitudes toward the size of the difference between the credentials of firsthand experience and of testimony in the aesthetic and nonaesthetic cases. This is an important aspect of the debate. Although hard to quantify, participants in the debate genuinely disagree about how bad things are for aesthetic testimony compared to nonaesthetic testimony, and experimental philosophy can help provide a clearer picture as to how big a difference there is between the way people treat aesthetic and nonaesthetic testimony.

A fourth way to use the optimism/pessimism distinction places the emphasis on the type of explanation offered for any difference there might be between the epistemic credentials of aesthetic and nonaesthetic testimony. This issue can be used to sort those in the philosophical debate into two camps. Pessimists tend to give explanations that pin aesthetic testimony's inferiority on some special feature of the aesthetic case. Optimists' explanations, on the other hand, do not point the finger at any principled difference between the aesthetic case and other cases. The difference concerns whether there is a principle or norm active in the aesthetic case that is not active in the nonaesthetic case (Hopkins 2011). Robson (2012) is suspicious of the idea that this distinction provides the best means for distinguishing between *optimism and pessimism* (and I'm inclined to agree). However, Hopkins (2007) is certainly right to think that this distinction is an important one when taxonomizing views on testimony. Experimental philosophy can help speak to this debate too, so let's get a quick sense of the various types of explanation that have been offered.

3. In-principle and mundane explanations

In-principle explanations might take a number of forms. One variety of in-principle explanation appeals to something like the acquaintance principle. This principle is, roughly, the idea that proper aesthetic judgments or beliefs are in some way required to be grounded in firsthand experience (this principle is generally attributed to Wollheim 1980). To judge a meal to be stunningly presented, you need to have seen the meal. To judge a novel to be lacking in any rewarding depth, you need to have read it. As usual, few accept a completely unqualified version of the acquaintance principle (including Wollheim). However, again, there is another looser debate to be had about where one should fall on the scale between extremes (the extremes being, this time, the acquaintance principle itself and the idea that there is no additional barrier whatsoever to proper aesthetic judgment based solely on testimony). This is an in-principle explanation because, ex hypothesi, no equivalent principle is true in other domains. Note that if the legitimacy of forming aesthetic beliefs via testimony is thought questionable, it will likely be thought questionable even if beliefs formed in this way often amount to knowledge.

Another variety of in-principle explanation appeals to the idea that aesthetic language works in a different way to language in other domains. For example, Andow (2015) argues that certain somewhat plausible views about aesthetic predicates can make sense of the idea that beliefs formed on the basis of aesthetic testimony are less likely to constitute knowledge than those formed on the basis of testimony about nonaesthetic matters. The views in question are those that say that either the content or truth values of sentences containing aesthetic predicates varies with either the context of use or context of assessment in some way (and that we are typically unaware of this context sensitivity). This is a variety of in-principle explanation in virtue of the fact that language about most nonaesthetic descriptive matters is assumed not to be context sensitive in the same way.⁵

A final variety of in-principle explanation might appeal to some sort of relativism about aesthetic value (rather than just aesthetic language). If aesthetic properties such as beauty are, for instance, relative to individual's tastes, then this would go a long way to explaining why people might treat aesthetic testimony in different ways to testimony about more nonaesthetic, nonrelative matters.

Mundane explanations point the finger at more general factors. We treat testimony in different domains in different ways for all sorts of reasons that do not appeal to any in-principle difference. We'd typically take testimony about the inner workings of refrigerators to be, generally speaking, epistemically

inferior to testimony about how to tell if one is wearing one's glasses. This is no in-principle asymmetry. The value of the testimony available about the inner workings of refrigerators is lower than that about spectacles simply because the background level of knowledge about the former is rather lower. Similarly, mundane explanations hold that there's no special barrier to aesthetic testimony. It seems sensible to think the testimony people provide about themselves on online dating profiles is to be taken with a generous pinch of salt (at least when contrasted with what they say about the weather outside). This is no principled distinction either. We just expect a higher level of deception of some variety or another in the online dating game. Meskin (e.g., 2006) is the most prominent advocate of the idea that what accounts for any asymmetry between aesthetics and nonaesthetic testimony is largely or wholly due to such more mundane factors (see also Meskin and Robson's 2015 analogous discussion of taste and testimony). Meskin (2004) has also noted that one doesn't need to offer the "in-principle" explanation of the asymmetry that appeals to relativism or subjectivism about aesthetic value, since the mere fact that the folk have tendencies to entertain subjectivism or relativism about aesthetic judgments is sufficient to explain away the relevant pessimistic intuitions.

How might experimental philosophy contribute to the debate about what explains any asymmetry? How might it help us to decide whether any asymmetry should be put down to largely "in-principle" or "mundane" factors? It seems that experimental methods are well-placed for examining what explains any observed asymmetry. For example, if some disparity in people's treatment of aesthetic and nonaesthetic testimony was simply due to mundane factors such as, for example, the higher background level of disagreement or deception about aesthetic matters, then one might expect such background factors to play a moderating role in any asymmetry in participants' treatment of aesthetic and nonaesthetic testimony.

4. Extant empirical work

Experimental philosophers have given fairly limited attention to the extent to which experimental work speaks or could speak to the issues surrounding aesthetic testimony. To my knowledge, there is only one series of experiments to date that speaks directly to the debate on aesthetic testimony (Meskin, Liao, and Andow in preparation). However, there are a number of other studies that speak to the issue in less direct ways.

4.1. Direct evidence

Meskin, Liao, and Andow (in preparation) present a series of experiments that ask simply whether there is an asymmetry in participants' treatment of aesthetic and nonaesthetic testimony and, if there is, how big it is. The results paint the following picture.

First, in typical cases, nonaesthetic testimony is regarded as enjoying higher epistemic status than aesthetic testimony. This claim is supported by various results from Meskin, Liao, and Andow (in preparation). For example, when presented with a film review, participants were asked how confident they were about various aspects of the film on the basis of the review including descriptive (e.g., that it is set in contemporary Taiwan) and aesthetic (e.g., that the cinematography is beautiful). Participants were more confident about the content of the mundane descriptive testimony than the aesthetic testimony featured in the review (in both first and third person cases).

Second, aesthetic testimony is nonetheless treated as having appreciable epistemic value. For example, in various experiments in which participants responded on a scale with an explicitly anchored midpoint (i.e., "neither confident nor unconfident"), Meskin, Liao, and Andow's (in preparation) participants' ratings of confidence in contents of aesthetic testimony (in both first and third person cases) were consistently significantly higher than this midpoint. This indicates that participants think one can have some level of confidence in the content of aesthetic testimony. Thus, Meskin, Liao, and Andow's (in preparation) results do not suggest that the folk embrace a form of pessimism that claims that aesthetic testimony has no epistemic value.

Third, there is some evidence to suggest that participants are skeptical about the ability of aesthetic testimony to provide knowledge, even if they think aesthetic testimony is of some epistemic value. In two experiments, Meskin, Liao, and Andow (in preparation) find, when asked whether "X knows that the sculpture is beautiful" following a piece of aesthetic testimony from a third party, participants' ratings are significantly below the midpoint.

4.2. The nonnormativist folk

Relativists and subjectivists about aesthetic matters/language can give a pretty straightforward explanation of why there would be an asymmetry between people's treatment of aesthetic and nonaesthetic testimony.

Some results seem to support this type of explanation. Cova and Pain (2012) find evidence that the folk are not "normativists" about aesthetic judgment, normativism being the position that

aesthetic judgments "claim" for universal validity in the sense that when one formulates an aesthetic judgment, she considers her judgment as being either correct or incorrect so that, in a contradictory aesthetic debate, each side believes that at most one of them is right. (241)

Cova and Pain (2012) present participants with cases of putative disagreements and ask them to select between the following options:

- 1. One of them is right and the other is not.
- 2. Both are right.
- 3. Both are wrong.
- 4. Neither is right or wrong. It makes no sense to speak in terms of correctness in this situation. Everyone is entitled to his own opinion.

The first option is the only consistent option for one who endorses normativism. But participants were very reluctant to select this option for aesthetic cases. If you take Cova and Pain's (2012) results to provide some support for nonnormativist views, then these results suggest a certain type of explanation of any asymmetry.

However, even if you don't take Cova and Pain's (2012) results to speak against normativist views themselves but only to the fact that the folk seem to endorse nonnormativist views, these results are still important. As briefly mentioned above, anyone who thinks that the folk endorse nonnormativist views (even mistakenly) also has a ready explanation for any asymmetry (Meskin 2004). If people believe that aesthetic judgments have contents such as *X* is beautiful for me, and think that what is beautiful for one person may not be beautiful for another, then it is understandable that they would treat aesthetic testimony slightly differently than testimony in other domains. So, whether such evidence speaks in favor of nonnormativist views themselves or simply the widespread endorsement of such views, it points the way to a potential explanation for any asymmetry.⁶

There are some wrinkles here in light of Meskin, Liao, and Andow's (in preparation) evidence. It is perhaps not clear why endorsement of subjectivism or relativism would lead participants to be overall skeptical about the possibility of testimony-based aesthetic knowledge while still treating aesthetic testimony as being of significant epistemic value. However, this might be because they think

that the testimony of only one person, given the truth of subjectivism/relativism, is not sufficient to lead to knowledge, even though it is of some positive value.

4.3. Variation in use of aesthetic adjectives

On the basis of their empirical work, Liao and Meskin (2015) propose a novel type of explanation of the asymmetry in people's treatment of aesthetic and nonaesthetic testimony. Their empirical work focuses on aesthetic adjectives such as "beautiful." Liao and Meskin (2015) claim that one of their findings, "a significant amount of interpersonal variation in how agents use aesthetic adjectives" provides "one piece of the puzzle in explaining the difficulty with aesthetic communication" (25).

Liao and Meskin (2015) don't develop this claim much further as it is only a brief comment made in their conclusion. However, I can try to unpack it a little. Take one aspect of Liao and Meskin (2015)'s results. Their participants were much more divided with respect to aesthetic predicates ("beautiful" and "ugly") than with nonaesthetic prototypical relative ("long") or absolute ("spotted") gradable adjectives when it comes to whether participants felt able to comply with the request to select "the [adjective] object." For example, in the case of "beautiful," 44 percent of participants complied and the rest did not. One way to think about this result is that about half of their participants treated "beautiful" as a relative gradable adjective, while about half of them treated it as an absolute gradable adjective. I don't suggest that we should infer that their participants are split 50/50 between relative-users and absolute-users—and this is certainly not the spin that Liao and Meskin (2015) put on the results however, imagining a world in which people are split in their usage helps us to understand why Liao and Meskin (2015) suggest that widespread variation in use of aesthetic language could result in communication problems.

If Relative tells Absolute that "the ugly Picasso is in the corner of the second gallery," then Absolute may interpret Relative as saying that the relevant work is ugly in some absolute sense, whereas Relative simply meant that of the Picasso's in the exhibition, the relevant work was the most ugly. This misunderstanding could well lead to Absolute downgrading the credence that she gives to Relative's advice on art in the future (since, suppose, firsthand experience tells her that the Picasso in question was perfectly passable). In any case, a higher background level of discrepancy in the ways that speakers use such adjectives, as opposed to more nonaesthetic adjectives, might go some way to explaining why people might be somewhat reluctant to base their beliefs on what others say about aesthetic matters.

As yet, Liao and Meskin's (2015) hypothesis is only *suggested* by their data. However, it would be amenable to further empirical investigation. I am not aware of any extant work relevant to this hypothesis and the studies I report in the following do not speak to it either. Nonetheless, the idea that a higher level of interpersonal variation in use of aesthetic adjectives explains part of the asymmetry should be treated as a live option.⁷

5. Study 1: Proper judgment

One question about the nature of the asymmetry that Meskin, Liao, and Andow (in preparation) don't directly address is whether there is an asymmetry in participants' attitudes toward proper aesthetic judgment. In order to speak fully to the philosophical debate about aesthetic testimony, it is important that we ask whether people think forming a judgment on the basis of aesthetic testimony is more problematic than other types of testimony.

Study 1 uses two different ways to try and get at this notion of proper judgment. The first concerns *legitimacy* and the second concerns *permissibility*. Both probes are based on the way Hopkins (2007) expresses the notion he has in mind (in relation to *moral* testimony):

Is reliance on testimony legitimate ...? Is it permissible to adopt a ... view in key part because someone else claims that things are ... thus and so? (Hopkins 2007: 612)

5.1. Participants

Fifty participants were recruited via Prolific Academic to complete an online survey using Qualtrics.⁸ All participants were at least eighteen years old, had English as their first language, and were currently resident in the UK. Twenty were male, and the rest female. Their mean age was 32.16. Participants were rewarded £0.50 for their time @£5/h (based on an estimated time of six minutes).

5.2. Materials

This experiment used a 3×4 within-subject design. Participants received both permissibility and legitimacy questions (order randomized) about twelve

scenarios (order randomized). Two factors were manipulated: the source of the belief (firsthand experiences, expert testimony, a friend's testimony), and the property involved in the belief (beauty, ugliness, size, and cost). The text of the questions was as follows:

Permissibility: Is it permissible to adopt the view that a particular painting is beautiful/is ugly/is large/cost \$14 million to create because an expert/a friend/firsthand experience tells you that the painting is beautiful/is ugly/is large/cost \$14 million to create?

Legitimacy: Suppose an expert/a friend/firsthand experience tells you that a particular painting is beautiful/is ugly/is large/cost \$14 million to create. Is it legitimate to rely on what the expert/the friend/firsthand experience tells you when forming your own opinion about whether the painting is beautiful/is ugly/is large/cost \$14 million to create?

Responses were given on a six-point scale from 1 (Completely Illegitimate/Completely Impermissible) to 6 (Completely Legitimate/Completely Permissible). Two additional questions were included in order to check that participants were paying attention. Finally, demographic details were collected.

5.3. Results

The mean and standard deviations for ratings of all questions is provided in Table 2.1. Table 2.1 also includes the statistics from one-sample t-tests run to determine whether mean response to each question was different than the notional midpoint of the scale (i.e., 3.5).

A 3 x 4 within-subjects MANOVA was conducted to examine the main effects and interaction of source and property on permissibility and legitimacy ratings. There were significant main effects of source (F(4,46) = 32.28, p < .0005, $\eta_p^2 = .74$) and property (F(6,44) = 15.66, p < .0005, $\eta_p^2 = .68$), and the interaction effect was also significant (F(12,38) = 4.40, p < .0005, $\eta_p^2 = .58$).

Univariate tests with the Greenhouse-Geisser correction were used to examine the effects on permissibility and legitimacy separately. For legitimacy, there were significant main effects of source $(F(1.40,68.68)=91.15,p<.0005,\eta_p^2=.65)$ and property $(F(2.42,118.66)=23.15,p<.0005,\eta_p^2=.32)$, and the interaction effect was also significant $(F(4.62,226.36)=9.78,p<.0005,\eta_p^2=.17)$. For permissibility, there were significant main effects of source $(F(1.50,73.29)=90.72,p<.0005,\eta_p^2=.65)$ and property $(F(2.22,108.64)=31.26,p<.0005,\eta_p^2=.39)$, and the interaction effect was also significant $(F(4.62,218.62)=14.24,p<.0005,\eta_p^2=.23)$.

Property	Source	Question	Mean	SD	Comparison to Midpoint
Beauty	Expert	Permissible	2.74	1.18	Lower $(t(49) = 4.58, p < .0005)$
		Legitimate	2.94	1.25	lower $(t(49) = 3.16, p = .003)$
	Friend	Permissible	2.84	1.04	lower $(t(49) = 4.50, p = .005)$
		Legitimate	2.76	0.98	lower $(t(49) = 5.34, p < .0005)$
	Firsthand	Permissible	5.00	1.20	higher $(t(49) = 8.87, p < .0005)$
		Legitimate	4.88	1.34	higher $(t(49) = 7.31, p < .0005)$
Ugly	Expert	Permissible	2.48	1.17	lower $(t(49) = 6.19, p < .0005)$
		Legitimate	2.68	1.10	lower $(t(49) = 5.29, p < .0005)$
	Friend	Permissible	2.30	0.97	lower $(t(49) = 8.71, p < .0005)$
		Legitimate	2.32	0.98	lower $(t(49) = 8.53, p < .0005)$
	Firsthand	Permissible	4.68	1.41	higher $(t(49) = 5.93, p < .0005)$
		Legitimate	4.78	1.33	higher $(t(49) = 6.81, p < .0005)$
Large	Expert	Permissible	3.98	1.20	higher $(t(49) = 2.82, p = .007)$
		Legitimate	3.96	1.21	higher $(t(49) = 2.69, p = .01)$
	Friend	Permissible	3.44	1.09	no diff. $(p = .699)$
		Legitimate	3.42	1.16	no diff. $(p = .629)$
	Firsthand	Permissible	5.12	1.08	higher $(t(49) = 10.60, p < .0005)$
		Legitimate	5.10	1.06	higher $(t(49) = 10.73, p < .0005)$
Cost	Expert	Permissible	4.10	1.30	higher $(t(49) = 3.27, p = .002)$
		Legitimate	4.08	1.35	higher $(t(49) = 3.03, p = .004)$
	Friend	Permissible	2.98	1.10	lower $(t(49) = 3.35, p = .002)$
		Legitimate	2.96	1.09	lower ($t(49) = 3.51, p = .001$)
	Firsthand	Permissible	4.70	1.37	higher $(t(49) = 6.18, p < .0005)$
		Legitimate	4.86	1.16	higher $(t(49) = 8.29, p < .0005)$

Table 2.1 Study 1: Mean ratings, standard deviations, and midpoint comparisons

Post hoc tests using the Bonferroni correction were used in order to further explore the main effects. There were significant differences between the ratings for the four properties with aesthetic properties receiving lower ratings than nonaesthetic properties $(F(6,44)=15.66, p<.0005, \eta_p^2=.68)$. There were significant differences between the ratings for the three sources, with firsthand experience receiving the highest ratings $(F(4,46)=32.28, p<.0005, \eta_p^2=.74)$. The sources is a significant differences between the ratings are the sources.

Breaking down the interaction between property and source, it was found that the interaction and both main effects were significant for both permissibility and legitimacy for seven out of the eight possible 2×2 contrasts of aesthetic vs nonaesthetic properties (e.g., ugly vs. cost) by firsthand versus testimonial sources (e.g., firsthand vs. expert).¹¹

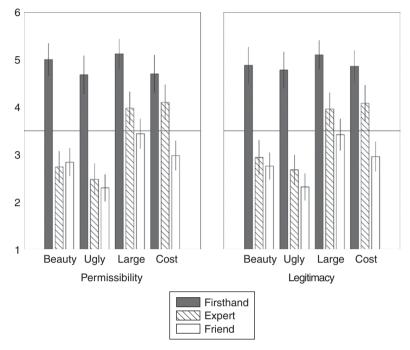


Figure 2.1 Study 1: Mean ratings and 95 percent CI

One illustrative way to look at these results is to note that it is only in the testimonial cases that forming an opinion is considered to be less permissible/legitimate in aesthetic cases than nonaesthetic cases. This can be seen clearly in Figure 2.1, which plots the means for each scenario participants saw.

5.4. Discussion

Study 1 finds clear evidence of an asymmetry in judgments about whether it is permissible or legitimate to form beliefs on the basis of aesthetic and nonaesthetic testimony. Moreover, it seems that participants tend toward thinking that it is not permissible or legitimate to form beliefs on the basis of aesthetic testimony. This doesn't seem to be a symptom of a more general skepticism about forming beliefs on the basis of testimony. The reason is that participants tend toward thinking that it is legitimate and permissible for nonaesthetic beliefs in the case of expert testimony. That said, participants do not seem to think it legitimate or permissible to form beliefs about nonaesthetic properties on the basis of inexpert testimony (friends' scores for cost are both below the midline, and for large are not significantly higher than the midline).

This finding is interesting in light of those of Meskin, Liao, and Andow (in preparation). This previous study found that aesthetic testimony was thought to be of significant value although of less value than nonaesthetic testimony. If these previous findings are correct, then the findings from Study 1 might be taken to speak in favour of a view that says the following: the reason it is more difficult to acquire knowledge on the basis of aesthetic testimony (than nonaesthetic testimony), despite the fact that aesthetic testimony is of epistemic value, is that beliefs formed in this way are not legitimately formed for some reason.

6. Study 2: Attitudes toward normativism

The aim of this study is to test the hypothesis that nonnormativist beliefs (e.g., relativist or subjectivist beliefs) about the aesthetic may explain the asymmetry in participants' treatment of aesthetic and nonaesthetic testimony. If this hypothesis were correct then we should expect a moderating effect whereby the asymmetry is stronger for participants with stronger nonnormativist attitudes with respect to the aesthetic.

6.1. Participants

A total of 304 participants were recruited. ¹² Again, Prolific Academic and Qualtrics were used. All participants were at least eighteen years old, had English as their first language, and were currently resident in the UK. Of them, 117 were male, 186 female, and 1 other. Their mean age was 32.24. Participants were rewarded £0.17 for their time @£5.10/h (based on an estimated time of two minutes).

6.2. Materials

This study uses a between-subjects design. First, participants were presented with the following case in order to assess their attitudes to normativism. The case and question options are adapted from those that Cova and Pain (2012) used to assess attitudes to normativism:

While visiting an art gallery, Alex and Harry look at a painting. Harry says that the painting is beautiful, while Alex says that the very same painting is not beautiful.

They then responded to four items on a scale from 1 (Strongly Disagree) to 7 (Strongly Agree). The order of presentation was randomized:

AH1: One of them is right and the other is not.

AH2: Both are right. AH3: Both are wrong.

AH4: Neither is right or wrong. It makes no sense to speak in terms of correctness in this situation. Everyone is entitled to their own opinion.

Participants were then assigned to one of four conditions (aesthetic-testimony, aesthetic-firsthand, nonaesthetic-testimony, nonaesthetic-firsthand). In each condition, participants responded to one question about knowledge and one about legitimacy:

Knowledge: Suppose that *firsthand experience/a friend* tells you that a particular painting *is beautiful/large* and that you base your opinion about whether the painting *is beautiful/large* solely on what *firsthand experience/a friend* tells you. Do you know whether the painting *is beautiful/large*?

Legitimacy: Suppose that *firsthand experience/a friend* tells you that a particular painting *is beautiful/large*. Is it legitimate to rely on what *firsthand experience/a friend* tells you when forming your own opinion about whether the painting *is beautiful/large*?

Responses were taken on a twelve-point scale from "Definitely Don't Know/ Completely Illegitimate" to "Definitely Do Know/Completely Legitimate."

6.3. Results

Means and standard deviations for all questions can be found in Table 2.2. Table 2.2 also includes the *p*-values from one-sample *t*-tests run to determine whether mean response to each question was different to the midpoint of the scale (4 for the AH-items, and 6.5 for the knowledge and legitimacy questions).

Participants' responses to the AH items were fairly consistent—for example, only 2 percent of participants failed to indicate agreement with AH4 and only 3.3 percent indicated agreement with AH1. In order to investigate the moderating effect of attitudes to normativism, a composite score was calculated for each participant.¹³ A median split was then conducted to split participants into two groups: *lower* and *higher* normativism rejection.

A $2 \times 2 \times 2$ between-subjects MANOVA was conducted to examine the main and interaction effects of property (aesthetic vs. nonaesthetic),

Question Type	Item	Mean	SD	Midpoint Comparisons
Normativism	AH1	1.98	1.23	lower (<i>p</i> < .0005)
	AH2	4.84	1.95	higher ($p < .0005$)
	AH3	2.18	1.39	lower ($p < .0005$)
	AH4	6.53	0.84	higher $(p < .0005)$
Knowledge	Aesthetic-testimony	4.11	3.31	lower ($p < .0005$)
	Aesthetic-firsthand	7.94	3.47	higher ($p < .0005$)
	Nonaesthetic-testimony	5.87	3.38	no diff. $(p = .122)$
	Nonaesthetic-firsthand	8.27	3.29	higher ($p < .0005$)
Legitimacy	Aesthetic-testimony	4.80	2.75	lower ($p < .0005$)
	Aesthetic-firsthand	9.23	2.73	higher ($p < .0005$)
	Nonaesthetic-testimony	7.41	2.55	higher $(p = .004)$
	Nonaesthetic-firsthand	9.00	2.81	higher ($p < .0005$)

Table 2.2 Study 2: Mean ratings, standard deviations, and midpoint comparisons

source (friend vs. firsthand), and normativism rejection (lower vs. higher) on knowledge and legitimacy ratings. There were significant main effects of property $(F(2,295)=7.26,p=.001,\eta_p^2=.05)$ and source $(F(2,295)=51.85,p<.0005,\eta_p^2=.26)$, but not normativism rejection (p=.56). There was a significant two-way interaction between property and source $(F(2,295)=9.74,p<.0005,\eta_p^2=.06)$. All other interactions were not significant (ps>.61).

Breaking this down to look at knowledge and legitimacy separately: For knowledge, there were significant main effects of property $(F(1,296)=6.80, p=.01, \eta_p^2=.02)$ and source $(F(1,296)=62.59, p<.0005, \eta_p^2=.18)$, but not normativism rejection (p=.37). The interaction for property and source was trending but not significant $(F(1,296)=2.81, p=.095, \eta_p^2=.01)$. All other interactions were not significant (ps>.443). For legitimacy, there were significant main effects of property $(F(1,296)=13.63, p<.0005, \eta_p^2=.04)$ and source $(F(1,296)=88.93, p<.0005, \eta_p^2=.23)$, but not normativism rejection (p=.34). The interaction for property and source was significant $(F(1,296)=19.32, p<.0005, \eta_p^2=.06)$. All other interactions were not significant (ps>.780).

6.4. Discussion

Study 2 finds clear evidence of an asymmetry in participants' treatment of aesthetic and nonaesthetic testimony. It replicates the general pattern of results

found for judgments about permissibility. However, it finds no evidence that this asymmetry is moderated by participants' attitudes toward normativism.

There are various reasons why this experiment may have failed to find an effect. The first is that attitudes to normativism do not moderate the asymmetry. However, the explanation might also be the result of the relatively low levels of variation among participants in terms of their level of endorsement of the AH items, and in particular AH1 (only ten out of a total of 304 participants indicated any level of agreement) and AH4 (only four of them indicated any level of disagreement). Therefore, further research will be needed to draw a conclusive verdict, and likely research that attempts to manipulate attitudes to normativism. Another response to these current results might be to raise questions about the validity of the tool used to measure participants' attitudes to normativism. However, for now, these results seem to count as a strike against the idea that the asymmetry is best explained by widespread endorsement of relativism or subjectivism.

7. Study 3: Disagreement and deception

Let's consider a different type of explanation one might offer for the asymmetry. One more mundane explanation is that it is due to a higher background level of disagreement or deception about aesthetic matters. If this is right then one would expect to see a greater asymmetry in participants who think there are higher levels of disagreement and deception. This study puts this hypothesis to the test.

7.1. Participants

A total of 210 participants were recruited. Again, Prolific Academic and Qualtrics were used. All participants were at least eighteen years old, had English as their first language, and were currently resident in the UK. Of these, 81 were Male, 131 female, and 2 other. Their mean age was 33.47. Participants were rewarded £0.17 for their time @£5.10/h (based on an estimated time of two minutes). ¹⁶

7.2. Materials

This experiment used a between-subjects design (2×2) . All participants first answered a battery of twelve questions designed to assess participants'

perceptions of the background levels of disagreement and deception about aesthetic matters and nonaesthetic matters (see Table 2.3 for these twelve items in full). There were three basic questions about disagreement and three basic questions about deception. There were two versions of each basic question (one about aesthetic matters, and one about descriptive matters), forming a pair. Questions were presented in pairs. The order of pairs and the members of each pair were randomized. Participants gave responses on a 100-point scale (Almost never happens–Almost always happens). Then participants were randomly assigned to receive knowledge and legitimacy questions about either (i) testimony or firsthand cases, and (ii) aesthetic or nonaesthetic cases. The form of these questions was as in Study 2.

7.3. Results

Mean ratings for all questions about deception and disagreement are provided in Table 2.3. Two scores were calculated for each participant to represent the extent to which they considered the background levels of disagreement and deception to be higher with respect to aesthetic matters, "DisDiff" and "DecDiff." A median split was then conducted to split participants into two groups (lower and higher) for each of DisDiff and DecDiff.

Mean knowledge and legitimacy scores for each condition are given in Table 2.4. Two $2 \times 2 \times 2$ between-subjects MANOVAs were conducted to examine the main and interaction effects of property (aesthetic vs. nonaesthetic), source (friend vs. firsthand), and the proposed moderator (lower vs. higher) on knowledge and legitimacy ratings for DisDiff and DecDiff in turn.

Take DisDiff first. There were significant main effects of property $(F(2,205)=10.79, p<.0005, \eta_p^2=.10)$ and source $(F(2,205)=70.62, p<.0005, \eta_p^2=.41)$, but not disdiff (p=.13). There was a significant two-way interaction between property and source $(F(2,205)=11.66, p<.005, \eta_p^2=.10)$. All other interactions were not significant (ps>.154).

Breaking this down to look at knowledge and legitimacy separately: For knowledge, there were significant main effects of property (F(1,206) = 14.20, p < .0005, $\eta_p^2 = .06$) and source (F(1,206) = 93.02, p < .0005, $\eta_p^2 = .31$), but not disdiff (p = .096). The two-way interaction between property and source was significant (F(1,206) = 7.65, p = .006, $\eta_p^2 = .04$). The three-way interaction was borderline significant (F(1,206) = 3.44, p = .065, $\eta_p^2 = .02$). All other interactions were not significant (ps > .407). For legitimacy, there were

Table 2.3 Study 3: Mean ratings and standard deviations for deception and disagreement questions

Item No.	Question	Mean	SD
I1	People disagree about whether a particular painting is beautiful	72.99	20.66
I2	People disagree about whether a particular object is large	34.77	24.86
I3	One person sincerely thinks a painting is good while someone else sincerely thinks the very same painting is terrible	73.37	20.55
I4	One person sincerely thinks a painting is large while someone else sincerely thinks the very same painting is tiny	23.91	22.49
I5	Some people like a particular work of art while other people don't like it	81.07	15.95
I6	Some people think a particular object is large while other people think it isn't	36.81	24.31
I7	People present themselves as being a good judge whether something is beautiful, when in fact they are not a good judge	61.03	23.31
18	People present themselves as being a good judge of whether something is large, when in fact they are not a good judge	38.09	25.22
I9	People present themselves as knowing a lot about art/books/ music when in fact they do not know a lot about art	69.09	18.47
I10	People present themselves as knowing a lot about the size of objects when in fact they do not know a lot about the size of objects	34.25	25.01
I11	People lie about liking art	64.71	20.46
I12	People lie about thinking things are large	26.71	22.13

Table 2.4 Study 3: Mean ratings, standard deviations, and midpoint comparisons for knowledge and legitimacy questions

Question	Property	Source	Mean	SD	Midpoint Comparisons
Knowledge	Beauty	Testimony	27.11	26.87	Lower $(t(54) = 6.46, p < .0005)$
		Firsthand	74.30	27.61	higher $(t(52) = 6.28, p < .0005)$
	Large	Testimony	53.51	33.56	no diff. $(p = .542)$
		Firsthand	78.29	22.90	higher $(t(58) = 9.32, p < .0005)$
Legitimacy	Beauty	Testimony	31.91	22.57	lower $(t(54) = 6.11, p < .0005)$
		Firsthand	77.32	24.91	higher $(t(52) = 7.84, p < .0005)$
	Large	Testimony	58.57	23.58	lower $(t(46) = 2.35, p = .023)$
		Firsthand	74.31	22.97	higher $(t(58) = 7.96, p < .0005)$

significant main effects of property $(F(1,206) = 14.07, p < .0005, \eta_p^2 = .06)$ and source $(F(1,206) = 91.94, p < .0005, \eta_p^2 = .31)$, but not disdiff (p = .106). The two-way interaction between property and source was significant $(F(1,206) = 21.38, p < .0005, \eta_p^2 = .09)$. All other interactions were not significant (ps > .19).

Now take DecDiff. There were significant main effects of property $(F(2,205)=14.32,p<.0005,\eta_p^2=.12)$, source $(p<.0005,\eta_p^2=.38\,F(2,205)=64.03,)$, and decdiff $(F(2,205)=4.32,p=.014,\eta_p^2=.04)$. There were significant two-way interactions between property and source $(F(2,205)=12.22,p<.0005,\eta_p^2=.11)$, property, and decdiff $(F(2,205)=3.57,p=.030,\eta_p^2=.03)$, but not source and decdiff (p=.556). The three-way interaction was also significant $(F(2,205)=4.89,p=.008,\eta_p^2=.05)$.

Breaking this down to look at knowledge and legitimacy separately: For knowledge, there were significant main effects of property $(F(1,206)=21.52,p<.0005,\eta_p^2=.10)$, source $(F(1,206)=7.57,p=.006,\eta_p^2=.04=.28)$, and decdiff $(F(1,206)=7.57,p=.006,\eta_p^2=.04)$. There were significant two-way interactions between property and source $(F(1,206)=10.80,p=.001,\eta_p^2=.05)$, and property and decdiff $(F(1,206)=7.13,p=.008,\eta_p^2=.03)$, but not source and decdiff (p=.448). The three-way interaction was significant $(F(1,206)=9.58,p=.002,\eta_p^2=.04)$. For legitimacy, there were significant main effects of property $(F(1,206)=15.31,p<.0005,\eta_p^2=.07)$ and source $(F(1,206)=84.73,p<.0005,\eta_p^2=.29)$, but not decdiff (p=.073). There was a significant two-way interaction between property and source $(F(1,206)=20.22,p<.0005,\eta_p^2=.09)$. All other interactions were not significant (p>.570). The sum of the significant (p>.570).

To understand the nature of the three-way interactions (between property, source, and decdiff/disdiff) in predicting knowledge ratings, it is helpful to consider Figure 2.2. Figure 2.2 plots knowledge ratings by property and source for both higher and lower levels of DisDiff and DecDiff. As you can see, the two-way interaction between property and source is more pronounced for higher levels of both DisDiff and DecDiff. Interestingly, it seems that the important difference concerns knowledge ratings for nonaesthetic testimony. High levels of DecDiff and DisDiff seem to produce higher knowledge ratings for nonaesthetic testimony. The explanation for this is that there was a tendency for participants with lower levels of DecDiff or DisDiff to have them because they gave higher than normal ratings of the level of deception or disagreement about nonaesthetic matters (rather than lower than normal ratings concerning aesthetic matters).

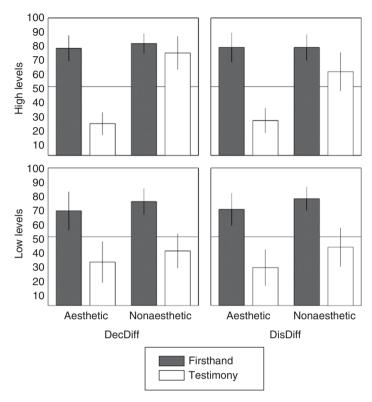


Figure 2.2 Study 3: Mean knowledge ratings and 95% CI

7.4. Discussion

Study 3 again finds clear evidence of an asymmetry in participants' treatment of aesthetic and nonaesthetic testimony. It replicates the general pattern of results found for judgments about legitimacy and knowledge across Studies 1 and 2. Responses indicate that participants tend to think aesthetic testimony is not a legitimate basis for belief and doesn't provide sufficient grounds for knowledge.

Moreover, Study 3 finds evidence that suggests that this asymmetry may be related to participants' perceptions of the relative background levels of deception and disagreement in aesthetic and nonaesthetic domains (for knowledge judgments, if not legitimacy). The results suggest a modest moderation effect whereby the extent to which participants think that the comparative background levels of deception or disagreement are higher for aesthetic matters partially explains the extent to which they think there is an asymmetry between aesthetic

and nonaesthetic testimony. This suggests that at least part of the explanation for the asymmetry in participants' treatment of aesthetic and nonaesthetic testimony may be due to "mundane" rather than "in-principle" factors.

8. Conclusion

So, where does the experimental philosophy of aesthetic testimony stand? First, the results confirm that there is an asymmetry in the way that ordinary people think about typical cases of aesthetic and nonaesthetic testimony. Meskin, Liao, and Andow (in preparation) and the studies in this paper make it clear that (a) the epistemic status of aesthetic judgments is treated as being weaker than that of nonaesthetic judgments, (b) the epistemic status of beliefs acquired via testimony is treated as being weaker than that of those acquired via firsthand experience, and (c) these two factors come together to render beliefs formed on the basis of aesthetic testimony as illegitimate and to prevent them from attaining the status of knowledge (even if aesthetic testimony isn't treated as being of no value at all). It is also important to note that the three studies in this chapter all suggest that there is an interaction whereby beliefs formed on the basis of aesthetic testimony are treated as being in poorer epistemic standing than firsthand aesthetic beliefs to a greater degree than beliefs formed on the basis of nonaesthetic testimony are treated as being in poorer standing than firsthand nonaesthetic beliefs.

Second, the overall picture painted seems to be a somewhat pessimistic one with respect to whether testimony can serve as the basis for aesthetic knowledge or judgment; all of the mean scores for all of the items relating to aesthetic testimony across the three studies reported in this chapter were significantly lower than the midpoint. However, there are hints, as in Meskin, Liao, and Andow (in preparation), that participants are not pessimists in all respects about aesthetic testimony. For example, the mean ratings for aesthetic testimony were never right down at the bottom of the scale in any of the three studies in this paper. This may be taken to indicate that participants don't regard the testimony as being completely incapable of producing knowledge or as a completely illegitimate basis for belief.

Third, and perhaps more importantly, some progress has been made toward finding the best explanation for the asymmetry. Study 3 found signs of a moderating effect of the degree to which participants thought there was a greater level of disagreement or deception about aesthetic matters on the important

interaction between source (testimony vs. firsthand experience) and property (aesthetic vs. nonaesthetic) concerning knowledge ratings. This suggests that the explanation for the asymmetry is at least in part due not to a principled distinction between the aesthetic and nonaesthetic domains but rather to this more mundane difference.

Finally, it is worth noting that differences between the ways people treat aesthetic and nonaesthetic testimony may have a number of contributing factors. So while a perception that the background levels of deception are higher about aesthetic matters may be a contributing factor, this does not rule out that other factors may also contribute. For instance, Liao and Meskin's (2015) suggestion that a greater variation in use of aesthetic predications may contribute to the asymmetry is far from ruled out by the studies I have reported here.

Acknowledgments

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Notes

- 1 Note that accounts of aesthetic testimony do not always emphasize *epistemic* factors in accounting for the interesting features of aesthetic testimony (see, e.g., Gorodeisky 2010).
- 2 Please refer to Robson (2012) for a useful overview of the philosophical debate.
- 3 One shouldn't overestimate the consensus. It is true that some have tried to emphasize various ways in which our ordinary aesthetic practices do seem to treat aesthetic testimony as having some real epistemic value (e.g., Meskin 2004, Meskin and Robson 2015). However, these philosophers still accept the basic picture painted above. One exception may be Robson (forthcoming) but even he seems to accept a descriptive asymmetry with respect to typical aesthetic judgments and typical nonaesthetic judgments such as "the painting is two feet wide."
- 4 Hopkins (2007) is talking about moral testimony, but the reasoning applies equally in the aesthetic case.

- 5 Another somewhat similar type of explanation might appeal to a noncognitive account of the content of aesthetic judgments that disrupts the usual testimonial process. Although one might worry that such an account may also threaten the credentials of firsthand aesthetic.
- 6 Interestingly, Cova and Pain (2012) understand their results to help undermine some of the considerations that Meskin takes to speak against nonnormativist views (see, e.g., Meskin 2004: 82). But I don't want to get into this here.
- 7 Anyone interested in chasing this up should examine the comments and pilot data provided by Mark Phelan in relation to Liao and Meskin's study. This can be found with the supplementary materials for Liao and Meskin (2015), which can be found at https://osf.io/inepu/.
- 8 Prolific Academic is a UK-based equivalent to Amazon Mechanical Turk.

 One is able to reject submissions prior to closing the survey. A small number of participants were excluded in this way on grounds of either (a) taking an implausibly short amount of time in the survey (under six seconds per question), or (b) answering incorrectly one or both of two "attention check" questions.
- Pairwise comparisons for legitimacy reveal: (i) ugliness $(3.26\pm.10)$ received lower ratings than beauty $(3.53\pm.12)$ (p=.019), large $(4.16\pm.12)$ (p<.0005), and cost $(3.97\pm.12)$ (p<.0005); (ii) beauty received lower ratings than large (p<.0005) and cost (p=.022); (iii) ratings for large and cost were not significantly different (p=.896). Pairwise comparisons for permissibility reveal: (i) ugliness $(3.15\pm.11)$ received lower ratings than beauty $(3.53\pm.11)$ (p<.0005), large $(4.18\pm.11)$ (p<.0005), and cost $(3.93\pm.13)$ (p<.0005); (ii) beauty received lower ratings than large (p<.0005) and cost (p=.023); (iii) ratings for large and cost were not significantly different (p=.309).
- 10 Pairwise comparisons for legitimacy reveal: (i) friends $(2.87 \pm .11)$ received lower ratings than experts $(2.42 \pm .12)$ and firsthand $(2.49 \pm .15)$ (both, p, <.0005); (ii) experts received lower ratings than firsthand (p < .0005).
- 11 The only exception was for beautiful vs. cost by firsthand vs. friend where only the main effect of source was significant. The full analyses are not reported for these 2 × 2 comparisons for the sake of brevity.
- 12 A small number of responses were not approved due to failing attention check questions or failing to complete the survey.
- 13 This score was calculated as follows: AH2 + AH3 + AH4 AH1. Cova and Pain (2012) identify AH2, AH3, and AH4 as departing from normativism in some way. Thus the maximum possible score was 20 and the minimum –4. The mean of this composite score was 11.57 and the standard deviation was 2.81.
- 14 Multiple linear regression was also used as an alternative analysis. Two models were created using source, property, and the normativism rejection composite score, all two-way interactions and the three-way interaction to predict knowledge and legitimacy scores respectively. None of the interaction terms involving normativism

- rejection were significant predictors in either model (ps > .54). Full details are omitted for brevity.
- 15 A very similar tool used by Cohen and Nichols (2010) in the experimental philosophy of color has been criticized by Roberts, Andow, and Schmidtke (2014). On the basis of results gathered using a tool designed to address their worries about Cohen and Nichols's (2010) study, Roberts, Andow, and Schmidtke (2014) conclude that Cohen and Nichols's (2010) tool overestimates the extent to which participants embrace relationalism about color. Since relationalism about color about is an analogous position to nonnormativism about aesthetic judgment, one might similarly expect that Cova and Pain's (2012) design overestimates the extent to which participants endorse nonnormativist views. For more in this debate about color, see Adams (2015) and Roberts and Schmidtke (forthcoming).
- 16 A small number of participants were excluded on the grounds that they answered one or both of two attention check questions incorrectly.
- 17 DisDiff was calculated using the following: ((I2-I1)+(I4-3)+(I6-I5))/3. For DecDiff, the formula was: ((I8-I7)+(I10-I9)+(I12-I11))/3.
- Multiple linear regression was also used as an alternative analysis. Two models were created using source, property, and the full decdiff and disdiff score, all two-way interactions and the three-way interaction to predict knowledge and legitimacy scores respectively. The full analyses are not reported here. I report only the standardized coefficients and p-values for the three-way interaction terms. In both of the models predicting knowledge ratings, the three-way interaction terms were significant (disdiff, $\beta = -.49$, p = .029; decdiff $\beta = -.57$, p = .004). In neither of the models predicting legitimacy ratings were the three-way interactions significant (disdiff, p = .91; decdiff p = .97). Full details are omitted for brevity.

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Impure Aesthetics

Angelika Seidel and Jesse Prinz

1. Introduction: The traditional approach to empirical aesthetics

It would be somewhat misleading to say there has been an empirical turn in aesthetics, or at least to say that this turn is new. Since the dawn of psychology, aesthetics judgments have been a major subject of inquiry. Founding figures such as Wilhelm Wundt and Gustav Fechner wrote important work on the psychology of art, and the term "aesthetics" was coined by Alexander Baumgarten in 1750, who defined it as the "science of sense cognition." Such a science was not yet underway at that time—psychology didn't exist—but the earliest psychologists were reared in this intellectual tradition, and regarded aesthetics as a central area of inquiry. Despite these early efforts, however, aesthetics fell into empirical neglect, and it has come into vogue only in recent years. It is gaining momentum in both experimental philosophy and in psychology, where two major journals are dedicated to the area (*Psychology of Aesthetics, Creativity and the Arts* and *Empirical Studies of the Arts*). One might describe this as an empirical return, rather than an empirical turn.

Like all returns, the return to empirical aesthetics cannot bring us back to the same place that was left behind. Too much has changed in both the study of art and the study of the mind. For Baumgarten, the proper domain of aesthetics was sensory perfection, or beauty, which could be perceived through lower faculties of the mind ("facultatum cognoscitivarum inferiorum")—those that deal with sensory information. In a similar spirit, Wundt and Fechner were interested in the psychology of perfect form. There was a nineteenth-century preoccupation with the phi ratio, and Fechner tried to test whether people prefer polygons that conform to these idealized proportions. In a typical experimental paradigm,

participants would be presented with an array of rectangles, triangles, or ovals, and asked which ones they like best. This set the stage for much subsequent testing. Results on the phi ratio have been mixed (see Phillips, Norman, and Beers 2010), but interest in aesthetically pleasing sensory qualities remains. Psychologists and neuroscientists with an interest in aesthetics continue to investigate beauty, or its near neighbor, aesthetic preference. For example, many neuroimaging studies in aesthetics present people with batteries of pictures to look at, without any descriptive information about them (e.g., Kawabata and Zeki 2004, Cela-Conde et al. 2011, Vessel, Starr, and Gabrielle 2012). There are also behavioral studies that collect preference judgments while manipulating stimulus features such as complexity (Osborne and Farley 1970), curvilinear forms (Silvia and Barona 2009), symmetry (Washburn and Humphrey 2001), and balance (Nodine 1982). In this tradition, which has origins in the eighteenth century, the main task of aesthetic psychology is to measure what people like looking at, and the experiments focus on sensory dimensions.

This traditional approach is hard to square with more contemporary approaches to art and mind. In the twentieth century, beauty was displaced as the central aim in art, and many art theorists began to recognize that the merits of an artwork can extend beyond mere appearance. Meaning, originality, authorship, art-historical significance, and many other factors contribute to aesthetic worth (e.g., Stecker 2010: chap. 11, Leder and Nadal 2014). Some authors distinguish aesthetic and artistic merits, where "aesthetic" is defined narrowly to refer to sensory qualities of a work, including beauty, and "artistic" refers to those aspects of excellence that go beyond appearances but are nevertheless appropriate for the evaluation of artworks as such (Kukla 1981). For reasons we will elucidate below, we are not entirely happy with this distinction because we think that as a psychological fact, factors outside of perception can impact perceptual judgment. For now, let it suffice to say that what makes a work seem good may not be limited to its formal qualities. In a slogan, looking good may go beyond looks. We think it is high time that empirical research reflect this insight of twentieth-century aesthetics. The age of pretty polygons must be left behind.

Theories of the mind have also advanced since the nineteenth century. We alluded to one advance when we noted that perceptual judgment can be influenced by non-perceptual factors. In recent work, various authors have challenged the modularity of mind, suggesting that information outside the sensory systems can influence perception (e.g., Lupyan 2015, Stefanucci, Gagnon, and Lessard 2011, Witt 2016). There are technical issues that arise in discussions of modularity, which we cannot take up here. One might wonder whether thinking influences

low-level perception also or merely perceptual judgments at a fairly high level. We suspect the former, but will be content with the latter. We want to show that perceptual judgments about art are not entirely bottom-up but can depend on background information. But even if there is no direct impact of cognitive states on perception, we think it is important to recognize that cognitive states can impact assessments of artistic merit. If we define "aesthetic preference" as what people praise when looking at artworks, there is considerable evidence that aesthetic preference is not entirely bottom-up.

Put differently, we think aesthetic preference cannot be limited to "formal features." Formal features are features that are in some sense intrinsic to a work and can be detected by the senses, such as shapes and colors. A variety of other factors may matter, including beliefs about a work, emotions, and facts about embodiment (including the embodiment of the work, the viewer, and their relation). Here we will present some of our own recent findings that aim to provide empirical support for this claim. Our thesis is that aesthetic judgment goes beyond formal features in a number of different ways, and is, in this sense, "impure." One can hold formal features constant and manipulate preference—how people judge artistic work while looking. This may or may not involve a top-down influence on how a work appears. Here we will not take a strong stand on that question. Our main goal is to review evidence for a number of different ways people may draw on information that is not delivered by the retina when evaluating artworks with which they are presented.

2. Nonformal factors that influence judgment

We now turn to a review of some of our recent empirical findings that bear on the impurity of aesthetic judgments. We aim to show that there are a variety of different nonformal factors that can come into play. These can be sensory, motoric, cognitive, affective, and normative. After reviewing the examples, we will consider some possible mechanisms.

2.1. Scale and position

Our first example is perhaps the least impure, at least on the face of it. In recent work, we have shown that spatial magnitudes, such as the physical size and physical location on the wall of a work can impact judgments (Seidel and Prinz 2018). In a series of five experiments, we explored the impact of scale and

position on judgments about art, and conversely. Here we mention two of our findings (some others will be mentioned below).

To investigate aesthetic value of artworks, we developed an aesthetic judgment scale that included six terms: *amazing*, *good*, *inspiring*, *boring*, *interesting*, and *awe*. Participants evaluated paintings on each of the six items anchored at 1 (*Not at All*) to 7 (*Very Much*). In one pair of experiments, we showed that the very same painting, Pablo Picasso's *Three Musicians* (1921), impressed people more (M = 5.15 vs. M = 4.06) when it was larger 32" × 32" than smaller (12" × 12"). This was true for both a visually complex work and a more simple piece, namely, Miro's *Blue II* that consisted of a uniform blue background with a single red line and a series of black dots (Seidel and Prinz 2018: exp. 2a and 2b).

We interpret this finding to show that a work that has the same configuration of colors and shapes can have a different aesthetic impact depending on its scale. Such a finding indicates impurity in aesthetic judgment, but only of a minimal kind. By keeping formal properties (shapes and colors) constant, we show that aesthetic judgment goes beyond the features that are emphasized in purist approaches to aesthetics, as well as the features that are most frequently manipulated in empirical studies of aesthetic judgment. This is, thus, a corrective to purists' approaches as they usually stand. Strictly speaking, however, size is a sensory feature—it is something that impacts visual response. A larger work occupies more of the visual field and may be difficult to take in at a single glance. High-level visual processing is relatively scale-invariant, so size may not impact visual processing to the same degree throughout the visual hierarchy, but it certainly impacts some levels of visual processes. So this result establishes impurity only relative to the standard emphasis on shape and color, but it does not show that judgments are impacted by factors that are not visual in nature.

To establish stronger forms of impurity, we conducted other experiments. One of these, which pushes slightly further in the direction of a nonvisual effect, manipulated spatial position rather than size. In this experiment, we placed reproductions of works at different heights on a wall (Seidel and Prinz 2018: exp. 5). On one height, participants had to look down to see the work, another height was at eye level, and a third required a slight raising of the head. We again used a between-subject design and the same aesthetic judgment scale. Results showed that ratings on the scale (and on each scale item) increased as works got higher on the wall. Participants who evaluated Kandinsky's work while looking up gave the highest aesthetic ratings (M = 5.67), relative to participants who evaluated it at eye level (M = 4.19) or below eye level (M = 3.62). Participants who looked down at the painting gave the lowest overall ratings.

It is conceivable that direction of gaze (down, eye level, or up) has some retinal impact but, because the paintings were the same size, it's likely that the formal properties were relatively constant across the three viewing conditions. If there were slight changes in appearance, it is not obvious why these should impact judgment. Rather, the factor that seems to make a difference is direction of gaze. Works have a more negative impression when we look down, and a more positive impression when we look up.

2.2. Authorship

A more dramatic example of impurity can be demonstrated when viewing conditions are held constant, and information about a work is manipulated. For example, we have conducted experiments in which the same work, presented in the same way, is attributed to different artists. Attribution impacts aesthetic evaluations.

Consider, for example, two experiments in which we manipulated the fame of the artist (see also, Huang et al. 2011; Cleeremans et al. 2016). In one, participants viewed reproductions of paintings that have contested authorship. In each case, participants were presented with a roughly full-size reproduction in a laboratory setting at a distance of four feet (Seidel and Prinz 2018: exp. 3). We simply manipulated attribution, and then administered our aesthetic judgment scale. For example, some participants were presented with a work that we credited to Van Gogh and others saw the same work attributed to a forger. All items on our scale increased when work was attributed to a famous artist. Participants in the "Van Gogh" condition evaluated the painting more positively (M = 4.45), relative to participants in the "forgery" condition (M = 3.61). Interestingly, the work was also judged to be larger (M = 26.37) and closer (M = 3.18) in Van Gogh condition but estimated as smaller (M = 22.06) and further away in the forgery condition (M = 4.18), indicating that the praise for the work is not a simple result of expectancy effects. A similar pattern of results was obtained in an unpublished replication using a painting once attributed to Rembrandt.

In another experiment (Seidel 2017), we manipulated artist fame using doodles rather than finished paintings. We chose doodles by Leonardo da Vinci, Pablo Picasso, and Salvador Dalí. Participants were either given the correct author of these examples, or attributions were given to unknown individuals. In this experiment we didn't directly ask for quality, since our main goal was to establish that there are dimensions of evaluation that go beyond appearances. We tried to identify variables that could get at the idea that works by famous

artists might seem desirable even if they aren't much to look at. With this in mind, we asked participants to rate monetary value, desire to own, and how tragic it would be if the doodle were destroyed. All went up in the famous artist condition. We asked whether participants would keep or sell the doodle if they owned it, telling them to imagine they had just one chance to sell. Most chose to keep in the famous artist condition, but not otherwise. The increase in monetary worth is not surprising. Newspapers have reported on cases where doodles by famous artists sold at exorbitant prices. For example, a Damien Hirst doodle sold for £4,500 a few years ago (Quinton 2012). More surprising is that people were inclined to keep master's doodles rather than selling them. This suggests that the increase in value that comes with distinguished authorship is not just a matter monetary worth but something more like a desire to possess the work. Does this impact how the doodles look? We do not know. In a follow-up study, we tested whether masters' doodles were more beautiful than the same doodles attributed to unknown artists. We found no difference. But our first study was conducted with a New York college student sample, and the second was conducted on Amazon's Mechanical Turk, where participants may not have been sufficiently interested in art to be impressed by a famous name. Only about a quarter of our sample described themselves as art enthusiasts. They gave higher beauty ratings than non-enthusiasts, regardless of condition. This itself is important in the present context, since it shows that beauty is not a direct function of the work alone but also imposed, to some degree, by the viewer. On the other hand, it is hardly surprising that art enthusiasts are more enthusiastic about the art they see. We didn't measure how sophisticated these viewers are about art. In follow-up work, we plan to run the test with a sample of art aficionados. We believe that viewers who admire famous artists are likely to arrive at inflated evaluations of works attributed to masters.

Overall, the studies summarized here show that artist fame can impact the value of artworks in ways that go beyond their formal qualities. We did not directly measure impact of fame on perception, but we did measure impact of fame on perceptual judgments about size and distance; this suggests that fame could impact how works look. We can conclude, with more confidence, that assignment of artistic worth goes beyond the sensory information delivered to the retina. In the forgery study, fame was associated with higher aesthetic evaluation, and in the first doodle study there was an impact of fame on desire to own a work. This should be no surprise, given the great premium that is placed on authorship in art history, curatorial practice, and art markets. Our follow-up doodle found no main effect of fame on beauty, but we did find an effect of

art enthusiasm on beauty, which underscores the fact that beauty judgments, though directed toward visual stimuli, are partially a reflection of a viewer's attitudes. This serves to remind us that empirical aesthetics should not limit itself to formal properties. Manipulating stimulus features is not the only way to impact aesthetic judgments; beliefs and attitudes held by viewers matter too.

Future work can further explore how, when, and to what degree fame impacts evaluation. It would also be interesting to investigate whether people would rationally embrace such effects given full information. Should a picture really be regarded more highly if it is by a master? Is this an error of judgment or an insight into what people mean by aesthetic merit? We cannot settle the normative question here but, descriptively, we can confirm that assessments of art can go beyond formal properties.

2.3. Originality

A third line of research investigates the impact of originality on judgments about value. Prior work has indicated that the same painting is rated as having more worth if it is presented as unique original performance rather than as a result of copying another artist's style (Newman and Bloom 2012). In one group of experiments, we sought to extend this work and show some limitations of the phenomenon (Seidel 2017). For example, in two experiments we presented participants with copies created by famous Renaissance masters. These included copies that the masters made of their own earlier works as well as copies of less acclaimed or unknown artists. We found that when masters make copies, discounting for the lack or originality does not occur (M = 4.72 in the original condition vs. M = 4.31 in the duplicate condition). In contrast, when unknown artists make copies, judgments about quality are reduced as compared to works that are presented as original (M = 5.58 in the original condition vs. M = 3.77in the copy condition). As in the Newman and Bloom experiment, we found the effect on the value of original but only in the minor artist condition. When masters copy their originals, the copies are rated as having the same amount of worth. In another experiment we wanted to see whether ancient Greco-Roman original sculptures would be worth more than forgeries by famous masters. In one experiment we presented participants with a depiction of *Laocoon* strangled by a snake and described it as an ancient Greco-Roman original or Michelangelo's forgery. Surprisingly, the great master's forgery was rated as having more worth (M = 5.37) than the ancient Greco-Roman original (M = 4.59). In contrast, when a minor artist made a forgery, judgment about value was reduced (M = 5.98 in

the original condition vs. M = 3.35 in the minor artist forgery condition). Thus, there is a complex interaction between originality and authorship, indicating a fair amount of cognitive processing in the assignment of artistic merit.

In other experiments, we examined the motivation to view copies as compared to original works (Seidel 2017). We found that people are much more motivated to see originals rather than what we described as perfect reproductions. Strikingly, in one experiment, we found that people are more motivated to see original as compared to perfect duplicates even when the original is in a seriously degraded state and the duplicate is not. For example, we asked participants to imagine that the Mona Lisa had been destroyed in a fire. When then asked, would you rather see a perfect, intact replica of the painting, or the ashes left behind from the original, we found that 65 percent of the participants opted for the ashes. Chi-square analyses revealed that the results were statistically significant $X^2(1, n = 85) = 7.35, p = .007$. Such findings indicate that formally identical works can be preferred as a function of both originality and authorship, with authorship outweighing originality, and that the motivation to view art goes beyond the desire to see certain colors and forms. We value looking at art (not just art itself) for reasons that go beyond pure formal properties. Such experiences can bring us into indirect contact with artists whom we esteem, and that seems to contribute to the assessed value of a work and the value of experiencing the work.

2.4. Morality

As a final example of impure aesthetics, we want to present finding concerning the impact of morality on aesthetic value. In a series of experiments (Seidel 2017), we demonstrated that the presumed moral character of the artist could impact artistic work. In the first demonstration of this moral effect, participants were presented with art pieces created by Adolf Hitler, Conrad Hommel, and Arno Breker. We found that moral character of artist amplified ratings on all items. In the Nazi artist condition, participants were given correct information about artwork's authorship; others read that it was created by someone who rescued people during the Holocaust. The neutral condition contained no morally significant information. To measure the impact of artist's morality on aesthetic judgment of art, participants evaluated artworks on each of the eight items: $artistic\ value$, beauty, disgust, genius, awe-inspiring, uplifting, goodness, $technical\ skill\ anchored\ at\ 1\ (Not\ at\ All)$ to 7 ($Very\ Much$). As predicted, all items on our scale decreased when paintings were attributed to Nazi artists (M=4.11)

than when the artwork was attributed to a "noble creator" (M = 5.26), or described in neutral terms (M = 4.86). In addition, artworks attributed to Nazi artists were rated as most disgusting (M = 2.57), relative to neutral condition (M = 1.69), and were rated as least disgusting when they were attributed to noble painters (M = 1.39).

In another experiment investigating morality and aesthetic value, we explored the impact of moral content on aesthetic worth. In one condition, participants were told that artwork's attributes promoted National Socialist values during the Third Reich in Germany. For instance, in the "Nazi content" condition, participants read that artistic peace "served to glorify Nazi racial supremacy." In the "Noble content" condition, participants read that the artwork "served as an appeal for mutual respect, cooperation, and peace." Neutral condition described artwork's physical features (e.g., made of marble). As before, participants rated the artworks on eight items: artistic value, beauty, disgust, genius, awe-inspiring, uplifting, goodness, technical skill anchored at 1 (Not at All) to 7 (Very Much). We found an impact of condition: the same works were rated as worse (M = 4.00) than the neutral condition (M = 4.89) when presented as promoting Nazi values and as better (M = 5.54) when presented as promoting altruistic values. As expected, Nazi art was evaluated as most disgusting (M = 2.95) relative to noble art (M = 1.29) and neutral condition (M = 1.62).

These findings indicate that participants take moral attributes into consideration when assessing art. Again, we did not measure here whether the works appear differently depending on the moral content. All we can confirm with confidence is that participants' aesthetic ratings were influenced by moral attributions. It is possible that participants didn't want to give high ratings to Nazi art because they thought that would make them look bad. Here, we will not take issue with that possibility. Even if that is the case, it shows that people are willing to take values into consideration when delivering aesthetic verdicts. If there were a widespread presumption that aesthetic value should be based on formal features alone, the pressure to give low ratings to Nazi art would be mitigated. People do seem to regard such information as relevant, whether explicitly or implicitly.

2.5. Summary

We have just briefly reviewed a number of recent experimental results in which we find that assessments of artworks take into consideration factors that go beyond form. These experiments take a number of factors into consideration: scale and position, artist fame, originality, and morality. Despite the differences between

these factors, they each seem capable of influencing aesthetic verdicts. This suggests that the assessment of art extends beyond formal properties in a variety of different ways. We take this to be unsurprising. It puts pressure on pure formal theories of artistic worth, but such theories are not especially popular these days. The value of this work is that it offers empirical confirmation of the fact that aesthetic preferences are impure. It also provides a step in the direction of understanding how people make aesthetic judgments. Toward this end, we turn now to a more speculative part of this discussion, where we consider some possible mechanisms.

3. Possible mechanisms

Given the variety of ways in which aesthetic preferences can be influenced by nonformal features, it might be tempting to suggest that aesthetic judgment is a psychologically heterogeneous activity. That is, one might conclude that people arrive at aesthetic judgments in a variety of different ways, and there is no common psychological mechanism unifying the kinds of cases we just considered. Alternatively, one might grant that, though many different kinds of factors can have an impact, they do so by means of a shared underlying mechanism. We do not have the empirical evidence needed to adjudicate between these possibilities here, but, by way of existence proof, we want to contrast the two approaches and show that a unified account may be possible.

3.1. Disunified mechanisms

First, let's consider some examples of what a disunified account might look like. If each of the examples considered above were presented in isolation, one might propose mechanisms for one that cannot be easily extended to the others. Here are some possibilities.

Recall the finding that people prefer works that are bigger rather than smaller. One possible mechanism is metaphorical transfer. People may be familiar with metaphorical terms of praise such as "great," "grand," "towering," "lofty," "elevated," which associate quality with large spatial magnitudes. Perhaps such linguistic associations lead us to think that bigger is better when it comes to art. This would explain the size study, but it would offer little perspective on findings having to do with authorship and originality.

Another disunified account would explain the findings about spatial position using the resources of embodied cognition. According to the embodiment approach, we use our bodies as information when making judgments. Perhaps the physical act of looking up, as opposed to down, has a direct impact on aesthetic verdicts. This would help with the position findings, but not the others.

A third disunified account draws on an idea from evolutionary psychology. Art making, according to evolutionists, is a kind of costly signal that advertises desirability by showing that we can master difficult skills even when they have no direct practical payoff. The emphasis on originality in aesthetic production has been interpreted along these lines since it is presumably easier to copy something than to come up with something new (Newman and Bloom 2012). But this analysis would offer little to explain why we dislike Nazi art, or why a painting hung at eye level is more appealing than one hung lower on a wall.

Finally, one can imagine a disunified account that emphasizes public presentation of the self. Social pressure makes it desirable to show that we value good people and disvalue bad people. There is also social pressure to show that we appreciate famous artists, and can discriminate masters from unknown individuals. This could contribute to understanding results involving morality and fame, but it would have little bearing on results having to do with originality and spatial magnitudes.

It does not refute an explanation to show that it is disunified. Given that the effects surveyed in section 2 are varied, it follows trivially that different psychological mechanisms contribute to aesthetic judgments. Moreover, the phenomena just adduced enjoy considerable empirical support: metaphors can impact judgment (e.g., there are some impressive results involving embodiment), and there is much pressure to conform to social norms. For these reasons, we are quite open to the view that a range of heterogeneous mechanisms contribute to the aesthetic domain.

Nevertheless, we think that disunified accounts risk losing sight of why all these different cases qualify as aesthetic judgments in the first place. If there is no overlap of mechanisms, then it is hard to explain why participants in these studies know what to do when we ask them to assess artworks. It would also be hard to explain how different factors, such as fame and originality, interact. Therefore, we think that an active effort should be made to investigate the possibility that the wide range of factors influencing aesthetic preferences may be filtered through a unified mechanism at some point in processing.

3.2. A unified account

Let us turn now to a more unified approach to explaining the range of impure factors that can impact aesthetic preferences. Granting that many psychological mechanisms may contribute, it is also possible that there is a psychological common denominator. To see this, reflect for a moment on what aesthetic judgments are. To assess a work of art is to make a judgment of value. Aesthetic judgments are value judgments. They are not just judgments of how things are, but rather they draw on standards of how things should be, and what makes things better or worse. Value judgments are, in this sense, valenced: we evaluate things as good or bad.

To understand the nature of value judgments, it is helpful to move beyond aesthetics and consider another domain of value that has been investigated much more extensively: morality. There are many competing theories of how people make moral judgments, and we cannot adjudicate these disputes here. We can, however, say where we stand. Both of us have argued elsewhere, on both empirical and theoretical grounds, that moral judgments depend on emotions (Prinz 2007, Seidel and Prinz 2013a, Seidel and Prinz 2013b, Seidel 2017). The basic idea is that a moral judgment is actually an emotion directed toward a person or action. Research on moral judgments has shown that they depend on specific emotions and can be altered by manipulating those emotions.

Here we want to suggest that aesthetic judgments too may be grounded in emotions. Without speculating which emotions are involved (on this, see Prinz 2007), we can simply suppose that there are positive and negative emotions underlying positive and negative aesthetic verdicts. There may be much more to aesthetic judgments than this, but it is plausible that emotions are among the psychological states that occur when form verdicts about aesthetic worth.

Aesthetic sentimentalism—the view that aesthetic judgments have emotions as components—could point us in the direction of a more unified account of the way factors other than form can impact aesthetic judgment. Consider, again, the findings reviewed in section 2.

First, we reported that size and position can impact aesthetic preference. There is work suggesting that spatial magnitudes can impact emotions. Larger stimuli can lead to more expansive and holistic information processes, which increase positive affect. Direction of gaze may matter as well. Looking up is associated with both pride and respect. Looking down is associated with sadness and shame. It is possible that such changes in embodiment potentiate positive and negative emotions.

Fame and originality may impact emotions as well. We admire both, and there is a lot of anecdotal evidence that people become highly emotional when in contact with individuals they admire. Conversely, individuals whom we disvalue can elicit negative emotions. These emotions are known to spread from individuals to inanimate things. This is especially evident in moral cases. Hitler instills disgust in some people, and that disgust can transfer to things he has touched. For example, people do not want to try on a sweater than Hitler is said to have worn (Rozin and Nemeroff 1990). We don't mean to suggest that all of these effects of fame, originality, and morality involve emotional contagion. Contagion is a very specific mechanism and it would lead to a disunified view. Rather, our point is that all of these attributes may have emotional consequences, and the emotions that they evoke may directly impact aesthetic judgments.

This description is far too abbreviated to qualify as a model of aesthetic judgments. Our aim here is simply to explain what a unified account might involve, so as to help guide future research. A unified account would not reject the involvement of multiple mechanisms, but it would explain why very different mechanisms might all be said to impact judgments of the same kind: aesthetic judgments. If aesthetic judgments are emotionally grounded and emotions can be elicited in various ways (through senses, embodied states, social pressures, and thoughts), then we would be a step closer to accounting for the range of ways in which aesthetic judgments can be impure.

We would also have some testable predictions. For example, induced emotions, passing moods, and individual differences in emotional dispositions should have an impact on aesthetic judgment. The position also makes some predictions that would be surprising if confirmed. For example, some works of art are highly valued because of their cognitive content, such as works of conceptual art. If art evaluation is emotional, then these seemingly cerebral works should pack emotional punch as well. Indeed, a work that appears to be highly expressive might be assigned less aesthetic merit than a clever work. The sentimental approach suggests that, surprisingly, when this occurs, the clever work might be more evocative for the viewer who praises it, than the expressive work.

We cannot assess whether such predictions will be borne out. Our more modest goal is to suggest that in the studies reviewed above, emotions may mediate the seemingly disparate effects. If so, this would bring some unity to what may otherwise appear to be disconnected phenomena. It would also give a principled reason for proposing that aesthetic judgments are not restricted to form. If emotions are involved in aesthetic judgment, they should be amenable to factors that go beyond appearances, since many things can impact our emotions.

4. Implications and future directions

In the forgoing, we have reviewed a body of recent empirical results in which we demonstrate that assessments of art can be impacted by factors other than form. Keeping appearances constant, we can influence aesthetic judgments by manipulating spatial magnitudes, fame, originality, and morality of the artist. We briefly described a number of possible psychological mechanisms that might contribute to these effects. We also indicated a possible avenue for providing a unified account: if aesthetic judgments have an emotional basis, a variety of nonformal factors should have an influence, including those reviewed here. In any case, empirical work on aesthetics should go beyond formal factors and investigate the ways in which aesthetic preferences can be impure.

This is a young research program, and the studies we have presented raise more questions than answers. We want to conclude by summarizing some of the aforementioned directions of future research.

One question concerns the normative significance of impure judgments. Philosophers debate, for example, whether moral defects are really aesthetically problematic or whether, instead, moral assessments should be completely distinguished form aesthetic assessments (e.g., Carroll 1998, Gaut 1998, Jacobson 1997). One can imagine a view on which formal features are all that matter when assessing art as such, even though an artwork can also have attributes that matter morally. On this view, it is a mistake to say a painting is less excellent as an artwork simply because it was painted by a bad person. One might also have a moderate view, on which moral judgments can matter artistically, but only in a restricted range of cases, as when they interfere with the artistic aims of the work. On such a view, a painting made to convey Nazi values might be more artistically compromised than one made by Hitler, since conveying a message can be part of the artistic aim of a work. Our findings suggest that moral demerits of artists may impact judgments quite generally. Perhaps people would correct their negative verdicts if presented with full information. Likewise, people might be embarrassed to discover that wall position influences the assessed quality of a painting, or that doodles by masters are regarded as better. Future work can be designed to test when impure judgments are embraced on reflection, or rejected as erroneous.

Second, it would be interesting to know whether the effects examined here influence perception. Some authors distinguish artistic and aesthetic values, where "aesthetic" is defined narrowly to include only aspects of perceptual experience. On such a picture, artistic judgment is impure but, strictly speaking,

aesthetic judgment is not, because, by stipulation, aesthetic judgments are perceptual. Our findings may appear to be consistent with such a sharp distinction. But there is another possibility. Perhaps factors such as presumed originality, authorship, and morality exert a top-down influence on perception. If so, two works that differ along these dimensions may look different even if they are formally identical. Our findings cannot settle this issue. Only one result—the fact that works by famous artists are judged to be larger and closer than works by forgers—investigates perceptual states. This finding may indicate a top-down effect, but it could also indicate mistaken post-perceptual judgments. Future work should investigate whether nonformal factors can influence perceptual states. If so, the boundary between artistic and narrowly aesthetic merits will blur.

Third, it would be illuminating to investigate which emotions contribute to aesthetic judgments. Moral psychology has been advanced by the finding that there are different moral emotions, and these impact moral judgments in different ways. For example, anger and disgust influence different kinds of moral judgment (Seidel and Prinz 2013b). What are the emotions implicated in aesthetic judgment? Are there many different aesthetic emotions? For example, does beauty cause different emotions than the sublime? Are there positive and negative aesthetic emotions? Are aesthetic emotions aesthetic by nature, or imported from other domains? By answering such questions, we can make progress on the nature an origin of aesthetic judgment, and we can better understand the scope and limits of impurity. If specific emotions are involved then some nonformal factors will be more likely to have an influence than others.

Finally, if empirical results support the conjecture that emotions are involved in aesthetic judgment, then the scope and limits of this connection should be ascertained. Are all aesthetic judgments emotional? Do emotional deficits lead to aesthetic incapacity? Do individual differences in emotion lead to irresolvable aesthetic debates? Do efforts to produce art that is more intellectual than evocative backfire, because intellectual achievements can arouse emotions? The conjecture that aesthetic assessment is emotional may seem to be a throwback to romanticism. This would be as parochial as pure formalism. In making a case for impure aesthetics, and suggesting that emotions may play a role in impurity, we are staking out the possibility that emotions play a role in assessing artworks even when they do not seem to have overt emotional content (as with some of the abstract and modernist paintings used in our research). Future work is needed to determine the plausibility of this conjecture.

Our interim moral is that the study of art evaluation should not limit itself to the perceptual domain. Empirical work is confirming that thinking, acting, and feeling can impart our judgments about art. We summarized some of our own work on impurity here. By ending with unanswered questions, we hope that this can serve as a call to arms. There is still much to be done.

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Part Two

The Ontology of Art

Why Is That Art?

Richard Kamber and Taylor Enoch

In this chapter we present an experimental approach to the problem of adjudicating the competing claims of art theories about what is and is not a work of art. Although classificatory theories of art try to spell out reasons on the basis of which art is distinguishable from nonart, they seldom attempt to explain what evidence would count for or against success. They may allude to considered intuitions or expert opinion, but they tend to be vague or silent about *whose* intuitions and opinions are to be counted and *how* to take a count of that kind. In an effort to remedy this deficiency and test several prominent theories of art, we designed a survey that asked art professionals to consider hard cases (e.g., Ligeti's *Poème Symphonique*, a railroad bridge, a painting by Ruby the elephant, etc.), judge whether each object is art, and then rate the relative importance of the reasons for their judgments. The resulting data suggest that none of the theories we tested is consistently successful in tracking the judgments and reasons of art professionals, but that Monroe Beardsley's "aesthetic definition of art" is more successful, overall, than the others we tested.

1. Introduction

The philosophy of art is the discipline to which one naturally turns for wisdom on the place of the arts in the larger scheme of things. Philosophers have thought carefully about demarcating what is art from what is not art and proposed ingenious reasons for distinguishing one from the other. Yet philosophers disagree about what these reasons should be, how to resolve disputes among themselves over hard cases, and where to draw borders. They may allude to considered intuitions or expert opinion in defending their theories, but they tend to be vague or silent about *whose* intuitions and opinions are to be counted

and *how* to take a count of that kind. Sitting in an armchair might be method enough for discovering one's own intuitions ("Let me think. Would I call a painting by an elephant art?"), but it won't suffice for discovering the intuitions of others. Philosophers of art need to bring relevant data *to* the armchair, if their reflections on the nature of art are to be more than speculation.

One way of acquiring relevant data is by studying art history. This method, as Dominic McIver Lopes points out, is particularly useful when one is trying to understand how concepts of art have been extended over time to cover items previously thought not to be art. He advises close attention to "the history of admissions and expulsions from the club of the arts" and cautions that, beyond a certain point, discussion "should build upon genuine historical investigation and should not be left to philosophical speculation" (Lopes 2014a: 115–117). Historical investigation, however, is limited to what has made its way into historical records or lingers in memories. In order to determine whether a theory successfully tracks the current extension of art (i.e., each and every thing that is art), historical data need to be supplemented by experimental data.

The principal advantage of an experimental approach is that it backs up thought experiments with real experiments and substitutes systematic surveys of intuitions and reasons for guesswork. Instead of arguing from untested assumptions about what people say or think (or *would* say or think if presented with hypothetical cases), an experimental approach conducts empirical studies to discover what actual subjects say and think and then looks for revealing correspondences between differences in their responses and demographic data about the subjects. Although experimental philosophers typically poll ordinary folk rather than experts, nothing prevents the selection of a more exclusive pool. That is precisely what we have done.

In 2012, we designed a survey to probe art professionals' reasons for judging whether an item is art. We call it: "the art reasons survey." This survey presents participants with a subset of thirteen objects from two previous surveys¹ and asks them to check one of three responses: (a) It is art. (b) It is not art. (c) I am not sure. In addition, they are asked to consider fourteen possible reasons for each judgment and assign a degree of importance to each reason on a Likert scale ranging from "Not one of my reasons" (with a value of zero) to "High importance" (with a value of four). We wanted to measure and compare the mean importance of each reason for all participants who made the same judgment (yes, no, or unsure) about the art status of a particular object. If all participants who judged that x is a work of art assigned a score of four to reason y, then the

mean importance of y as one of their reasons for judging x to be art would be four. Mean importance scores are summarized in Table 4.1.

The following list ranks the fourteen reasons from high to low in order of the mean importance participants attributed to them as reasons for judging the objects in the survey to be art. The negative wording of reasons is presented in brackets:²

- 1. It was [not] made or selected by a conscious agent(s). (R3)
- 2. It was [not] intended by its maker(s) or selector(s) to be an object of aesthetic interest or appreciation. (R4)
- 3. It [does not] invite(s) interpretation, such as asking "what meaning does it embody?" (R14)
- 4. It [does not] provide(s) an imaginative experience (e.g., as stories are said to do). (R13)
- 5. It was [not] intended by its maker(s) to evoke or communicate emotion. (R5)
- 6. It was [not] intended by its maker(s) or selector(s) to be regarded in a way that artworks were then or later came to be regarded. (R6)
- 7. It is [not] aesthetically interesting. (R2)
- 8. It was [not] intended by its maker(s) or selector(s) as a comment on established art. (R7)
- 9. It [does not] belong(s) to a recognized genre or art form. (R9)
- 10. It is [not] original or was [not] original when first presented. (R12)
- 11. It was [not] made or selected by an artist(s) for presentation to people who have some understanding of art. (R8)
- 12. It is [not] descended from or causally linked to earlier acknowledged artworks and artistic practices. (R10)
- 13. It is [not] recognized as art by art professionals or art institutions. (R11)
- 14. It is [not] beautiful. (R1)

In addition to these reasons, we also provided a box for write-in reasons and comments. A total of 237 participants responded to at least some of the questions; 105 responded to all of the questions they were given *and* identified themselves as art professionals.³ Except where noted, the data cited below for the art reasons survey were drawn from responses of the 105 who completed the survey and identified themselves as art professionals. However, 37 of the 105 were asked and responded to an additional question about the relative importance of the fourteen reasons for artworks *in general*. Those responses are also mentioned below.

 Table 4.1 Mean score summaries

		%Ans	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14
Art-in-General†		ı	2.667	3.469	3.071	2.742	2.400	2.185	2.036	1.750	1.864	2.074	2.000	2.733	2.800	2.667
			(1.2)	(1.2)	(6.0)	(I.I)	(1.0)	(I.I)	(0.9)	(0.8)	(6.9)	(6.0)	(6.0)	(I.I)	(1.2)	(1.0)
Overall (Art) *		I	2.227	2.955	3.342	3.171	3.007	2.966	2.842	2.675	2.781	2.657	2.619	2.772	3.041	3.075
			(1.2)	(1.0)	(6.0)	(1.0)	(1.0)	(1.1)	(1.1)	(1.1)	(1.1)	(1.0)	(1.2)	(1.2)	(1.0)	(1.1)
Frith Painting [‡]	Art	26	2.2 (1.2)	2.9 (1.0)	3.4(0.8)	3.3 (0.9)	3.1 (0.9)	3.0(1.0)	2.3 (1.0)	2.6 (1.1)	2.8 (1.1)	2.8 (1.0)	2.6 (1.1)	2.6 (1.2)	3.1 (1.0)	3.0 (1.1)
	Nonart	0	ı	1	ı	ı	ı	ı	ı	ı	ı	ı	ı	ı	ı	ı
Duchamp Readymade [‡]	Art	83	1.7 (1.0)	2.6 (1.1)	3.4 (0.9)	3.1 (1.2)	2.9 (1.2)	3.4(1.0)	3.5 (0.8)	3.2 (1.0)	3.2 (1.1)	2.6 (1.1)	3.0 (1.1)	3.2 (1.1)	3.0 (1.1)	3.3 (1.0)
•	Nonart	4	ı	1	ı	I	3.5 (0.7)	3.0 (0.0)	3.0 (0.0)	ı	ı	1	ı	ı	4.0 (0.0)	4.0 (0.0)
Ligeti Composition*	Art	85	2.2 (1.1)	3.2 (1.1)	3.6 (0.7)	3.5 (0.8)	3.0(1.1)	3.2 (0.9)	3.1 (0.9)	2.9 (1.0)	2.9 (1.1)	2.6 (1.0)	2.6 (1.3)	3.0 (1.1)	3.2 (1.0)	3.3 (1.0)
,	Nonart	5	3.7 (0.6)	3.0 (1.7)	1.0(0.0)	3.0 (0.0)	2.0 (0.0)	3.0 (0.0)	ı	ı	ı	1.0(0.0)	3.0 (0.0)	ı	ı	3.0 (0.0)
Velvet Elvis*	Art	09	1.7(1.0)	2.4 (1.1)	3.3 (0.9)	3.2(1.0)	2.8 (1.0)	2.7 (1.2)	2.0 (1.1)	2.2 (1.1)	2.5 (1.1)	2.5 (1.1)	1.9(1.1)	2.2 (1.2)	2.6 (1.1)	2.3 (1.2)
	Nonart	23	3.1 (1.1)	3.2 (1.1)	2.3 (1.5)	3.2 (1.3)	2.3 (1.5)	3.0 (1.2)	3.0 (1.2)	2.7 (1.4)	2.5 (1.7)	2.5 (1.7)	2.6 (1.3)	3.0 (1.3)	3.1 (1.2)	3.2 (1.1)
Crate Label*	Art	55	2.1 (1.2)	2.7 (1.1)	3.3(1.0)	2.9 (1.0)	2.8 (1.0)	2.2 (1.2)	2.1 (1.1)	2.2 (1.1)	2.5 (1.1)	2.7 (0.9)	2.1 (1.1)	2.4 (1.1)	2.8 (1.0)	2.4 (1.1)
	Nonart	35	1.8 (1.3)	2.1 (1.3)	2.7 (1.2)	3.0(1.1)	1.5(1.1)	3.2 (1.1)	3.2 (1.1)	3.0 (1.1)	2.4 (1.3)	2.2 (1.2)	2.7 (1.2)	2.4 (1.2)	2.3 (1.3)	3.0 (1.2)
Arbus Photo*	Art	93	2.2 (1.1)	3.2 (0.9)	3.4 (0.9)	3.3 (0.9)	3.3 (0.9)	3.0(1.1)	2.5 (1.1)	2.6 (1.1)	3.0 (1.1)	2.6 (1.0)	2.8 (1.2)	2.9 (1.1)	3.0 (0.9)	3.1 (1.0)
	Nonart	3	ı	ı	ı	ı	ı	ı	ı	ı	ı	ı	ı	ı	ı	ı
Selk'nam Mask*	Art	75	2.6 (1.3)	3.2 (0.9)	3.3 (0.9)	3.2 (0.9)	3.3 (0.9)	3.3 (0.9) 2.9 (1.0)	2.0 (1.2)	2.0 (1.2)	2.6 (1.1)	2.8 (0.9)	2.6 (1.2)	2.9 (1.2)	3.2 (1.1)	3.1 (1.0)
	Nonart	10	I	ı	ı	I	1.0(0.0)	1.0 (0.0) 3.5 (0.8)	3.0 (1.2)	2.8 (0.8)	3.0 (0.0)	2.5 (0.6)	2.6 (0.9)	4.0(0.0)	1.0 (0.0)	3.3 (1.2)
Railroad Bridge [‡]	Art	39	2.7 (1.2)	3.1 (1.0)	3.3(1.1)	2.7 (1.0)	2.4 (1.2)	2.7 (1.3)	3.0(1.1)	2.5 (1.2)	2.6 (1.1)	2.8 (1.0)	2.6 (1.3)	2.8 (1.3)	2.9 (1.1)	2.8 (1.4)
	Nonart	45	1.0(0.0)	2.0 (1.0)	2.3(1.0)	3.4(1.0)	3.3 (0.9)	3.3 (0.9) 3.4 (0.8)	3.1(1.1)	3.2 (1.0)	2.6 (1.1)	2.6 (1.1)	3.1 (1.1)	2.0 (1.1)	3.1 (1.0)	3.3 (0.9)
Elephant Painting*	Art	35	2.7 (1.1)	3.2 (1.0)	2.8 (1.2)	2.9 (1.3)	2.8 (1.3)	2.9 (1.2)	2.7 (1.2)	2.9 (1.3)	2.9 (1.1)	2.6 (1.1)	2.5 (1.3)	2.7 (1.2)	3.0 (1.1)	3.0 (1.2)
	Nonart	39	2.5 (1.7)	3.0 (1.4)	3.8 (0.5)	3.6(0.8)	3.5 (0.9)	3.5 (0.8)	3.3 (0.9)	3.3 (0.9)	2.4 (1.5)	2.6 (1.2)	2.3 (0.9)	3.0 (1.7)	3.0 (1.3)	3.4 (1.0)
Computer Poem [‡]	Art	29	1.7(1.1)	2.8 (1.0)	2.8 (1.3)	3.1(1.1)	2.8 (1.2)	2.8 (1.3)	3.0(1.1)	2.5 (1.2)	2.7 (0.9)	2.8 (0.9)	2.2 (1.2)	2.5 (1.2)	3.2 (0.8)	3.2 (0.9)
	Nonart	44	3.0(1.1)	3.1 (1.1)	3.7 (0.6)	3.2(1.0)	3.3 (0.9)	3.3 (0.9) 3.0 (1.1) 2.6 (1.1)	2.6(1.1)	3.0(1.1)	1.3 (0.5)	2.3 (1.5)	2.2 (1.5)	2.5 (1.2)	3.0 (1.2)	2.8 (1.3)

2. Art as significant form

The art reasons survey has one typical artwork. It is William Powell Frith's *The* Railway Station (1862), a large and very detailed representational painting of the interior of a busy railway station. Although famous in its day, it is now best remembered as the popular work Clive Bell denied was art because it lacked significant form. This painting served Bell as a critical test case for the possibility that a work can have conventional formal properties and good craftsmanship and yet be devoid of significant form. It also tests the cognitive foundation of Bell's theory. How does Bell know that this painting lacks significant form? He says he has spent "many a weary forty minutes" studying this painting and found no significant form in it (Bell 1914: 5). He notes that the painting provoked pleasant feelings in him but no aesthetic emotion. He expresses confidence in his ability to detect significant form in visual artworks (though not in music) and suggests that people with equally keen sensibilities can detect it as well (Bell 1914: 7–8). One might construe Bell as arguing for the detectability of significant form (perhaps by an ideal observer) rather than for his own capacity to detect it, but we took Bell at his word. Under our construal, if Bell is mistaken about the absence of significant form in this painting, then the reliability of his aesthetic sensibilities is called into doubt and so is his claim about the sensibilities of others.

We did not include significant form as one of the stated reasons in the art reasons survey because there is no concise way to explain what Bell meant by "significant form," but we did expect participants' responses to The Railway Station to tell something about the credibility of his theory. How many survey participants agreed with Bell that this painting is *not* art? None! In fact, Frith's painting received a higher percentage of affirmative votes (97%) than any other item in the survey. The remaining 3 percent were unsure. Admittedly, these data do not prove that Bell's theory is wrong. The sensibilities required to detect significant form and experience the aesthetic emotion it provokes could be even rarer than Bell claimed. It is also possible that some participants detected an absence of significant form in the image of The Railway Station but did not share Bell's conviction that some degree of significant form is necessary for art. Conjectures such as these need substantiation. Our data challenge anyone who wishes to defend Bell's theory in whole or part to design alternative tests whose results could confirm or disconfirm his theory.

3. Art as intended capacity to satisfy aesthetic interest

The art reasons survey included the two items that Monroe Beardsley singles out in "An Aesthetic Definition of Art" as undeserving of the name of art: Duchamp's *Fountain* and Ligeti's *Poème Symphonique* (Beardsley 2005: 60). Most participants did not concur with Beardsley's dismissal of these works from the extension of art. *Fountain* was identified as art by 83 percent of participants in the art reasons survey; *Poème Symphonique* by 85 percent. On the other hand, Beardsley's emphasis on intended aesthetic interest fares well in the survey as whole. R4, "It was intended by its maker(s) or selector to be an object of aesthetic interest or appreciation," was meant to serve as a shorthand version of Beardsley's theory. For the 105 art professionals who completed the survey, R4 was the second in rank for overall mean importance. As many as 84 percent of the thirty-seven art professionals who were also given and responded to the additional question judged R4 to be of medium to high importance (2–4 on the Likert scale).

If our data are reliable indicators of the judgments of art professionals at large about Duchamp's *Fountain* and Ligeti's *Poème Symphonique*, then we can infer: (1) they are very likely to identify them as art; and (2) their conscious reasons for doing so are likely to include reasons of the sort that Arthur Danto and Joseph Kosuth defended: the work comments on established art or invites one to ask what meaning it embodies (R7 and R14). This is not surprising. What is surprising is that the data also indicate that their reasons for identifying as art these—arguably *anti-aesthetic*—works are also likely to include the intended or actual capacity of these works to satisfy aesthetic interest.

4. Is imitation sufficient for art?

In his influential essay "The Artworld" (1964), Danto remarks that, since the advent of photography, mimesis is neither necessary nor sufficient for art and "mere illustrations" have been relegated to a category beneath that of art (Danto 1964: 571). It is easy to see why photography posed a problem for a mimetic theory of art. If making a likeness, even a striking likeness, is sufficient for art, snapshots made by anyone with a camera are works of art. Danto champions the requirement that a work be grounded in art theory, and thus enfranchised by an art-conceptual enterprise, but people may have more pedestrian reasons for denying art status to representational works.

We chose Velvet Elvis, a crude and mawkish painting of Elvis Presley on black velvet, to assess participants' agreement with the proposition—to which many philosophers of art now subscribe—that an object can be aesthetically or artistically bad and still be a work of art in the classificatory sense. In many respects Velvet Elvis is not problematic at all. It is a handcrafted representational work that belongs to the ancient genre of portraiture. The respects in which it is problematic have to do with merit. One measure of merit in art is originality, and paintings like this are not original. They have been cranked out by commercial workshops since Elvis was in his prime.

Responses to Velvet Elvis were more varied than we expected. Some 60 percent of respondents identified it as art. Most of the latter did not check originality, beauty, or aesthetic interest (R12, R1, or R2) as reasons for their affirmative choice. However, over 94 percent of those who responded affirmatively to Velvet Elvis in the art reasons survey indicated that for them "it was intended by its maker(s) or selector(s) to be an object of aesthetic interest or appreciation." (R4) was a reason of medium to high importance. Although Velvet Elvis would surely wind up on Beardsley's list of "tawdry and negligible" (Beardsley 2005: 62) borderline cases, these numbers lend support to a central insight of Beardsley's theory: belief that an object has been produced with the intention to satisfy aesthetic interest remains a strong reason for identifying that object as art even when one thinks that the object fails to achieve that intention.

In order to test Danto's claim that mere illustrations are not art (a claim with which Stephen Davies seems to agree),4 we chose a crate label for "Safe Hit" brand Texas vegetables with a comic-like illustration of a baseball batter who has just hit a ball. Our caption read: "End label for a crate of 'Safe Hit' brand Texas vegetables. Printed paper label. (Courtesy of Dover Collection.)" About half—55 percent—of respondents to this question chose: "It is art"; 35 percent chose: "It is not art"; and 10 percent indicated they were not sure. Most of those who responded affirmatively denied that being beautiful (R1) or being recognized by art professionals or institutions (R11) were among their reasons. Most also denied any role to the three reasons that imputed intention on the part of makers or selectors to connect with the artworld (R6, R7, and R8). None of the reasons cited for affirmative responses stood out as statistically significant. The relative importance of reasons cited by respondents to this question who chose either "It is not art" or "I am not sure" was also quite flat. The written comments exhibited similar diversity. Some said the crate label is art because it is commercial art; another said the crate label is not art because it is commercial art. One respondent who judged the label to be art wrote: "This is actually a graphic art design which uses both pictorial and linguistic systems."

The art reasons survey also included a slightly blurred photo of a middle-aged woman with her eyes closed, on a city sidewalk. Our caption read: "Woman on the Street with Her Eyes Closed by Diane Arbus 1956. The Art Institute of Chicago Collection." As many as 93 percent of participants judged it to be art. Why? Our expectation was that people would attach high importance to: "It is recognized as art by art professionals or art institutions" (R11). But we were mistaken. Some 44 percent of respondents who identified this photo as art indicated that this was *not* one of their reasons, and only 21 percent picked it as a reason of "high importance." The reason with the second highest mean score for importance was Beardsley's reason (R4), aesthetic intention. In third place was: "It was intended by its maker(s) to evoke or communicate emotion" (R5).

5. Are art-making social practices necessary for producing artworks?

We chose a mask made by aboriginal people to test theories that imply that an item cannot be a work of art unless art-making social practices were in place when and where the item was made. Our caption read: "A ceremonial mask of the Selk'nam people, a now-extinct aboriginal tribe of hunters who lived in Tiera del Fuego. Earth pigments on soft wood. Private collection." We did not mention that the mask was made for puberty rituals. We expected few, if any, participants to be familiar with Selk'nam culture.

For the past fifty years, artworld theorists have questioned whether it is conceptually possible for individuals, whatever their skills and sensibilities, to produce artworks in the absence of art-making social practices or an artworld. Danto puts it this way:

There could not have been, everything being equal, flight insurance in the Middle Ages, or Etruscan typewriter erasers. The world has to be ready for certain things, the Artworld no less than the real one. It is the role of artistic theories, these days as always, to make the Artworld, and art, possible. It would, I should think, never have occurred to the painters of Lascaux that they were producing *art* on those walls. Not unless there were neolithic aestheticians. (Danto 1964: 33)

Similarly, George Dickie's institutional theory requires that there be an artworld public for there to be works of art. Noël Carroll's historical narrative theory requires that art-making social practices be in place already when an artwork is made, though his theory allows ad hoc exceptions.⁵ Even Jerrold Levinson's historical definition of art (a theory that counts as art any artifact made with an intention that already is or subsequently becomes a correct or standard way of regarding artworks), still has to wrestle with the question of how we can know what its maker intended when we don't know who its maker was (Levinson 1979).

Survey participants with similar reservations could have registered those reservations either by identifying the mask as nonart or by playing it safe and electing the "I'm not sure" option. Yet few respondents did either. As many as 75 percent of responses affirmed that the mask is art. Significantly, among those who responded affirmatively, most denied that the artworld-related reasons (R7, R8, and R11) were reasons for their judgment.⁶ These denials are significant because they suggest that many respondents did not subscribe to the Danto-Dickie-Carroll thesis that strictly speaking, an item cannot be art unless an artworld or art-making social practices are in place when the item is made. The written comments, however, show that some participants wrestled with the challenge posed by that thesis.

In one important respect, Carroll's historical-narrative theory is more ambitious than Danto's, Dickie's, and Levinson's theories. Carroll asserts as "the central claim" of his theory "that identifying narration, with emphasis on art as a social practice, is by far our most typical means for establishing art status" (Carroll 1999: 262). In other words, he claims that when people are trying to decide whether something is or is not art, they do so most typically by means of identifying narration. By "identifying narration" he means linking present art to past art "in terms of its descent—its genetic (or causal) linkage to earlier acknowledged artworks and artistic practices" (Carroll 1999: 256). This claim is ambitious because it concerns a conscious process—namely, what people most often think about when they try to decide whether something is art. If Carroll's claim were correct, one would expect that the reason with the highest scores in the art reasons survey would be: "It is descended from or causally linked to earlier acknowledged artworks and artistic practices" (R10). In fact, it ranked twelfth overall for mean importance as an affirmative reason. The reason with the highest score was "It was made or selected by a conscious agent(s)" (R3), followed by "It was intended by it maker(s) to evoke or communicate emotion" (R5) and "It provides an imaginative experience (e.g., as stories are said to do)"

(R13). These reasons are remote from Carroll's "identifying narration, with emphasis on art as a social practice."

6. The border between artworks and utensils

Most of the human-made objects that touch our lives are utensils—objects designed and made to fulfill practical functions. Buildings, blankets, bridges, and automobiles are among the countless utensils that serve us in one such capacity or another. Since antiquity, philosophers have sought to draw a consistent distinction between craftsmanship that produces mere utensils and craftsmanship that produces works (whether conceived as non-utensils or as exceptional utensils) designed for special kinds of appreciation.

We chose a railroad bridge to probe reactions to an item that was clearly a utensil. Philosophers like to argue about *borderline cases*, but not all relevant cases sit on the line between categories. The bridge we chose was a fairly new unpainted single-span lattice truss bridge with two tracks separated by a middle wall of latticework. Participants saw a photograph of the bridge, the category "Bridge," and the description: "Double-barreled railroad bridge. Truss construction. Late 20th century." We picked this bridge because of its squat shape, heavy-duty construction, and lack of adornments.

Only 39 percent of respondents to this question judged it to be art. For this group, "It was made or selected by a conscious agent" (R3) had the highest score for mean importance, followed by "It is aesthetically interesting" (R2). Their written comments reflected a diversity of views. One participant wrote: "Architecture of this kind guides the eyes to the pure essence of function. Art." Another wrote: "Long ago, I thought we distinguished between art and non-art, on the one hand, and good art and bad art on the other. This is bad art in my opinion. I'm convinced there are more elegant and imaginative ways to design a bridge of this sort, but I'm not an engineer, maybe this is the best you can get for a bridge that must support traffic."

Some 45 percent judged the bridge not to be art. The reason with the highest mean score for importance was: "It was not intended by maker(s) or selector(s) to be regarded in a way that artworks were then or later came to be regarded" (R6). In second place was "It was not intended by its maker(s) or selector(s) to be an object of aesthetic interest" (R4). The reason with the lowest mean scores for importance was: "It is not beautiful" (R1). "It is not aesthetically interesting" (R2) and "It is not original or was not original when first presented" (R12)

were tied for second lowest. About half of the written comments by those who judged the bridge not to be art expressed confidence that this "totally practical" object is not art, but the other half expressed some ambivalence. For example, one participant wrote: "I'm always unsure whet[h]er to regard object[s] that have a concrete function, although they may be elaborated in an aesthetically interestin[g] way, as works of art. As this bridge doesn't, I wouldn't judge it to be a work of art. But I recognize that this is a very subjective estimation. My brother, who is an architect, would probably argue that surely it is an artwork!" Comments by the 16 percent of respondents who checked off "I am not sure whether it is art" expressed similar ambivalence. One wrote: "This is a great example of an object that can certainly be appreciated aesthetically, and presented in such a way to be a work of art (in a photograph, for example), but is not inherently a work of art."

The data for the railroad bridge tell a tangled but instructive tale. Although aesthetic interest was an important reason for respondents who identified the bridge to be art, lack of aesthetic interest was relatively unimportant for respondents who judged it *not* to be art. Those who judged it *not* to be art chose as their chief reasons absence or insufficiency of its links with the artworld and artistic practices, rather than lack of aesthetic interest. This pattern suggests that the weight of reasons varied with perspective. The comments, in turn, suggest that participants were struggling to find a perspective from which they could weigh various reasons. Several invoked the distinction between architecture and engineering. Others invoked the stance of the observer. "I might," wrote one participant, "choose to attend this bridge as an object of aesthetic regard, but it is outside the normal conventions of artistic appreciation as you present it."

7. The border between what is made by humans and what is made by animals or machines

Until the advent of ready-mades, art theorists took for granted that works of art were intentional products of human labor—artifacts. Duchamp confronted theorists with the possibility that an artwork could be chosen rather than made, but even he left the element of human agency in place. Since then the development of computers and research on the art-like behavior of animals have prompted philosophers to consider whether artworks can be made by agents other than human beings.

Denis Dutton in *The Art Instinct* argues that the "ensemble of adaptations that became the human art instinct go back in our prehistory only a hundred thousand years or so" (Dutton 2009: 8) and that art-like behaviors among other animals are not really art. Drawing on the work of biologist Thierry Lenain, he argues that "human art not only requires calculation of effects, it also needs an intention to create something you are going to want to look at after you are finished" (Dutton 2009: 7). He points out that though male bower birds create extravagantly ornamented bowers up to six feet tall to attract females, and chimpanzees in captivity enjoy applying vivid colors to white paper, neither a bower bird nor a chimp has any "interest in his creation once it has done its job" (Dutton 2009: 8). He concludes, "Animals ... do not create art" (Dutton 2009: 9). One could apply the same reasoning to computers since, as far as we know, they have no interests and, therefore, no interest in what they create either before or after producing it.

In order to probe responses to machine and animal "art," we chose a haiku poem randomly generated by a computer and labeled as such, and a painting by Ruby, a female elephant at the Phoenix Zoo. Only 29 percent of respondents identified the poem as art; 35 percent identified Ruby's painting as art. Both objects elicited an unusually high percentage (over 25%) of "I am not sure" responses.

Among respondents who affirmed that the painting is art, the mean importance scores for all but one were fairly flat: 2.6–2.9. The exception was "It is aesthetically interesting" (R2) with a high score of 3.15. Among respondents who checked off the painting as *not* art, the reasons with the highest mean importance scores were: "It was not made or selected by a conscious agent" (R3) and "It was not intended by its maker(s) or selector(s) to be an object of aesthetic interest or appreciation" (R4). It is possible that participants who selected R3 did so because they do not believe that elephants are conscious agents. We think it is more likely that they did so because they do not believe that elephants are capable of *artistic* consciousness. The written comments suggest the latter. As one respondent put it, "Elephants are smart, but I don't think they would classify as conscious agents in the art making process."

Nearly all of the comments made by unsure respondents raised the question of intention. One respondent wrote: "I marked I don't know because I would need to know the elephant's intention, and I don't have access to that information." Although doubting whether elephants have or can have artistic intentions is not quite the same as Dutton's argument that art "needs an intention to create something you are going to want to look at after you are

finished" (Dutton 2009: 7) and that animals don't exhibit that kind of interest, they are complementary.

The randomly generated haiku poem in the three surveys reads as follows:

Oh the feeling played! Zounds! Hark! Breaking leaving dog Tiger plays brightly

Among affirmative respondents to this poem, the reasons that took first and second place for mean importance were: "It provides an imaginative experience (e.g., as stories are expected to do)" (R13) and "It invites interpretation, such as asking 'what meaning does it embody?'" (R14). But the significance of these choices is open to question. Poems are composed of words, and words have public meanings. When words are arranged in a sequence that is syntactically and grammatically permissible, that sequence invites interpretation and an effort to imagine what is being talked about. Since ambiguity is a common feature of poetry, and modern poetry is often enigmatic, sophisticated readers are accustomed to being patient with the interpretation of difficult lines. Many, we suspect, are more likely to doubt their own interpretive skills or imagination rather than conclude that what they are reading is nonsense.

We assume the computer that generated this poem was programmed to arrange English words in sequences that are syntactically and grammatically permissible within the rules of haiku. So the poem may appear to be meaningful in the terse manner of haiku poems. A critical question is whether that meaningfulness is real or illusory. The written comments suggest that respondents struggled with this question. A respondent who affirmed the poem is art observed: "Like any poetry, this is art because it presents metaphorization of language. However, because something is a work of art it does not mean that it is of any value." A respondent who denied the poem is art wrote: "Given a list of phrases and particular phrasing structure of the haiku form one can program chance selections that occasionally result in a poem we read with significance but the action results in imitation rather than authenticity." Another negative respondent wrote: "Until I saw that a computer generated it, I was provoked to wonder about its meaning. This is not art." A respondent who checked "I am not sure" recanted his/her choice, explaining: "I don't like this haiku, but I was open to the possibility that a computer could generate a beautiful, meaningful haiku. Without an artist, how can we interpret meaning or derive a human experience from it?"

8. The border between art and nature

The border between art and nature is arguably the final frontier between art and nonart. Although artists may appropriate natural objects for art without modifying them physically, that appropriation changes them in other ways such as location and function. Taking a piece of driftwood from a beach and putting it where it can be appreciated may be all that is required to transform it into an artifact and, perhaps, a work of art. Morris Weitz doubted that "even the traditional condition of artifactuality"8 is a necessary condition for art. But most art theorists have preferred to loosen requirements for artifactuality rather than give it up. Joseph Margolis and Stephen Davies look to cultural context rather than the behavior and interests of artificers to make this distinction. Margolis suggests that the clue to accommodating "found art, readymades, anti-art, machine art, and animal art" is to "construe as an artifact any object that may be said to have a culturally specified function" (Margolis 1980: 91). Stephen Davies distinguishes two senses of artifactuality: (a) "That which is modified by work" and (b) "That which has significance for the members of a culture; that which invites interpretation as opposed to mere explication" (Davies 1991: 122-123). He argues that (a)-type artifactuality is not a necessary condition for being an artwork, but that: "Necessarily an artwork possesses at the time of its creation (b)-type cultural significance" (Davies 1991: 122–123).

We chose a small dead tree near the bottom of a hill to test the outer limits of artifactuality as a condition for art. It had not been crafted, composed, designed, relocated, enclosed, or endowed with a culturally specified function. In order to steer respondents away from confusing the objects themselves with the photographs of the objects, the following warning was posted in the instructions for the survey: "All images in this survey are photographic reproductions, but please do not judge them as photographs unless the word photograph appears in red at the top of the description. Every image description starts with a key word. If it says tree, the object for your consideration is a tree, not the photograph of a tree." To reinforce this message the parenthetical reminder "(not photo)" was inserted into the dead tree question and into its accompanying image. We expected very few affirmative responses.

To our surprise, 21 percent of respondents affirmed that the tree is art and only 65 percent judged it not to be art. Their reasons were also unexpected. The affirmative reason with the highest mean score was: "It provides an imaginative experience (e.g. as stories are said to do)" (R13). Second highest was: "It is

aesthetically interesting" (R2). Tied for third place were: "It is recognized as art by art professionals or art institutions (R11) and "It invites interpretation, such as asking 'what meaning does it embody?" (R14). These reasons are puzzling because there is nothing out of the ordinary about this small dead tree, nothing interesting or thought-provoking, and no apparent basis for inferring that it is recognized by art professionals or art institutions.

The written comments shed some light on these results. One participant wrote: "God's creations are all original art." We see the point. If one believes that God designs each and every object in the world, even dead trees, then one could also believe that God does so with aesthetic or artistic intent. Another wrote: "As a photo it's art, ... the object moved into a gallery or museum ... art ... singled out in some way, pointed at, it's art ... as an object in the natural world of course it's not art, it's an object in the natural world." This comment suggests that an object in the natural world becomes art when it is singled out or pointed at as a candidate for art. Two other comments were similar.

Respondents who denied that the dead tree is art chose as their principal reasons lack of consciousness and intention. "It was not made or selected by a conscious agent" (R3) had by far the highest mean score for importance. Some of the written comments suggest that picking out a natural object, even if only to ask whether it is art, may be tantamount to making it art. One respondent remarked: "While questioning art it becomes art." Another wrote: "The difficulty here is that by asking if this is a work of art, you are picking out the dead tree for an effort of consideration as a work of art. 'This' dead tree already has pretensions to be a work of art in virtue of the focus of our attention to categorize it. It is Duchamp's achievement to help us see how this works, though he was of course more interested in the contrast of the useful and the artistic rather than the natural and the artistic."

9. Cluster theories

The data from our art reasons survey suggest that when it comes to hard cases, art professionals disagree substantially about what is art and why. These results diminish the likelihood that any conjunction of necessary and sufficient conditions can successfully track the concepts of art that now prevail. Might a cluster of disjunctive conditions do better? One author of this chapter (Kamber) offered a modest proposal for a disjunctive theory of art in 1993 (Kamber 1993). Subsequently, others have proposed more elaborate cluster theories.

The Welsh philosopher Berys Gaut has been particularly influential in defending the thesis that the concept of art is a cluster concept and so cannot be fully defined. He explains: "There are multiple criteria for the application of the concept, none of which is a necessary condition for something's being art" (Gaut 2005: 273). He has also proposed and defended a "plausible example" made up of ten criteria that count toward an item's being art. ¹⁰ Dutton also defended an important cluster theory. His theory, unlike Gaut's, assigns different weights to the disjunctive criteria. He also adds two necessary conditions to his ten disjunctive conditions. The necessary conditions are: being an artifact, and being normally made or performed for an audience (Dutton 2009: 60). Although his weighting of criteria and inclusion of necessary conditions make his theory more vulnerable to disconfirmation, they also strengthen its capacity to elucidate the wellsprings of art, explain judgments about hard cases, and adjudicate disagreements.

A virtue of both Gaut's and Dutton's cluster theories is that they reflect how diverse people's reasons can be for judging what is art. This virtue, however, can also be a vice. The greater the number of possible outcomes with which a theory is consistent, the weaker its explanatory power. Dutton, to his credit, is willing to make testable predictions about what people would think about the art status of championship games and why. Although he acknowledges that sporting events like the World Cup and the American Super Bowl fulfill five of his criteria, he guesses that "many people would resist the idea that such championships taken as a whole are works of art or artistic performances" (Dutton 2009: 62). He reasons that this resistance would arise from the absence of one of the most important items on his list: (R13) imaginative experience. To test Dutton's predications we included in the art reasons survey: "An NFL Super Bowl Game considered as a whole." The results were striking. Only 7 percent of respondents judged it to be art; 85 percent judged it not to be art. Their reasons, however, did not mirror Dutton's. Among participants who judged it not to be art, the mean importance score for "It does not provide an imaginative experience (e.g., as stories are said to do)" (R13) ranked fifth. Only one out of the twenty-one written comments by participants who judged it not to be art resembled Dutton's reasons.¹²

10. Back to the arts

In Beyond Art, Lopes urges art theorists to give up the twentieth-century preoccupation with resolving hard cases by reaching agreement on a

comprehensive solution to the problem "What is art?" and pass the buck instead to theories of art kinds. In a way, this is a return to the pre-twentieth-century view that the arts rather than art or artworks are primary. Lopes writes:

According to the buck passing theory, what makes an item a work of art is a matter of its meeting two conditions: it belongs to a kind and that kind numbers among the arts What makes *Fountain* a work of art (if it is one) is replaced with a different question, of what makes it a sculpture ... or a member of some other kind of art (if it is one). (Lopes 2014a: 187)

A distinct advantage of this strategy is that theories about what makes an item a work of art can vary from one art kind to another. The criteria used by a theory of sculpture to deal with hard cases may be quite different from those used by a theory of literature or music. Another advantage is that theories of art kinds are more amenable than theories of art in general to being based on historical information and empirical data about specific media and practices.

A distinct *disadvantage* of the buck-passing strategy, according to Lopes, is that it takes on a twofold burden that is not borne by theories of art in general. (1) Buck-passing theories fail to have explanatory value if any work (e.g., the ceramic coffee mug holding pens on your desk) turns out not to be art but does belong to a specific kind of art (e.g., ceramic art). Lopes calls such works (if there are any) "free agents" (Lopes 2014a: 17–18, 190–202). (2) Buck-passing theories are falsified if any work (e.g., *Fountain*) turns out to be art but not belong to any specific kind of art.

Lopes deals with the first of these burdens by treating art kinds as medium-centered *appreciative* kinds. The basic idea is: "An appreciative kind realizes more determinate values than a medium associated with it" (Lopes 2014a: 147). Some of the properties that make an ordinary coffee cup good as a work of nonart ceramics (e.g., an attractive shape) may be shared with what makes a work of ceramic art good. But other properties, such as standardization in size and shape, are not shared. He deals with the second burden by laying out a framework for placing every artwork in an art kind. He proposes that every artwork is a product of medium-centered appreciative practices and that such practices constitute either a traditional or an emerging art kind.

A straightforward way to contest the latter proposal is to find cases of artworks that cannot be products of medium-centered practices because they have no art media. Duchamp's *Fountain* and Cage's 4' 33" might seem at first to be such cases, but both works involve practices that invite contemplation of sensible things in ways that resemble standard practices associated with art media. Duchamp tried to *exhibit* a visible three-dimensional object, as sculptors do. Cage *staged a performance* that produced sounds, as composers do. Perhaps,

then, a clearer example of an artwork without a medium is this. In 1961 the American painter Robert Rauschenberg was invited to submit a portrait of Iris Clert to an exhibition of portraits at the Galerie Iris Clert in Paris. He responded by sending a telegram with the message: "This is a portrait of Iris Clert if I say so." Although Rauschenberg used a physical object (the telegram) to present his submission to the exhibition, it is plausible to regard the physical telegram as incidental and construe his submission as a conceptual gesture. (Today he might just tweet his message.) Lopes suggests that works like Rauschenberg's belong to the corpus of conceptual art, and that conceptual art is "an appreciative kind centered on language and ideas as its medium" (Lopes 2014a: 199).

Rauschenberg's telegram was included in the art reasons survey. The category was "Telegram" but there was no photo of the actual telegram. The description read: "In 1961 Robert Rauschenberg sent a telegram to the Galerie Iris Clert which said: 'This is a portrait of Iris Clert if I say so' as his contribution to an exhibition of portraits." As many as 58 percent of respondents judged that it is art, and 30 percent that it is not art. Among those who responded affirmatively, the reason with the highest mean importance score was: "It was made or selected by a conscious agent" (R3) followed closely by "It was intended by its maker(s) or selector(s) as a comment on or reaction to established art" (R7). The reason most favorable to Lopes, "It belongs to a recognized form or genre" (R9), ranked eighth. This difference in ranking suggests that affirmative responders were swayed more by the idea that Rauschenberg intended his telegram to serve a conceptual function than by the idea that conceptual art is a form or genre to which this work belongs. More empirical work needs to be done on this and other examples of conceptual art.

Although "recognized form or genre" is not quite the same as "art kind," it is similar and probably more intelligible to nonphilosophers. How did this reason, "Belonging to a recognized form or genre," (R9) fare overall? In fact, it did not fare well.

The thirty-seven self-identified art professionals who answered the general question about the relative importance of the fourteen reasons ranked it in twelfth place.

11. Objections and replies

Critics of this article will have no difficulty finding points to challenge. Above all, they may want to question the design of the art reasons survey and our interpretation of its data. Since most surveys in experimental philosophy gather data on folk intuitions, they are routinely criticized for failing to provide the data that really count: the judgments of experts. That routine objection cannot be leveled against the art reasons survey or its two predecessors since all three surveys broke out the judgments of experts (art professionals) for separate consideration.

What can be questioned, however, is whether the art reasons survey reached the right group of experts. We solicited most of our respondents through requests for participation that we sent by email to individuals who were listed on college or university websites as full- or part-time faculty engaged in teaching the arts (visual, musical, literary, etc.), art history, art theory, and aesthetics. To some critics, this may seem too elite a group to represent art professionals in general, to others not elite enough. Some critics may wonder whether questions about visual items should have been reserved for professionals in the visual arts, musical items for professionals in music, and so on, rather than presenting the same items to all participants.

There is also room to challenge the design of questions. The variety of reasons respondents were asked to consider may have been perplexing; the request to indicate how important each reason was for the respondent's judgment in a given case may have strained normal powers of conscious discrimination. A deeper worry is the general reliability of introspective access to our reasons for aesthetics judgments. Although subjects are seldom at a loss when asked to give reasons for their actions, preferences, and judgments, experimental research shows that those reasons are sometimes post hoc rationalizations rather than reliable reports on what actually led subjects to act, prefer, or judge as they did. Lopes's essay "Feckless Reason" summarizes prominent studies that illustrate the unreliability of reasons given for aesthetic preferences (Lopes 2014b).

A critic might allege that the reasons given by participants in our study are unreliable in one or more of the following ways. They might be: (1) canned responses rather than fresh reflections; (2) post hoc rationalizations for judgments rather than accurate reports of what led to the judgments in the first place; (3) expressive of theoretical commitments rather than spontaneous thought processes; (4) unstable guesswork rather than stable insights; (5) unduly influenced by extraneous factors such as gender or age. Our reply is this.

If participants had been asked to write in reasons without rating the relative importance of each item in a list of fourteen carefully worded reasons keyed to various theories of art, then the risk of canned responses would have been greater. The design of our survey pressed participants to be reflective. We did not presume that participants would have introspective access to all of the reasons that might lead them to classify a given object as art or nonart. We were prepared to accept as genuine reasons those that participants, upon reflection, believed helped to justify a classification they had chosen as well as those that led them to choose a classification in the first place.

Similarly, it was not important to our inquiry whether the reasons chosen expressed theoretical commitments or spontaneous thought processes. Although some of the items presented in the survey (e.g., *Fountain* and *Poème Symphonique*) were stock examples, most were not. Even if a participant had some theoretical commitment relevant to the crate label or railroad bridge, the effect of that commitment might not be predictable. Taking the art reasons survey can bring one face-to-face with imprecision and instability in one's own thought processes about what makes one object art and another nonart. It is humbling to discover how elusive one's own reasons can be.

As for extraneous factors, we did not find any *reliably* significant correlations between the reasons selected and our demographic variables: gender, age, academic qualification, or nationality. Because of the design of this survey and its correlation tests, most of the significant correlations (at 95% confidence) must be attributed to insufficient sample size, and therefore disregarded as unreliable. Among the eleven sets with sufficient sample size, the correlation scores for all but one fell fairly flat: \pm 0.20–0.37. The exception, at +0.51, was the correlation score between age and "It is descended from or causally linked to earlier acknowledge artworks and artistic practices" (R10) for the general question about art. This suggests that R10 is more likely to be a reason for older art professionals, despite its overall low ranking. Perhaps this reflects nothing more than a tendency to take a longer view as one grows older.

We fully expect that new surveys and experiments designed to address the question "What is art?" will yield data more revealing than the data discussed in this article. Gathering data on a subject of this complexity is an incremental process, and the data gathered here are—to the best of our knowledge—the first of their kind. We believe this chapter points the way to opportunities for progress on a central problem of philosophy. If it does no more than rouse a few art theorists from their armchairs and motivate them to design theories that will stand or fall on the basis of testable predictions, it will be a boon to progress.

Notes

- 1 For a discussion of the first two surveys and their results, see Kamber (2011).
- 2 We determined the rank order of the fourteen reasons by comparing the averages of their mean importance scores as reasons for judging the thirteen objects to be art. These mean importance scores were calculated using scores of 1 to 4 (scores of zero were omitted) given our interest in selected reasons only. The highest average score was 3.342 (R3); the lowest was 2.227 (R1). Refer to "mean score summaries" in Table 4.1.
- 3 Since we were particularly interested in the reasons of art professionals, we solicited participants by sending invitations to people who appeared to be professionally connected with arts. Since the survey could be taken by anyone who had the link, we tried to verify art professional status by asking participants whether one or more of the following was true of them. Group one: (1) I am a professional artist. (2) I am not an artist but I work for an arts organization. (3) I teach the practice of one more of the fine performing arts. (4) I teach art history, art theory, or art appreciation. (5) I teach the philosophy of art. Group two: (1) I have taken more than two courses in the history, theory, or philosophy of art. (2) I visit art museums at least twice a year. (3) I attend concerts or theatrical performances at least twice a year. (4) I am an amateur artist. Only those who answered affirmatively for at least one of these statements in both groups were admitted as art professionals.
- 4 Stephen Davies offers a detailed list of visual imitations that fail to qualify as art: "Maps, architect's plans, advertisements in the form of or containing pictures, political cartoons, drawn pictures recording crime scenes, illustrations in scientific treatises or field guides of birds, animals, or plants, not to mention your three-year old's drawings, might all make the grade as pictures, some of the highest quality and verisimilitude, but do not qualify thereby as art." (Davies 2008, quoted in Lopes 2014a: 146).
- 5 "If the work of a truly solitary artist is art, then there may be exceptional grounds for calling it such. However, that would not call into question the central claim that identifying narration, with emphasis on art as a social practice, is by far our most typical means for establishing art status" (Carroll 1999: 215).
- 6 Among those who responded affirmatively, 76 percent denied that R7 ("It was intended by its maker(s) or selector(s) as comment on or reaction to established art.") was one of their reasons; 62 percent denied that R8 ("It was made or selected by an artist for people for presentation to people who have some understanding of art.") was one of their reasons; and 63 percent denied that R11 ("It is recognized as art by art professionals or art institutions.") was one of their reasons.
- 7 For affirmative respondents to the bridge, the top three mean importance scores were 3.250 "conscious agent" (R3), 3.103 "aesthetically interesting" (R2), and 3.00 "comment on art" (R7).

- 8 See Weitz (1956). Weitz argues that "no one or any collection" of the conditions we rely on for recognizing something as a work of art is either necessary or sufficient, not "even the one which has traditionally been taken to be basic, namely, that of being an artifact" (34). Although this sounds unequivocal, the example he uses to illustrate his point is incomplete. He asks us to consider the utterance: "This piece of driftwood is a lovely piece of sculpture" (34). Yet he does not say whether we are to imagine these words being spoken in front of a piece of driftwood observed on a beach, displayed on a mantle, or exhibited in an art museum.
- 9 The closeness of the three top scores is worth noting: R13 (3.455) ranked first, R2 (3.429) ranked second, R14 and R11 (3.250) tied, ranked third.
- 10 See Gaut (2000: 28). His criteria are: (1) possessing positive aesthetic properties ...; (2) being expressive of emotion; (3) being intellectually challenging ...; (4) being formally complex and coherent; (5) having a capacity to convey complex meanings; (6) exhibiting an individual point of view; (7) being an exercise of creative imagination (being original); (8) being an artifact or performance which is the product of a high degree of skill; (9) belonging to an established artistic form (music, painting, film, etc.); and (10) being the product of an intention to make a work of art.
- 11 Dutton (2009: 52–59). His disjunctive criteria are: (1) direct pleasure; (2) skill and virtuosity; (3) style; (4) novelty and creativity; (5) criticism; (6) representation; (7) special focus; (8) expressive individuality; (9) emotional saturation; (10) intellectual challenge; (11) art traditions and institutions; (12) imaginative experience.
- 12 The comment was: "When using the word, 'art,' it is within the context of something that is symbolic, tells a compelling story, captures a unique moment in time, and so on. While games of any sort require strategies, player talents, good technique, close team coordination, this is not 'art' in the traditional sense. This is highly important."

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Artworks Are Evaluated as Extensions of Their Creators

George E. Newman and Rosanna K. Smith

What are the psychological processes that drive the evaluation and appreciation of art? To date, the psychological study of art has largely focused on the perceptual aspects of viewing artwork—that is, how certain colors, shapes, axes of symmetry, and so on give rise to perceptions of beauty and good form. More recently, however, a number of researchers have begun to examine the conceptual factors underlying the appreciation of art. The aim of this chapter is to synthesize these conceptual approaches under a common theoretical umbrella.

Specifically, we propose that people intuitively evaluate artwork as a physical extension of its creator—the extended-self hypothesis (see Belk 1988, James 1890, Newman, Bartels, and Smith 2014). Thus, art appreciation is not only influenced by the object's aesthetic features, but also by key conceptual factors, including beliefs about the artist's mental state and the degree of physical connection to the work. In this chapter, we review a number of recent studies that support this framework. We also report the results of a new experimental study, which suggests that in certain cases, artwork itself may be intuitively viewed as a living entity.

1. Aesthetic psychology

One natural approach to the study of art appreciation is to assume that there are particular aesthetic features that drive evaluations of art. For example, certain perceptual elements (e.g., composition, goodness of form, etc.) may lead one painting to be judged as more beautiful or aesthetically pleasing than another. Indeed, early research on the psychology of aesthetics was

motivated by the notion that there are universal aesthetic principles that guide art appreciation. Fechner (1876) is credited with being one of the first to propose that aesthetics should be studied with experimental methods, and is considered the father of empirical aesthetics (Martindale 2007). He promoted a bottom-up approach to studying aesthetics via deconstructing visual images into various elements. Fechner conducted numerous studies that tested, for instance, the most appealing proportions of a rectangle (the golden rectangle) (Fechner 1865), and what colors were most preferred (Fechner 1876). Other researchers adopted this approach and tested various perceptual properties with the ultimate goal of understanding a more complex aesthetic picture (Shimamura 2012).

Gestalt psychologists promoted a more holistic approach to empirically studying aesthetics. They theorized that it was the organization of visual elements (as a whole) and not the elements themselves that contributed primarily to aesthetic appreciation (Arnheim 1974). Thus, compositional factors like balance, harmony, and object placement were the more essential dimensions guiding aesthetic appreciation. In line with this attention to the entire image, other psychologists focused on how "collative features" (e.g., novelty, complexity, incongruity, etc.) come together in a piece of work to produce varying levels of arousal. For example, Berlyne (1971) proposed a U-shaped curve, wherein the collective features result in optimal aesthetic appreciation at mid-range levels of arousal.

Neuroaesthetics is perhaps the most recent movement within this tradition, where the aim is to identify the neural correlates of aesthetic appreciation (Chatterjee 2011, Cinzia and Vittorio 2009, Zeki 1999). The field was initially focused on identifying the brain regions that are activated when experiencing beauty (Cinzia and Vittorio 2009, Zeki 1999). For instance, Kawabata and Zeki (2004) found that the orbtiofrontal cortex was more active when participants viewed a beautiful painting relative to a neutral or ugly painting. The field has since expanded to examine how visual experiences of an artwork link more broadly to sensorimotor areas, core emotional centers, and reward-related centers in the brain (Cinzia and Vittorio 2009). Taken together, empirical aesthetics has tended to focus on either distinguishing the specific aesthetic properties of an artwork that lead to positive evaluations or identifying regions of the brain associated with evaluating art.

However, the fields of empirical aesthetics and neuroaesthetics have been critiqued for their limitations in fully capturing the processes involved in art appreciation (Brown and Dissanayake 2009). Specifically, a limitation of the

"bottom-up" approach is that it does not take into account the influence of the viewer's knowledge and the specific historical context in which the artwork was created (Bullot and Reber 2013). For example, Andy Warhol's *Brillo Box* can only be appreciated if the viewer knows that Warhol meant the object to be viewed as art; otherwise, the *Brillo Box* is visually indistinguishable from an everyday consumer product (Bullot and Reber 2013, Danto 1992). Brown and Dissanayake (2009) further suggest that even if art appreciation were solely derived from perceptions of beauty, the prior paradigms have no way of differentiating between how the mind processes beautiful art versus beautiful objects more generally. In other words, empirical aesthetics and neuroaesthetics have not developed a theory of how people come to appreciate a particular entity as "art."

Art appreciation's relationship with external knowledge has led some scholars to conclude that the attempt to construct universals or fundamental principles is a futile endeavor (Currie 2004, Gombrich 2000, Zeki 2002). While there have been efforts to marry the historical dependency of art with the aesthetic evaluation of art (Bullot and Reber 2013), we propose that art appreciation can still be understood through a psychological framework. In the following section, we first review how recent research in cognitive psychology, evolutionary psychology and experimental philosophy has empirically examined art appreciation via its conceptual (vs. purely perceptual) factors.

2. Conceptual approaches to the psychology of art

Increasingly, the psychological study of art has recognized that artworks are often not assessed for their surface properties alone, but in relation to a broader set of conceptual factors. Specifically, such "top-down" approaches have focused on the importance on viewers' knowledge (e.g., about the artwork, its creation, the artist and their intentions, etc.) as well as considerations of the particular context in which beliefs about art appreciation are formed (Gombrich 2000, Shimamura 2012, Solso 1996). In contrast to the bottom-up approach of empirical aesthetics—where low-level sensory processing of visual elements leads to art appreciation—top-down approaches highlight how preexisting knowledge directs people to perceive and interpret sensory information. In other words, the concept or "schema" of art that people hold determines how art is evaluated, rather than the aesthetic elements themselves (e.g., colors, lines, shapes, etc.).

Within psychology, such conceptual approaches have not attempted to catalog *all* relevant historical or contextual knowledge. Rather, researchers have sought to identify more general patterns—that is, what are people's lay theories of art? What conceptual heuristics guide evaluations of art? What concepts or kinds of information appear to be most relevant? Below we outline a number of key findings that have emerged from this literature.

2.1. Familiarity and expectations-based art assessments

One prominent line of research has investigated the role of familiarity in people's assessment of art. For instance, to what extent can the value of Monet's paintings be attributed to their "intrinsic" aesthetic properties versus their popularity? Indeed, Cutting (2003) found that for impressionist paintings, frequency of exposure increased liking. Interestingly, the effect of exposure on liking was distinct from other factors such as recognition, complexity, and prototypicality judgments, suggesting positive evaluations of art can be affected by frequency of viewing per se. Such effects are consistent with a well-established "mere exposure effect" where a stimulus (e.g., a face, sound, etc.) is liked more simply because people have been exposed to it more often (Fechner 1876, Zajonc 1968).

More recent work, however, has added complexity to these findings. Meskin, Phelan, Moore, and Kieran (2013) varied whether or not participants were repeatedly exposed to art of high intrinsic value (John Everett Millais paintings) versus art commonly thought to be of low intrinsic value (Thomas Kinkade paintings). Instead of enhancing the appreciation of both kinds of paintings, the authors found that exposure made participant assessments more extreme: the high intrinsic value paintings were valued more with exposure, while the low intrinsic value paintings were valued less with exposure. Exposure thus seems to serve a reinforcing role in both positive and negative directions.

Other work has investigated how the reputation of the artist influences expectations and subsequent evaluations. For example, Bar-Hillel, Maharshak, Moshinsky, and Nofech (2012) found that participants rated a poem as higher quality when they were told that the poet was famous (vs. unknown). This is consistent with broader range of work from consumer psychology that has been concerned with the effect of brand names and price on valuation (Lee, Frederick, and Ariely 2006, Shiv, Carmon, and Ariely 2005). For example, in the absence of labels, beer drinkers cannot differentiate their favorite beer from other brands

(Allison and Uhl 1964); experienced violinists cannot distinguish sound of older violins versus newer ones (Fritz et al. 2012); and labeling can alter the experience of identical food products (e.g., beef labeled as "75% fat free" vs. "25% fat") (de Araujo et al. 2005, Levin and Gaeth 1988).

The influence of expectations on consumption experiences has been further corroborated by work in neuroscience (McClure et al. 2004, Plassman, O'Doherty, Shiv, and Rangel 2008). Specifically, original artworks are processed differently in the brain than visually identical artworks that are believed to be fake. Huang, Bridge, Kemp, and Parker (2011) found that Rembrandt paintings believed to be authentic lit up areas associated with the reward centers of the brain, whereas identical "fakes" lit up other centers of the brain associated with planning.

In some sense, art appreciation can operate in ways that are analogous to effects seen in branding, where expectations alone can alter appreciation and valuation. Importantly, however, these mechanisms (mere exposure and "branding" effects) seem to enhance the value of many different types of objects—not just art. Therefore, in the following sections we turn our attention to conceptual factors that appear to be particularly relevant to the evaluation of art.

2.2. Creative performance

The philosopher Denis Dutton (2009) proposed that people do not assess artwork solely in terms of perceptual features but, instead, as the endpoint of a "creative performance." In other words, features of the performance (e.g., who made it, how it was made, when it was made, etc.) play a key role in how people subsequently value art. Consistent with this perspective, Newman and Bloom (2012) have suggested that the reason why original artworks are valued significantly more than duplicates is because the original is a more substantial "creative performance." In support of this explanation, Newman and Bloom asked participants to value very similar landscape paintings made by unknown artists. Half of the participants were told that one painting was an intentional copy of the other; the other half of participants were told that the paintings were coincidentally similar. Newman and Bloom (2012) found that even when the artists were completely unknown (and there was no existing market for their work), an original painting was judged to be significantly more valuable than an intentional copy, whereas coincidentally similar paintings were judged to be equally valuable.

Past work has further supported this framework by varying other kinds of beliefs about the process behind how an artwork was made. For example, Kruger, Wirtz, Van Boven, and Altermatt (2004) found that people tend to apply a general "effort heuristic" when assessing the quality of artworks. Participants rate the same painting as higher quality and worth more money when it took more (vs. less) time to create. Relatedly, artworks believed to be created by one person are perceived to be higher quality and more valuable than otherwise identical artworks thought to be made via collaborative effort (Smith and Newman 2014). Somewhat analogous to the effort heuristic, this was driven by a higher premium placed on the effort of one individual versus the same amount of effort distributed across multiple people.

However, beliefs about the role of effort are malleable particularly when pitted against lay conceptions of talent or potential. Cho and Schwartz (2008) manipulated whether participants were exposed to one of two lay theories of artistic creation: either "good-art-takes-effort" or "good-art-takes-talent." When exposed to the former theory, the findings of the original effort heuristic were replicated; however, when participants were exposed to the talent theory, information about effort did not influence their assessments of a low versus high effort painting. In fact, the painting that took less time in the talent condition was valued more than the control condition where there was no information about effort, suggesting that talent can be associated with lower effort. In a similar vein, Poehlman and Newman (2014) found that an inferior painting was rated as higher in value when it was thought to have been made by a child versus an adult. This enhanced assessment was driven by beliefs in the younger artist's potential and the anticipation of future achievements.

Evolutionary psychologists have speculated as to the fundamental motivation behind this attention to performance over the perceptual endpoint (Miller 2000, 2001, Dutton 2009). This "art instinct" is thought to be associated with the genetic fitness communicated by an exemplary artistic performance (Dutton 2009). By attending to performance, people can better gauge the creativity, virtuosity, and general reproductive fitness of another. A forged painting is not the product of a person's originality and thus should not be given the same credence. However, this "Darwinian aesthetics" perspective has been critiqued by art historians who argue that the social function of art is often not competitive, but rather in the service of social harmony (Brown and Dissanayake 2009). The ultimate reasons why people attend to "creative performances" is not well-understood and is a promising avenue for future research.

2.3. The role of intentions

A second key dimension in the evaluation of artwork appears to be the artist's mental state and intentions. Beliefs about the artist's intentions have been found to influence art assessment in two general ways: categorization and valuation.

Indeed, beliefs about intentions play a key role in categorizing an object as a "work of art" in the first place. For example, consider the case of Andy Warhol's sculpture, *Brillo Box*. What differentiates Warhol's *Brillo Box* from a readily available commercial Brillo Box? According to a number of theorists (e.g., Danto 1992), the former is seen as art because Warhol *intended* it to be seen as such, while the latter was intended to be a mass-produced commercial product.

This view has been supported by research in cognitive and developmental psychology, which has demonstrated that intentions seem to trump an object's appearance or functional properties in categorizing the object as "art" (Barrett, Laurence, and Margolis 2008, Bloom 1996, Dennett 1987, Levinson 1993). For example, Newman and Bloom (2012) demonstrated that changing whether participants believed a one-of-a-kind object was intended to be functional object (a chair) versus an artwork (a sculpture) altered how they valued identical duplicates of the very same item. This attention to intent over surface features is not just limited to Western adult populations. Young children categorize ambiguous drawings and artifacts based on the creator's intent (Bloom and Markson 1998, Gelman and Bloom 2000, Gelman and Ebeling 1997, Olson and Shaw 2011, Preissler and Bloom 2008). Non-Western populations also favor original intent over current use as the defining criteria for an object (Barrett, Laurence, and Margolis, 2008), suggesting that the role of intention in the categorization of man-made objects is potentially universal.

Second, given that an object is seen as art, beliefs about the motivation behind the creation of the artwork (e.g., for self-expression vs. profit motives) also influences the assessment of art, independent of the work's aesthetic properties. Although there are many reasons why people create art, existing research has focused primarily on the assessment of artwork made for self-expressive purposes versus more extrinsic motives (e.g., commercial or profit goals). Bhattacharjee, Berman, Dana, and Mellers (2014) found that participants valued an artwork more if it was thought to be motivated by the artist's desire for self-expression versus conforming to outside tastes; however, when the same item was framed a commercial product, participants preferred the product that was altered in service of extrinsic motives. Theoretical and qualitative work has

supported similar associations between self-expression and other non-extrinsic motives (e.g., work made out of "love" or "passion") and higher valuation of artworks, particularly via higher beliefs in the artwork's expressive authenticity (Becker 1978, Beverland and Farrelly 2010, Dutton 2003, Hirschman 1983). It is not clear whether this association between individual expression, authenticity, and higher art value is universal or culturally reinforced; however, what appears to be consistent is that altering beliefs about why artwork was made tends to influence art assessment.

Interestingly, work in art theory has argued against the use of intention in art assessment. In their famous paper "The Intentionalist Fallacy," Wimsatt and Beardsley (1946) proposed that the artist's intentions should play no role in judgments of value—the work should speak for itself. Several versions of this critique have cropped up in art theory (Barthes 1967, Foucault 1969/1979), with Roland Barthes even declaring "the death of the author." While a useful way to think about how to normatively approach art, descriptively and empirically the attention to artistic intent has "stubbornly persisted" (Dutton 2009: 169) as an important way in which people intuitively assess art.

2.4. Physical connection and contagion

In addition to intentions or mental states, prior work has found that beliefs about an artwork's *physical* connection to its creator often influence assessments of value, independent of perceptual features (Newman, Bartels, and Smith 2014, Newman and Bloom 2012). These findings have been explained via the law of contagion (Frazer 1890/1959, Mauss 1902/1972, Rozin and Nemeroff 2002, Tylor 1897/1974), which is a form of magical thinking where people believe that an entity's essence can be transferred to another object through physical contact (Belk 1988, Bloom 2004, 2010, Frazer 1890/1959, Nemeroff and Rozin 1994, Newman, Diesendruck, and Bloom 2011). This is perhaps most clearly illustrated in the case of celebrity objects where mundane objects (e.g., JFK's hairbrush, Britney Spears's chewing gum) can be sold for exorbitantly high prices (Newman, Diesendruck, and Bloom 2011). Sterilizing such objects lowers valuation, suggesting that people indeed value the believed physical transmission of the individual's essence as opposed to valuing the item's mere association with the person (Nemeroff and Rozin 1994, Newman, Diesendruck, and Bloom 2011). In consumer contexts, contagion effects have been found to explain why people are more likely to purchase items that have been worn by attractive others (Argo, Dahl, and Morales 2008).

While contagion effects can elevate the value of artifacts, considerations of physical contact appear to be especially salient in the domain art. For example, Newman, Bartels, and Smith (2014) found that an artwork physically made by the original creator was valued more highly than the same artwork made by an assistant carrying out the original creator's intentions. Further, Newman and Bloom (2012) found that participants valued a sculpture more when they thought it was made via a "hands-on" process versus a "hands-off" process. Unlike celebrity memorabilia, which derives value from its physical connection to certain well-regarded celebrities, the effects of contagion on artwork appear to exist independently of the fame of the artist. Thus, contagion effects are another instance in which art is not just assessed in terms of its observed aesthetic properties. Rather, original artworks are valued, in part, because they are believed to be imbued with an *essence* that otherwise identical duplicates do not possess.

3. Artworks are evaluated as extensions of their creators

One common mechanism linking these findings is that when evaluating artwork, observers appear to be highly sensitive to the artist's intentions. In short, this "artistic design stance" (Bullot and Reber 2013) views artwork as the unique product of intentional action and therefore takes into account inferences about the intentions and mental state of the creator. Indeed, as reviewed above, there is considerable empirical support for the notion that evaluations of mental states play a key role in people's naïve theories about artwork (Bloom and Markson 1998, Newman and Bloom 2012, Olson and Shaw 2011).

A second key principle, however, is that in addition to the role of intentions, people tend to place a special value on the degree of physical contact that an artist has with an artwork (Newman and Bloom 2012). Such patterns are consistent with a belief in contagion—the notion that through physical contact, objects can acquire a special quality or essence (e.g., Frazer 1890/1959, Mauss 1902/1972, Rozin and Nemeroff 2002).

One way to integrate both the importance of intentionality and the importance of physical contact is to suggest that people intuitively view artwork as an extension of the artist. This notion is consistent with an "extended-self hypothesis" (James 1890, Belk 1988), which suggests that people's self-concept goes beyond their physical body and cognitive processes to include all entities that they regard as "their own"—their friends and family, pets, and the objects

that they own and use. While many entities may be thought of as part of the extended self, we suggest that art may be unique in that it is the epitome of an extended-self object. A work of art is a man-made entity that has no functional utility beyond its role as a work of art and, therefore, the belief that it is an extension of the self (in no small part) defines it as art. Put differently, observers may naturally assume that an object that reflects one's self or experience and has no other utility, is *Art*.

A large body of research has documented intuitive notions of mind-body dualism and the fact that people tend to think of themselves and others as both an agentive soul and a physical body (see Bloom 2004). As such, the belief that art is an extension of the self would include evaluating artwork both as an extension of the artist's mind (evaluations of the creator's intentions and mental states), as well as an extension of the artist's body (which includes evaluations of the degree of physical connection between the artist and the artwork). In other words, people are seen as possessing a soul or essence, which can spread to other objects, particularly those they create. In turn, artworks are evaluated as extensions of the artist, including both mental and physical characteristics.

Indeed, there is some empirical evidence that people tend to reason about art in a similar manner as they do about persons. For example, when reasoning about whether a particular work of art is "the same work of art" over time or transformation, people use the same criteria as when they reason about individual persons—and distinct criteria from those used to reason about ordinary artifacts (e.g., a hammer) (Newman, Bartels, and Smith 2014). Thus, in terms of identity judgments, there are important ways in which judgments about art appear to be more similar to judgments about persons than judgments about other artifacts.

However, while there are important parallels between people and art, there are also obvious differences. This raises interesting questions about how people conceive of the aspect of the person that is *in* the artwork. Do people literally assume a work of art is an extension of the person who created it? Is it the case that an original work of art is seen as in some way more "alive" because it contains the essence of the artist? We conducted an experiment to test this possibility.

4. Are original artworks "alive"?

The purpose of this study was twofold. The first was to corroborate past work, which has shown artworks are not just evaluated for their perceptual properties but are also assessed in relation to beliefs about their histories (or the "creative").





the artist's name is Jim Rilko.

Figure 5.1 Stimuli presented to participants

performance"). A second aim was to test whether original artwork is valued in part, because it is seen as more "animate" or "alive" than perceptually similar artworks that are not original.

4.1. Method

A total of 398 participants ($M_{\rm age} = 32.27$, 39.4% women) were recruited from Amazon's Mechanical Turk, an online platform. Using a previously established paradigm (Newman and Bloom 2012), all participants were presented with two similar looking landscape paintings (see Figure 5.1). Participants read that the paintings were created by two different artists who lived in the same town. They were then randomly assigned to one of two conditions (copy vs. coincidence). In the copy condition, participants read that one artist created the painting first, while the other artist created the painting after seeing the first one. In the coincidence condition, the two artists created the paintings independently from each other, and the similarities between the paintings resulted by coincidence.

Participants were then randomly assigned to rate one of the two paintings. Specifically, they rated the extent to which they agreed with the following statements: It is high quality; It is valuable; It should be worth a lot of money; It is impressive; It is praiseworthy (where 1 = Strongly Disagree; 9 = Strongly Agree). In order to test the "living entity" hypothesis, participants also rated the extent to which they perceived the painting to be animate using items adapted from an established anthropomorphism scale (Waytz, Cacioppo, and Epley 2010). Specifically, they rated agreement with the following: The painting has a soul; The painting seems "alive"; The painting is like a person; The painting takes on a life of its own; The painting expresses emotions (where 1 = Strongly Disagree; 9 = Strongly Agree).

We predicted that holding constant the surface features of the paintings, we should observe a difference in value based on the creator's intentions: the painting thought to be an intentional copy would be rated as less valuable compared to the original, while the paintings thought to be coincidental duplicates would not show difference in value. We further predicted that this difference would be explained by variation in the extent to which the painting is subsequently seen as more "alive" or "human"—in other words, more of an extension of the creator.

4.2. Results

We performed a 2 (coincidence vs. intentional copy) \times 2 (original vs. copy) between-subjects ANOVA on a composite measure of valuation (α = .92). As predicted, we observed a significant interaction, F(394) = 7.52, p = .006 (see Figure 5.2). Analysis of simple slopes revealed that, in the coincidence condition, there was no difference in value between the two paintings, t(192) = .67, p = .51. However, in the intentional copy condition, the copy (M = 5.31, SD = 1.54) was rated as significantly less valuable than the original (M = 6.23, SD = 1.41), t(202) = 4.45, p<.001.

To test the "living entity" hypothesis, we ran the same 2×2 analysis on the anthropomorphism items ($\alpha=.91$). There was a marginally significant interaction, F(394)=3.60, p=.056. Analysis of simple slopes revealed that, in the coincidence condition, there was no difference in perceptions of animacy between the two paintings, t(192)=.53, p=.60. However, when the copy was an intentional duplicate (M=4.43, SD=1.86) it was rated as significantly less animate than the original (M=4.99, SD=1.84), t(202)=-2.16, p=.032.

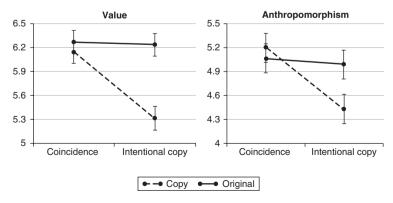


Figure 5.2 Results for valuation and anthropomorphism

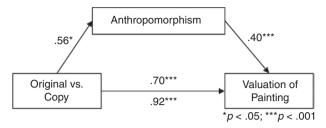


Figure 5.3 Mediation Results

Further, a bootstrap mediation model (10,000 resamples) with the intentional copy versus original conditions as the independent variable, valuation as the dependent variable and the anthropomorphism scale as the mediator, revealed that perceptions of the paintings' animacy significantly partially mediated the relationship [estimated indirect effect = -.35; 95% CI = -.73 to -.04] (see Figure 5.3).

4.3. Discussion

These results provide support for the hypothesis that artworks are evaluated as extensions of people. Specifically, we found that two similar looking artworks were valued differently depending on participants' beliefs about the intentions behind the works. When the two were thought to be coincidentally similar, people rated them as equally valuable. However, when participants believed that one creator intentionally copied another, the original was rated as significantly more valuable than the copy.

Moreover, we found that original artwork is valued in part because it is seen as more "human" or "alive" relative to unoriginal works. Such results are consistent with the extended-self hypothesis and the notion that artwork may be intuitively perceived as an extension of the artist.

5. Summary

The aim of this chapter was to review past research on the psychology of art and propose a framework underlying the conceptual aspects of aesthetic evaluations. The first section focused on the contributions of empirical aesthetics. This research has tended to focus on how the perceptual features of art influence aesthetic evaluations, but has been criticized for not incorporating both the historically dependent nature of art and the fact that many valued artworks deviate from traditional forms of beauty.

To speak to these issues, the second section reviewed psychological research, which has explored more conceptual, "top-down" approaches to art appreciation. We reviewed a growing body of research demonstrating (among other factors) the importance of the creator's intentions and the degree of an artist's physical connection to an artwork.

In the third section, we proposed these particular conceptual factors may arise because artworks are intuitively evaluated as physical extensions of their creators. As such, information regarding the artist's mental state as well as the degree of physical connection to the artist play a central role in how observers assess an artwork's quality and value.

Finally, to test this proposal, we conducted a new empirical study to explore whether original artworks are seen as "more human" than otherwise identical duplicates. Indeed, using an established paradigm, we found participants rated an intentional copy as less human than an original work or a coincidental copy. Further, lower ratings of anthropomorphism, in turn, explained lower valuations of the painting. This provided initial evidence that original artworks are valued, in part, because they are seen as more "alive"—an original contains the essence of the artist while a duplicate does not. These preliminary results also help to contribute to existing work on anthropomorphism by demonstrating that an object can be perceived as human not solely by virtue of possessing a resemblance to a human, but also via beliefs about its connections to human entities.

Appendix: Wording for experiment

Intentional copy condition (counterbalanced order of painting):

The painting on the left was created by an artist named Daniels.

The painting on the right was created by an artist named Stevens.

Both of these artists lived in the same town. Daniels painted this scene first_
(left). A while later, Stevens saw Daniels' painting and liked it very much.

He decided to make a copy (right) by studying the original very closely.

Coincidental condition (counterbalanced order of painting):

The painting on the left was created by an artist named Daniels. The painting on the right was created by an artist named Stevens. Both of these artists lived in the same town. As a coincidence they both happened to paint the exact same bridge from the same point of view. Neither one knew that the other one had made a similar painting—it was just a coincidence!

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Part Three

Emotion and Imagination

Being Quasi-Moved: A View from the Lab

Jérôme Pelletier

1. Introduction

The question left unanswered by many philosophers taking part in the discussion on our emotional responses to fictional content, whatever side they occupy in this rich discussion, is regarding the real impact of a fictional context on our emotional responses. This question is partly an empirical one and this might explain why most philosophers do not pay attention to it. It is partly a question about our actual emotional responses to fiction; a question that can be dealt with within a cognitive research, especially now that the study of emotions has expanded in cognitive psychology and neuroscience. As such, at least part of it is not a question for philosophers. Nonetheless the difficulty is that most philosophers take for granted in their philosophical discussion a specific answer to the empirical part of the question: either a positive answer or a negative one. Philosophers like Currie and Ravenscroft (2002) accept the view that our emotional responses to fiction and to nonfiction do not differ and that, as a consequence, a fictional context has no specific impact on our emotional responses, while philosophers inspired by Walton (1978) might accept the view that a fictional context does make a difference to our emotional responses. Here, philosophers face a situation where a philosophical question nests an empirical question. The philosophical question is, as Stock puts it, the "Classificatory question" of how to characterize our emotion-like responses to fiction in relation to ordinary emotional responses (2014). And the empirical question can be formulated in the following terms: "Are there differences between emotions felt in a fictional context and those felt in a non-fictional context?"

Most philosophers seem to disagree with this nesting claim. Often philosophers consider that philosophical functionalist arguments focusing on the cognitive function of imagining-based emotions can be sufficient to typeidentify emotional responses to fiction and to answer the Classificatory question. But if philosophers accept to recognize that the debate on the nature of emotions toward fictions nests an empirical question and that part of the philosophical discussion hangs on what is actually the case, some of the difficulties of the philosophical discussion may be overcome. This would require admitting that philosophy is not, in this domain, the exclusive owner of the object of its inquiry. Besides, once one admits that what is actually the case in this domain is not clear and needs to be discovered via empirical research, things look different. This is not to claim that an answer to the empirical question will deliver an answer to the philosophical question, the Classificatory question. Why? Clearly the classification's criteria needed to type-identify emotions will require a philosophical discussion. But at least an answer to the empirical question may impact the form of the philosophical discussion, the way it develops. Cognitive approaches of emotions toward fictions may help the philosopher to understand how or to what extent, maybe, one subpart of our emotional responses to fiction differs from the ordinary emotional responses while another subpart does not differ from the ordinary emotional responses. A neuroscientific study of our emotional responses to fiction may also help to understand how the constituting mechanisms of at least some emotional processes may differ from those of ordinary emotional processes. But once these empirical questions are answered, there remains plenty of room for the philosophical part of the discussion to flourish. Nesting an empirical question does not mean that a philosophical question would be reducible to its empirical part. This will be manifest in the following discussion.

2. Our emotional responses to fiction: From indirect to direct cognitive studies

Until recently the question of our emotional responses to fiction has not been directly addressed by cognitive psychologists. Two cognitive studies have just attempted to fill this gap (cf. Sennwald et al. 2018, Sperduti et al. 2016). These studies have been conducted by bi-disciplinary teams of philosophers and cognitive psychologists and at least one of them—the 2016 Sperduti et al. study—has been motivated and guided by philosophical questions. This is a new move for philosophers and for cognitive psychologists, a new move that has

two consequences. It will not be possible for philosophers wanting to bring in cognitive results in the philosophical discussion on emotion for fiction to ignore these new studies. It will help philosophers with an open mind for cognitive science to understand that the more a study is dedicated to directly investigating the philosophical problem at hand, the more it is justified to bring its results into the philosophical discussion.

Before these two recent studies, a few philosophers had attempted to find results in indirect cognitive studies of our emotional responses to fiction. "Indirect cognitive studies" are studies in which philosophers pick up some evidence they judge fit to support their philosophical hypothesis though these studies are, in the best cases, only peripherally related to the philosophical hypothesis under discussion. This way of using empirical evidence in philosophy, empirical evidence with no direct connection with the philosophical problem under discussion, is frequent and, in the end, damaging for the philosophical discussion. Besides, it presents a caricature of the philosophical project of getting out of the armchair.

Kathleen Stock (2014) has selected a number of philosophical approaches to our emotional responses to fiction that use, in my terminology, "indirect" cognitive studies to support their argument. What unifies these studies is that they constitute various attempts to record affective responses to imagining. The main result of these indirect studies is that there is a physiological similarity between imagining-based and belief-based emotional responses. One of these studies often quoted by philosophers is Lang et al. (1983). Lang's studies (1977, 1979, Lang et al. 1983) were the first ones to empirically examine the capacity for mental imagery to evoke emotional response. Lang's hypothesis is that perceptual-like representations, in the absence of sensory input of an emotionally charged stimulus (e.g., a spider), activate networks that overlap with those activated during actual experience of the stimulus in reality. Since these early studies, developments in brain imaging technology have enabled comparison of neural indices of emotion processing during mental imagery and during veridical perception of emotional stimuli. The main result of these studies is that activation of emotion-processing regions during veridical perception (the dorsomedial prefrontal cortex [mPFC], anterior cingulate cortex [ACC], amygdala and the insular cortex) is observed also during emotional mental imagery. For instance Kim et al. (2007) found comparable magnitudes of left hemisphere amygdala activity when subjects viewed emotional faces and when they generated mental imagery of such faces.

Have these researches on our emotional responses to mental imagery something relevant to say about our emotional responses to fiction? There are two ways of responding negatively to this question. First, by noticing that the main contrast in cognitive studies such as Lang et al. (1983) is between our emotional responses to representations by mental imagery and to verbal representations, a contrast that is entirely independent and orthogonal to the real/fictional contrast. If one wanted to insert in cognitive studies such as Lang et al. (1983) the real/fictional contrast in order to see whether a presentation of the stimuli in two conditions, either as fictional or as real, would modify how participants generate mental imagery and emotional responses in these two conditions, one would construct altogether different studies.

A second way of responding negatively is to underline what distinguishes the use of mental imagery in a fictional context, and its use out of a fictional context. As already said, mental imagery is used in the Lang studies out of a fictional context. When discussing Lang's conception of mental imagery as an "as-if-real" template, Ji et al. (2016) note that it parallels contemporary functional perspectives on mental imagery "which view mental imagery as a core component of the 'prospective brain,' which enables the simulation of hypothetical future events based on prior knowledge and memories of past experience for the purposes of prediction and planning" (2016: 2). In this functional perspective, mental imagery is said to enable the individual to not only "try out" alternative versions of what might happen but also to "try out" the emotional consequences of alternative courses of action (cf. Ji et al. 2016). The premise that would be necessary in order to be entitled to extend the results of Lang studies in the fictional domain is that mental imagery has the same function in prospection and in fiction. Though mental imagery may contribute to the representation of fictional objects and events, this contribution might be functionally divergent in fiction and in prospection and, due to this functional difference, might have a different impact on our emotional responses. As a matter of fact, this should prevent from applying results of studies of emotional responses to mental imagery, such as Lang's studies, to the fictional domain. In contrast to the "prospective brain," if one pretends just for the sake of the argument that there is such thing as a "fictional brain," this "fictional brain" would not be functionally dedicated to enabling the simulation of future events: its main functional characteristic—the cognitive function it implements—is that it enables a detachment from action systems. It seems that there is a consensus among philosophers about this functional specificity of fictional representations relative to real representations. If philosophers willing to import cognitive results in the discussion on our emotional responses to fiction admit that there is a functional divergence of imagination and of mental imagery in prospection and in fiction—mental imagery in prospection being functionally correlated with action prediction and the latter being functionally detached from the action system—and if they admit also that there is a structural relation between the action and emotion systems (cf. Frijda 2004), these philosophers should feel reluctant to seek in studies such as Lang et al. (1983) some support to make their claims. In other words, the fact that mental images activate ordinary emotional responses in prospection, as shown by Lang's studies, does not show that mental images also activate ordinary emotions in response to fiction, for the reasons just given. The philosophical use of what I call "indirect" cognitive studies such as Lang's studies in the debate on emotions toward fictions is risky.

What I call "direct" cognitive comparative studies, such as Sennwald et al. (forthcoming) and Sperduti et al. (2016), that is, studies dedicated to examining the similarities and differences of emotional responses to fiction and to nonfiction, seem more apt to answer the empirical question nested in the philosophical discussion on emotions toward fictions. As the Sennwald et al. study is not yet published, the study by Sperduti et al. (2016) will be our focus.

3. The Sperduti et al. (2016) study

In this study, a number of short silent video clips (4–5 sec.) were presented to participants in two conditions: either as recordings of real scenes or as recordings of fictional scenes. A word cue (FICTION or REAL) indicated the intentional nature of the scenes depicted by the clips. The clips were extracted from fiction films, documentaries, and private amateur videos. They were carefully selected in order to be accepted by the participants as depicting either real or fictional events. This careful selection explains the artistic and aesthetic poverty of these clips. These clips were deprived of artistic qualities such as well-known actors, camera movements, montage, special lighting, and close-ups. No signpost of fictionality or of cinematographical innovations were allowed in the clips. This artistic poverty was the price to pay to guarantee that the same clips that were accepted by participants as depicting fictional events would be accepted by participants as depicting real events. Besides, these video clips showed either scenes without emotions, or scenes with positive emotions (kissing scenes, birthday scenes, etc.) or scenes with negative emotions (fight scenes, etc.). One could describe this study as one in which the intentional objects of the emotion

were changed while the material objects of the emotions, the images presented, were kept identical. Same images, same video clips, but different intentional objects: images were said to depict real objects and events in the real condition, via the presentation of the word cue REAL, and to depict fictional ones in the fictional condition, via the presentation of the word cue FICTIONAL.

There are philosophical objections to the use of such stimuli: one of these objections is that there is no fictionality without narrative (e.g., Currie 2008) and that clips were too short and possessed either no narrative or a minimal narrative and, the objection goes, could not be presented as being fictional. Another objection is that, by virtue of their short duration, the clips were not complex enough to motivate what Tan (1996: 85-120) and Silvia (2008) call "interest" or what others call "transportation into a narrative" (Gerrig 1993). The clips used in the experiment had no transportive quality. To these objections, let's say that it was enough for the study's hypothesis that subjects accepted to treat the stimuli as depicting real events in one condition, and fictional events in the other condition. The study did not include a hypothesis on the emotional impact of narrativity or of cinematographic inventions. And the subjects' acceptance of the intentional nature (real or fictional) of the scenes shown on the screen was controlled and validated in the experiments conducted. According to the results of this validation study, the presentation of the word cue REAL or FICTIONAL was sufficient, despite the narrative poverty of the stimuli, to obtain the participants' acceptance that the clips depicted fictional or real scenes. Besides, the attentional focus (which results from interest or transportation) was obtained via the lab control. The lab context, being one in which subjects were watching images on a screen, with no direct interaction with the scenes depicted by the images, was similar to a reading room or studio context.

Yet, these philosophical objections certainly highlight the limits of such a study; in particular we still need to find a way to measure the impact of narrativity or cinematographic inventions on the emotional experiences of film viewers in order to generalize the study's results to the emotional experience of more ecological fictions, for example, narrative films (either fiction films or documentaries). It might be the case that the impact of narrativity and cinematographic inventions on emotional responses counterbalances the impact of fictionality on emotional responses. But these are different questions from the central question investigated in Sperduti et al. (2016), which is the question of the nature of the difference—if any—of our emotional responses toward clips presented, in two conditions, as depicting either real or fictional events. A study on the impact of narrativity and of cinematographic inventions

on viewers' emotional responses would require different hypotheses and altogether different protocols. Moreover, such a study should be neutral relative to the modal status (fictional or real) of the content narrated or displayed with cinematographic inventions. In Sperduti et al.'s protocol, fiction is opposed to reality as two modalities of the same nonnarrative contents: what is seen in the clip is either fictional or real, invented content or real content. But fiction is not opposed to reality at the level of contents: the exact same contents are presented in the two conditions. Finally these modalities (fictional or real) cannot be perceptually detected or inferred: they result only from the presentation of the word FICTION or REAL.

The Sperduti et al. study aims at testing two main hypotheses: (1) that emotional responses elicited by scenes will be less intense when these scenes are presented as fictional rather than real, and (2) that emotional responses will be more intense when scenes are associated to personal memories, regardless of the distinction of the fictional and real scenes. In order to test these hypotheses, the same video clips were presented twice. In the first phase of the experiment, after the word cue (FICTION or REAL) presentation, video clips were presented a first time. During the clips presentations, an objective measure of autonomic arousal, the electrodermal activity (EDA), was recorded. At the end of the first phase of the experiment, the same video clips were presented without any cue. This time, subjects were asked to rate each scene on a scale ranging from 0 to 7 on four features: the intensity of subjective felt emotion (0 = not intense, 7 = veryintense), the valence of subjective felt emotion (0 = very negative, 7 = very)positive), the degree of personal memory linked to the scene (0 = no memory, 1)7 =a very precise memory), and the nature of the scene (0 =real, 7 =fictional) that was used as a control for the experimental manipulation.

What are the study's results? Let's quote the authors of the study:

In agreement with our first hypothesis, the main findings of our work, confirmed by both repeated measure ANOVA and mixed-effects models, showed that in the fictional condition the emotional response was weaker than in the real condition. This effect was only evident for the subjective intensity and valence rating, and not for the physiological arousal. Moreover, this difference was more pronounced for negative emotions. Importantly, the effectiveness of our experimental manipulation was supported by the fact that participants subjectively rated as more fictional scenes that were presented as such, compared to those presented as real. In line with our second hypothesis, we found that scenes that elicited more personal memories were also scored more emotionally intense regardless of the condition. This effect seemed to be more robust for

positive material. Again, this result was only evident for the subjective report of emotional experience and not for the physiological arousal. (Sperduti et al. 2016: 57)

The main result of the study concerns negative emotions. It was found that, in the fiction condition, negative emotions are physiologically identical to emotions in the real condition but have attenuated subjective feelings relative to emotional responses in real condition. For positive emotions, the physiological activation remains the same in both conditions. Nonetheless, the subjective feelings in the fiction condition are attenuated relative to the real condition but this attenuation is less manifest than with negative emotions. It is only with negative emotional scenes that robust differences were recorded at the subjective level in the fiction condition relative to the real condition, while the corresponding physiological activations remained the same relative to the real condition. In other words, there is a kind of decoupling between the physiological arousal impact of the negative emotions and their phenomenological or subjective impact in the fiction condition. Finally, and this is the secondary result of the study, this decoupling of the physiological and the phenomenological is reduced when personal memories are elicited by the event shown in the fiction condition, this last effect being more robust with positive scenes than with negative ones. Let's see how to explain the study results.

4. Fiction as one variable of implicit emotion regulation

Sperduti et al. (2016) explain the study's main result—the attenuation of subjective negative feelings in the fiction condition—as the outcome of a process that enables the viewer of the clips in the fiction condition to control his/her negative subjective emotional experiences. On the basis of the secondary result of the study that highlights the impact of personal memories in the reduction of the decoupling of the physiological and the phenomenological aspects of the emotional responses, the authors suggest that the phenomenological attenuation of the viewer's negative emotional response in the fiction condition is the output of an emotional regulation strategy. Let's quote the study's authors:

We suggest that when confronted with fiction some kind of implicit emotion regulation, resulting by cognitive change due to knowledge of the fictional nature of the stimulus, would take place resulting in a weaker subjective emotional response. (Sperduti et al. 2016: 58)

The authors suggest that the cognitive change results from the initial appraisal by the viewer of the scenes as fictional. One hypothesis that is mentioned by the authors of the study is that this initial appraisal of fictionality triggers a psychological distancing with the scenes. This hypothesis is supported by the secondary result of this study. This secondary result allows us to identify a determinant of emotional responses to fiction and to real scenes, a variable whose effects go in the opposite direction compared to the down-emotional regulation associated with the first variable, the appraisal of scenes as real or fictional.

The study's secondary result is that scenes—presented either as fictional or as real—which elicit personal memories were judged more emotionally intense by the participants. The authors describe this phenomenon as an instance of emotion up-regulation and suggest that the personal memories associated with the scenes activate self-referential processes in the viewer's mind that amplify their emotional responses even to scenes appraised as fictional (Sperduti et al. 2016: 58). Since, according to the authors, this secondary effect of emotion up-regulation results from scenes (real or fictional) that remind the viewer of personal memories or, in other words, from scenes that resonate personally for the viewer, one understands why fictional scenes, that is, scenes to which the viewer feels psychologically distant, have an opposite effect on the viewer's emotional responses. Instead of talking of the opposite effects of these variables—the fictional variable and the personal relevance variable—one may talk of complementary variables.

Apparently, the fictional variable plays a cognitive role in the emotional response and draws, according to Sperduti et al. (2017) upon working-memory resources. The reference to working-memory resources in the Sperduti et al. (2017) study suggests a way of understanding, if one accepts to apply the study's results to our emotional responses to more ecological stimuli than the stimuli used in the study, that is, fictional movies, how a fiction viewer keeps in mind the information about the fictional nature of the movie he or she is watching. And this way of understanding how this information is kept in mind seems to fit the viewer's cognitive phenomenology. Following this path, one may speculate that the spectator "keeps in mind" the information that the scene is fictional in his or her working memory, an information the presence of which in the spectator's mind implicitly elicits a distancing with the negative events and a reduction of their emotional impact on the spectator's feelings. As with most information being kept in working memory, the fiction viewer finds in his working memory a way of representing the fictionality of the scenes shown without continually

reminding himself or herself that he or she is watching a fictional movie. Still keeping in working memory this information, he or she is apparently never unaware that he or she is watching a fictional movie. One may surmise that the down-regulation of the negative emotions in response to moving scenes in fiction feeds back into keeping active the representation of the fictionality of the scenes in working memory. The suggestion is that the process of controlling or down-regulating the feeling part of the negative emotions, a process initiated by a cognitive appraisal of the fictionality of the moving scenes and associated with a control of the motivational aspect of the emotional experience, would in turn reinforce a distanced attitude to the events shown and an updating of the representation of the fictionality of the scenes in working memory.

As noted above, the main result of the 2016 Sperduti et al. study is that, in the fiction condition, negative emotions are physiologically identical to emotions in the real condition but have attenuated subjective feelings relative to emotional responses in real condition. This decoupling manifest in the Sperduti et al. study of the physiological arousal impact of negative emotions on the subject and of its phenomenological impact is not limited to a fiction context. This decoupling apparently occurs in other contexts of emotional regulation, contexts where one may find an inhibition of the experience of an emotion without a decrease in physiological arousal.³ One hypothesis to explain this decoupling phenomenon in the fictional context is that, keeping in mind the representation of the fictional nature of the scene, the fiction viewer would partially discount the physiological activation as being the unique source of information about the emotional content of the moving scene, the other source of information being the fictional representation kept in mind. This partial physiological discounting may explain why the physiological activation has a nonstandard and minimal influence on the viewer while still enabling the viewer to be aroused by the emotional scenes and to focus on the scenes.

A consequence of this decoupling phenomenon is that the physiological activation, the arousal, in response to the moving scenes, which seems discounted by the fiction viewer, remains usable to enrich other emotions the fiction viewer may experience. The first candidates here are aesthetic or art emotions. The moving scenes, which in fiction elicit negative emotions such as fear, anger, or distress with attenuated feelings relative to their presentation as real, may elicit also, for some reasons, aesthetic appreciation. One may then surmise that the physiological activation that the fiction viewer discounts may reinforce or enrich, give more arousal, to his or her aesthetic emotions in response to the artistry of the scenes. Let's call this hypothesis the "diversion hypothesis." Aesthetic

emotions often have low degrees of physiological activation, in comparison to emotions like fear, anger, or distress. But according to the diversion hypothesis, in fiction aesthetic emotions may see their physiological activation slightly augmented via a diversion of the physiological activation of the nonaesthetic emotional negative response toward positive or negative aesthetic emotions for the scenes. According to the diversion hypothesis, fiction would be a context in which the physiological activation corresponding to negative emotions could be recycled or used for an aesthetic benefit, to augment either positive or negative aesthetic emotions for the scenes. One characteristic of fiction is that it allows a wider range of emotions than nonfiction. As Currie notes, amusement may be an appropriate response to murder in fiction while not being appropriate for nonfiction (cf. Currie 2014: 160). If one considers that amusement is an aesthetic emotion, the diversion hypothesis aims at explaining how it is possible to feel sadness in response to a fictional murder while at the same time being intensely amused by it.

5. Quasi-emotion?

Almost a century after Meinong (1902/1977), Walton (1978) brings into the philosophical discussion on emotions toward fictions the term "quasiemotions." The prefix "quasi" appears first in Walton (1978) as a modifier of the sensations that Walton attributes to Charles watching a horror movie about a terrible green slime. Let's quote Walton: "His muscles are tensed, he clutches his chair, his pulse quickens, his adrenalin flows. Let us call this physiological/ psychological state "quasi-fear" (1978: 6)." If I understand Walton well, part of what is described as sensations corresponds to what, in the Sperduti et al. (2016) study, is understood as the physiological activation. And the data of the Sperduti et al.'s study shows that the physiological activation remains at the same level in fiction and in nonfiction. So, the Sperduti et al. study sees no reason to describe the physiological activation with the "quasi" vocabulary. At this stage, there is no more than a superficial terminological difference between Walton and the Sperduti et al. study, since Walton's descriptions of Charles's tensed muscles and of the quickening of his pulse fit well with the Sperduti et al. (2016) data. Then, in a footnote, Walton suggests that we should understand "'quasi-fear' as referring only to the more psychological aspects of Charles's condition: the feelings or sensations that go with increased adrenalin, faster pulsed rate, muscular tension, etc." (1978: n. 9, p. 13). It seems then that Walton agrees with the Sperduti et al.

(2016) study in dissociating the physiological and the feeling impact on Charles "The purely physiological aspects of quasi-fear, such as the increase of adrenalin in the blood, which Charles could ascertain only by clinical tests, are not part of what makes it make-believe that he is afraid" (n. 9, p. 13). Of course, Walton's use of the "make-believe" vocabulary is not part of the Sperduti et al. study. Still, for Walton, in line with the Sperduti et al. (2016) study, only the feelings are said to be modified by the fictionality of the moving scenes.

But beyond this line, Walton (1978) and Sperduti et al. (2016) follow different paths. First, Walton describes the feelings modification in terms of makebelieve modification, this move being based on a philosophical theory about the generation of make-believe truths by representational works of art. Sperduti et al. (2016) describe the feeling modification on the basis of experimental results in terms of down-regulating feelings (for negative feelings) and, on that basis, some hypotheses on the nature of our engagement with fiction are proposed. Sperduti et al. (2016)'s study does not use the quasi-vocabulary and the authors do not attempt to answer the Classificatory question, only the empirical question that is nested into the Classificatory question. Still I suggest that the Sperduti et al.'s study constitutes grounds to speak of quasi-emotions toward fiction, but with a different meaning from Walton.

Charles's feelings are states of quasi-fear because these feelings are understood, by Walton, as being taken into a game of make-believe that Charles plays with the images on screen and with his feelings and sensations. When the slime raises its head, Charles grips his chair, and as a result, make-believe truths are generated (de re) about Charles: it is make-believe of Charles that he is threatened: "it is ... the fact that he feels his heart pounding, his muscles tensed, etc., which makes it make-believe that he is afraid" (13). According to Walton, Charles does not experience feelings of fear but quasi-fear feelings, of which it is true that make-believedly they are feelings of fear (1978: 22). Walton's approach to the issue of our emotional responses to fictions is a typical case of a philosophical theoretical approach to the issue. Walton's philosophical understanding of Charles's emotions toward the fictional slime constitutes, for the author of "Fearing fictions," a theoretical ground solid enough for describing Charles's emotional experience in terms of quasi-fear feelings.

By contrast, a cognitive philosopher looking for experimental results to approach the issue of our emotional responses to fiction would find in the Sperduti et al. (2016) study a different way of bringing the quasi-vocabulary into the discussion. These experimental results point in an altogether different direction than Walton's theoretical points. Sperduti et al. (2016) results are that

subjects to whom fiction clips depicting negative moving scenes are shown experience actual negative feelings. At both levels—the physiological level and the experience subjective level—all indicators testify the occurrence of true negative feelings in response to fiction. But these true negative feelings appearing to be, according to the experimental results, systematically down-regulated relative to nonfiction, the cognitive philosopher finds a ground for labeling emotions in fiction as quasi-emotions.

Beyond the deep disagreements of Walton (1978) and Sperduti et al. (2016), a philosopher may find either in a theoretical approach such as Walton's or in a cognitive approach such as the Sperduti et al. study an incentive for labeling our affective responses to fiction quasi-emotions. What both studies show is that emotions in response to fiction are artifacts of a game of makebelieve one plays with the props and with oneself, for Walton, and artifacts of our regulatory processes, for Sperduti et al. (2016). Fiction constitutes, for the philosophical and for the cognitive studies, an incentive not to act on our emotions with a reason, the recognition that what we face is fiction and that there are no objects or scenes to which we respond emotionally. Beyond the disagreements of Walton (1978) and Sperduti et al. (2016), both studies suggest that quasi-emotions construed either as make-believe emotions for Walton or as regulated emotions for the authors of the Sperduti et al.'s study are veridical or true responses to the moving situations in fiction. Both the make-believe and the regulated emotions are our own genuine accomplishments, true outputs of our own doings.

6. The normal attitude toward fiction

Walton mentions that the quasi-emotion hypothesis "is part of the larger issue of how 'remote' fictional worlds are from the real world" (1978: 5). On this larger issue, one may again opt either for a theoretical–philosophical or for a cognitive/experimental–philosophical approach. Walton's theoretical approach of the issue leads him to defend what one may call the "intimate thesis", that is, the claim that there is "a particularly intimate relation between the real world and fictional worlds" (1978: 21). By contrast, a cognitive philosopher will find in the Sperduti et al. (2016) study elements to defend "the distance thesis," that is, to justify the claim that we observe fictional worlds from a distance.

Walton argues for the "intimate thesis" on the basis of his theory of makebelieve truths and of linguistic evidence. Walton claims that Charles imagines himself afraid of the slime, or that "Charles does recognize a make-believe world that he and the slime share" (1978: 19). Walton sees in the use of indexicals like "here," which make implicit reference to the speaker, like in Charles's frantic exclamation during the movie "Yikes, here it comes! Watch out!" another illustration of the fact that Charles takes it to be make-believe that the slime is headed toward him: "It shows that he regards himself as coexisting with the slime in a make-believe world" (19). Walton locates the difference between an actor on stage who "generates make-believe truths solely by his acting, by his behavior" (14) and whose actual emotional state may or may not be like fear (1978: 14), and Charles whose actual state of mind has a role in generating make-believe truths about himself. "Insofar as make-believe truths are generated by a spectator's or reader's state of mind, he is no mere 'external observer' of the fictional world" (1978: 21). Walton concludes: "We have a particularly intimate relation between the real world and fictional worlds" (21).

A cognitive philosopher might argue for the "distance thesis" on the basis of the Sperduti et al. (2016) study. The study's authors suggest that the best explanation of the down-regulation of negative emotions in fiction is that we are less implicated with the moving scenes in fiction, more distant than with scenes in nonfiction. Not only we are external observers of fictional worlds, according to the author's study, but we are also distant external observers of the fictional worlds. On that basis, a cognitive philosopher might defend the view that the normal attitude toward fiction is an augmentation of the psychological distance toward the fictional worlds relative to the normal attitude toward the real world. By doing so, this cognitive philosopher would go against what Walton describes as "the traditional ideas that the normal or desired attitude toward fiction involves a 'suspension of disbelief', or a 'decrease of distance'" (Walton 1978: 23).

7. Our closeness to fiction and the value of fiction

Walton claims that his defense of what I have called the "intimate thesis" "enables us to comprehend our sense of closeness to fictions" and "to make progress on the fundamental question of why and how fiction is important" (1978: 24). Walton suggests that "much of the value of dreaming, fantasizing, and making-believe depends crucially on one's thinking of oneself as belonging to a fictional world. It is chiefly by fictionally facing certain situations, engaging in certain activities, and having or expressing certain feelings, ..., that a dreamer, fantasizer, or game

player comes to terms with his actual feelings—that he discovers them, learns to accept them, purges himself of them ... People can be expected to derive similar benefits from novels, plays, and films only if it is fictional that they themselves exist and participate (if only as observers) in the events portrayed in the works" (1978: 24).

Is a cognitive philosopher defending the "distance thesis" on the basis of the Sperduti et al. (2016) study deprived of resources for comprehending our sense of closeness to fictions and the value of fiction? I believe not. But this will require from the cognitive philosopher to disentangle the fictional and artistic dimensions of our experience of representational works of art.

Walton constructs a global theory of our experience of representational works of art, a theory that aims to explain on a single basis our emotional responses to the fictional propositions established by, for example, the horror movie "(that make-believedly there is a green slime on the loose)" (1978: 18), our sense of closeness to the fictional world established by the movie and the value of this experience. All three dimensions of our interactions with fiction are explained, by Walton, in terms of our participation in games of make-believe with the artwork considered as prop and with ourselves. A cognitive philosopher may explain the nature of our emotional responses to the fictional propositions on the basis of the Sperduti et al. (2016) study. He or she will then defend a "distance thesis," the view that our distance with the fictional worlds explains the down-regulation of negative emotions in fiction. But the "distance thesis" makes it difficult for the cognitive/experimental philosopher to explain what Walton describes as our sense of closeness to the fictional world established by a work of art without bringing a new parameter in the explanation. This is no real news since it has been already noticed above that the clips used in Sperduti et al. (2016), in virtue of their absence of artistic quality, that is, in virtue of their narrative poverty, were not complex enough to elicit what Tan (1996: 85–120) and (Silvia 2008) call "interest" or what others call "transportation into a narrative" (Gerrig 1993). And "interest" and "transportation into a narrative" are close cousins of what Walton describes as our sense of closeness with a fictional world. In other words, what is suggested here is that our sense of closeness with a fictional world, our capacity to immerse or to get absorbed into a fictional world, depend on the artistic and narrative qualities of the artwork. And these artistic and narrative qualities—which may be properties of artistic or narrative vehicles of fiction or of nonfiction—are liable to counterbalance the fiction parameter and explain that, in some cases, one experiences a sense of, maybe, "cognitive closeness" with a fictional world. Since the Sperduti et al. (2016)

study only tested the impact of fictionality on our emotional responses, not the emotional or psychological impact of artistic or narrative constructions, a cognitive/experimental philosopher must look in another direction, a direction different from the Sperduti et al. (2016) study, in order to make progress on this question. Reference has to be made by the experimental philosopher to other experimental studies, studies of the cognitive basis of our aesthetic attitude in response to artworks and to narratives.⁴

The fact that the Sperduti et al. (2016) data show that fiction triggers an implicit attitude of detachment or distance, not an attitude of psychological participation of the kind postulated by Walton in which the fiction viewer somehow "extends" himself or herself to the fiction level and ends up "on the same level" with fictions (1978: 23) does not exclude that the artistic properties of an artwork (fictional or nonfictional) trigger an attitude of psychological participation of the self-engagement kind. It may be the case that, contrary to a prevalent claim among aestheticians since Kant, what has been described in terms of detachment or distance is not the aesthetic attitude but the normal attitude toward fiction and that the aesthetic attitude should be described in opposite terms. The confusion in philosophy of these aspects of our psychological interaction with artworks depicting fictional scenes—a sense of distance and a sense of intimacy—is explainable insofar as so many artworks being vehicles of fictional content are the sources of aesthetic selfengaging attitudes embedded within or blended with distant or disengaged attitudes fit for fiction. In these circumstances, when artworks are vehicles of fictional content, one may surmise that a dual process—distancing and selfprojection—would be at work. This dual-process hypothesis is compatible with the "diversion hypothesis" discussed above.

8. Conclusion

Philosophers, in the analytic tradition, have struggled with questions concerning the spectator's or reader's emotional reactions to fictional characters and events. The lesson of our discussion is that a cognitive/experimental approach of the question of the difference between fictional world emotions and actual world emotions, instead of ending the philosophical discussion, may guide the philosophical discussion in a new direction, toward an investigation of the interaction between fictional world emotions and aesthetic emotions. The philosophical "Classificatory question" has acquired a new dimension.

Notes

- 1 In Sperduti et al. (in press), the authors have developed the research of the 2016 study in what may be called, according to my proposal, an "indirect" cognitive study. As a matter of fact, the authors investigate in this study "directly" the contribution of different executive functions (updating, switching, and inhibition) in implicit emotional regulation and only "indirectly" the impact of fictional content on our emotional responses. In this study, emotionally negative fixed images were presented to participants preceded by short texts describing each image as either real or fictional. In line with the findings of Sperduti et al. (2016), the participants' emotional responses to images displayed as fictional were rated as less intense relative to their presentation when the same images were displayed as real. Their first result is that the presentation of the images as fictional trigger implicit downemotional regulation processes since no explicit emotional regulation requirement was asked of participants. On that basis, the authors insist on understanding the presentation of the images as fictional as a way of inducing implicit emotion regulation processes. Their second result is that these emotional processes of downregulation are correlated with the participant's updating performances, with their capacity to hold in working memory the fictional construal of the image content. Participants performing well in complex executive functions such as updating are, according to the study's results, good modulators of their emotional responses to the negative images when they are displayed as fictional.
- 2 According to Lowe and Ziemke (2011: 17), "the feeling state has a fundamental role in regulating the action tendencies it represents (or comes to represent)."
- 3 Koole, in a review of the current research on the psychology of emotion regulation, notes that "cognitive reappraisal can inhibit the experience of unwanted emotions, although it does not consistently decrease psycho-physiological arousal" (2009: 23).
- 4 For an experimental study on the sense of intimacy in aesthetic experience, see e.g., Vessel, Starr, and Rubin (2013). For experimental works on self-projection narrative processing, see, e.g., Speer, Zacks, and Reynolds (2007), Hassabis and Maguire (2007), Buckner and Carroll (2007), and Yarkoni, Speer, and Zacks (2008).

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The Content-Dependence of Imaginative Resistance

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1. Introduction

Imaginative resistance "occurs when an otherwise competent imaginer finds it difficult to engage in some sort of prompted imaginative activity" (Gendler and Liao 2016). There are now many puzzles surrounding this phenomenon (see, e.g., Gendler and Liao 2016, Kieran and Lopes 2003, Todd 2009, Walton 2006, Weatherson 2004). In this paper, we focus on the oldest and most widely discussed puzzle, which was baptized by Tamar Gendler in her (2000), and traces back to Kendall Walton, Richard Moran, and ultimately, David Hume.

This version of the puzzle of imaginative resistance involves "our inability or unwillingness to imagine counter-moral propositions in fiction" (Kind and Kung 2016: 23). In Hume's words, there are many things in a fiction that we know are descriptively wrong, and that will "detract but little from the value of those compositions" (Hume 1757, para. 33). For example, we seem to have no problem with leprechauns, hobbits, and vampires, which we know do not exist. However, "a very violent effort is requisite to change our judgment of manners, and excite sentiments of approbation or blame, love or hatred, different from those to which the mind, from long custom, has been familiarized" (Hume 1757). For example, if Shakespeare had written all the circumstances of Duncan's murder at the hands of Macbeth exactly as we know them, but added that Macbeth's actions were morally praiseworthy, this would have been very difficult for us to imagine (Moran 1994). The puzzle, then, concerns how we

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can explain the difference in difficulty between imagining counter*evaluative* and counter*descriptive* propositions.¹

The empirical assumption underlying the puzzle is that people do indeed experience more imaginative resistance when they attempt to imagine scenarios that are evaluatively deviant rather than descriptively deviant. We apparently have a harder time imagining that something ugly is beautiful, that something morally wrong is right, that something dull is funny, or that something clumsy is elegant, than we do imagining something that is descriptively false.

This "curious asymmetry" (Kieran and Lopes 2003: 8, Matravers 2003: 91) is widely assumed in the literature, not very often argued for, and frequently restricted to *moral* deviance. For example, Moran asks,

Why can we not, as it seems, treat the judgments of morality and decency the same way we treat any other judgments, and accept as fictionally true what the story tells us (or implies) is true, and comfortably leave our genuine attitudes at the door? What happens to our sense of distance at that point, the distance between what we can imagine and what we actually believe? The suggestion here is that we cannot treat these as on a par with other fictional truths. (1994: 97)

Magdalena Balcerak Jackson writes that "most convincing examples of imaginative resistance involve requests to imagine situations where morally highly deviant behaviors and attitudes are endorsed" (2016: 47). Neil van Leeuwen wonders why "it seems easy to incorporate outlandish descriptive propositions into our understanding of the story, but our minds are far less flexible about incorporating outlandish moral propositions" (2016: 103–104).²

Like Hume and Moran, Walton uses introspection and thought experiments to motivate the claim that imagining counterevaluatives is more difficult than imagining counterdescriptives (1990: 154–155, 1994), though he expands the claim beyond morality to other evaluatives. For example,

If in a story a comedian tells [in Walton's own words, "a really dumb joke"] and the author simply writes explicitly in the text that it is hilariously funny, I expect that I would attribute a juvenile or an incomprehensible sense of humor to the narrator, and stick with my own judgment that the joke is not funny. I insist on applying my own sense of humor. (Walton 1994: 40)

This example is meant to show that it isn't just *moral* deviance that we resist, but counterevaluatives of many kinds (see also Yablo 2002: 485). As we said above, this was Hume's original point. In this paper, then, we will speak of the puzzle of imaginative resistance in terms of counterevaluatives broadly conceived.

What sorts of reasons are there for believing that imaginative resistance is more powerful for counterevaluatives than for counterdescriptives? The most common strategy is to provide a few short narratives or narrative sketches to pump intuitions into agreement. "We happily go along with talking mice and time-travel tales, but we balk if recreational torture is endorsed, or presented as truly permissible within the story" (Driver 2008: 302). A second strategy differentiates between kinds of imagination: one kind draws on the faculty of sentiment, and another on (what Hume called) the faculty of understanding. Desire-like (Currie 2002) or value-like (Stokes 2006) imagination on the sentiment side is more difficult to control than cognitive imagination on the understanding side. If this is true, it would explain why we experience more resistance with counterevaluatives than with counterdescriptives. A third reason is that while we often import real beliefs, desires, and values into fictions (e.g., we assume Sherlock Holmes has at least one kidney because we believe all humans do), we can also export imaginings into real beliefs, desires, and values (e.g., we might come to believe, desire, and value things about nineteenth-century London because of Dickens's novels). Imaginative resistance is then argued to be about what we ought to imagine, given that we risk exporting what we imagine into what we believe, desire, and value. We ought to resist imagining any counterevaluative that might "contaminate" (that is, negatively affect) our moral framework (Gendler 2000). A fourth reason might be that there are no counterdescriptives that cannot be imagined. Some of the best contenders for counterdescriptives that we cannot imagine are conceptual impossibilities, which, Gendler argues, can be imagined after all (Gendler 2000). If we can imagine that the sum of five and seven both is and is not equal to twelve, then certainly we can imagine any descriptive claim in a fiction. And this is not the case, Gendler claims, for counterevaluatives.

But there are also good reasons for doubting that it is more difficult to imagine counterevaluatives than counterdescriptives (see Mothersill 2006, Tanner 1994, Todd 2009, Weatherson 2004, Yablo 2002). One is that Hume's distinction between sentiment and understanding might be cognitively crude. If there is no defensible distinction between the faculties of sentiment and understanding, or if such faculties do not exist, the asymmetry disappears. Another is that we might not believe there are moral facts, in which case it becomes difficult to see how there can be moral *counter* evaluatives, and again the puzzle loses some of its bite. Something similar happens if we deny a strict distinction between facts and values (see Marchetti and Marchetti 2017). We might also target Gendler's claim

that conceptual impossibilities can be imagined. Stock (2003), for example, argues that they cannot.

To help decide the issue, we could turn to experiment. Black and Barnes (2017) show that there is quite a bit of individual variability in the amount of imaginative resistance people experience, and also that imaginative resistance is positively correlated with moral features (e.g., moral authority, moral harm, disgust sensitivity, fear of moral contagion, etc.). If this is right, people do experience some form of imaginative resistance when exposed to certain counterevaluatives. What we are interested in, however, is the assumption on which much of the work on this topic is premised: whether it is really *more difficult* to imagine counterevaluatives than counterdescriptives.

In our study, we investigated whether the degree to which a proposition was counterevaluative or counterdescriptive influenced levels of imaginative resistance. Differently put, we explored whether imaginative resistance is sensitive not only to proposition *type* (evaluative vs. descriptive) but also *content*, independently of type. We found that it was. A pilot study indicated that, in general, counterevaluative claims generate significantly more resistance than counterdescriptive claims. However, the degree of counterfactuality also had a significant effect on resistance judgments.³ In other words, imaginative resistance cannot be accounted for purely in terms of claim *type*. Instead, features of content (of which degree of counterfactuality is but one) seem to have an impact as well.

The pilot study raised a worry for imaginative resistance traditionally conceived: What if the detected overall difference in resistance between counterevaluative and counterdescriptive claims is not in fact due to claim *type*, but instead to features of content for which the experiment does not control? More precisely, resistance might be triggered by contents that represent states of affairs that are considered unlikely, astonishing, unusual, and so on. For simplicity, we introduce a catch-all term for potential resistance-inducing properties of this sort: "weirdness." It might turn out that the counterevaluatives invoked in the literature as those that produce imaginative resistance (e.g., the proposition that the practice of genocide or slavery is morally acceptable, or that it is evil to associate with people of other races [Walton, 1994: 28]) are simply "weirder" than the counterdescriptives with which they are standardly compared (e.g., the proposition that there is a ring that makes its wearer invisible, or that a village in Scotland appears and disappears every one hundred years [Walton, 1994: 31]). If this turns out to be correct, the difference in imaginative resistance triggered by different claims would thus not be due to claim type, but weirdness of claim

content. Our study addressed this worry by exploring imaginative resistance across claim types while controlling for a variety of features that might render their content weird.

2. Experiment

2.1. Participants

A total of 1,216 participants were recruited on Amazon Mechanical Turk to complete a paid online survey on Qualtrics. The IP location was restricted to the United States. Subjects who failed an attention test, took less than fifteen seconds to complete the main task, changed their response more than ten times, or had native languages that were not English were excluded. The exclusion criteria were determined in advance of the experiment. After the elimination, 845 subjects remained, of whom 441 were female. The average age was 38.8 years (SD = 12.3 years).

2.2. Method and materials

Participants were randomly assigned to one of twenty-four conditions in a 6 (claim type: evaluative 1 vs. evaluative 2 vs. evaluative 3 vs. descriptive 1 vs. descriptive 2 vs. descriptive 3) x 4 (degree of counterfactuality: low vs. mediumlow vs. medium-high vs. high) design. Evaluative 1 involved a moral norm, evaluative 2 involved a humor norm, and evaluative 3 involved an aesthetic norm. Each participant responded to three questions regarding weirdness and three questions regarding imaginative resistance (truth, difficulty, and possibility). Appendix 2 in the Supplementary Materials contains the complete text of all scenarios and questions. We will use the aesthetic condition as an example. The prompt and questions (variations of degree in square brackets) read:

Adaleine, Picasso's greatest student, was a prolific painter, whose work was unfortunately lost to history—with the exception of her last painting: A 3x4' canvas, painted from edge to edge in the exact same shade of yellow as the McDonald's golden arches. It is [a somewhat beautiful painting, /a beautiful painting, i /a very beautiful painting, without doubt one of the most beautiful works ever made,].

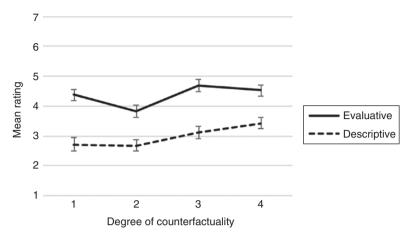
Q1 (weirdness 1): How unusual is it that Adaleine's painting is [a somewhat beautiful painting, /a beautiful painting, / without

- doubt one of the most beautiful works ever made $_{iv}$]? (1 = completely ordinary, 7 = completely unusual)
- Q2 (weirdness 2): If there is a world where Adaleine's painting is [a somewhat beautiful painting, /a beautiful painting, i /a very beautiful painting, i /without doubt one of the most beautiful works ever made, j, how different would this world be from ours? (1 = completely the same, 7 = completely different)
- Q3 (weirdness 3): How surprised would you be if you found out that Adaleine's painting is [a somewhat beautiful painting, /a beautiful painting, /a very beautiful painting, /without doubt one of the most beautiful works ever made,] in our world? (1 = completely unsurprised, 7 = completely surprised)
- Q4 (truth): If you were to find the previous scenario within a work of fiction, to what extent would you agree that the following statement is true in the fictional scenario? (1 = completely agree, 7 = completely disagree)
 - "Adaleine's painting is [a somewhat beautiful painting, /a beautiful painting, /a very beautiful painting, /without doubt one of the most beautiful works ever made.]."
- Q5 (difficulty): How difficult is it for you to imagine that Adaleine's painting is [a somewhat beautiful painting, /a beautiful painting, /a very beautiful painting, /without doubt one of the most beautiful works ever made, | (1 = very easy, 7 = very difficult)
- Q6 (possibility): To what extent do you deem it possible to imagine that Adaleine's painting is [a somewhat beautiful painting, /a beautiful painting, /a very beautiful painting, /without doubt one of the most beautiful works ever made, ? (1 = completely possible, 7 = completely impossible)

Participants responded to all questions on Likert scales ranging from 1 to 7, which were anchored as specified above. The order of test questions was fixed. The experimental prompts were preceded by an attention check and followed by a demographic questionnaire.

2.3. Results

Since we were interested in the impact of claim type and degree, we aggregated across scenarios of the same claim type. We conducted a mixed ANOVA with Greenhouse-Geisser correction (within-subjects factor: measure—truth versus difficulty versus possibility; between-subjects factors: claim type—evaluative versus descriptive, degree—low versus medium-low versus medium-high versus high). There was a significant main effect for degree F(3,837) = 36.18, p < .001, $\eta_p^2 = .115$, a significant main effect for measure F(1.80,1504.26) = 47.06, p < .001, $\eta_p^2 = .053$, a significant main effect for claim type F(1,837) = 37.68,



Error bars designate standard error of the mean

Figure 7.1 Mean ratings of imaginative resistance in terms of truth for evaluative and descriptive claims across degrees of counterfactuality

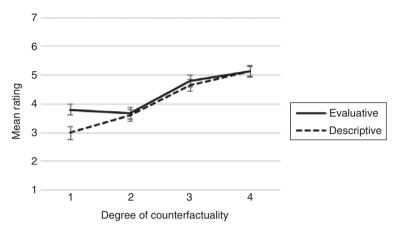
p < .001, $\eta_{\rm p}^2 = .043$. The measure*degree interaction was significant F(5.39, 1504.26) = 9.63, p < .001, $\eta_{\rm p}^2 = .033$, and so were the measure*claim type interaction F(1.80, 1504.26) = 33.30, p < .001, $\eta_{\rm p}^2 = .038$ and the degree*claim type interaction F(3,837) = 3.18, p = .023, $\eta_{\rm p}^2 = .011$. The three-way interaction was not significant F(5.40, 1504.26) = .78, p = .577, $\eta_{\rm p}^2 = .003$.

To further explore the effect of claim type and degree of counterfactuality on the three distinct measures of imaginative resistance, we ran an ANOVA each for truth, difficulty, and possibility judgments. With truth as the dependent variable (Figure 7.1), claim type proved significant F(1,837) = 93.38, p < .001, $\eta_p^2 = .10$, and so did degree F(3,837) = 5.62, p = .001, $\eta_p^2 = .02$. The interaction was not significant F(3,837) = 1.03, p = .38, $\eta_p^2 = .004$.

For the dependent variable difficulty (Figure 7.2), claim type did not prove significant $F(1,837)=3.25,\ p=.07,\ \eta_p^2=.004)$, degree was significant $F(3,837)=35.16,\ p<.001,\ \eta_p^2=.11$, and the interaction was not significant $F(3,837)=1.57,\ p=.20,\ \eta_n^2=.006$.

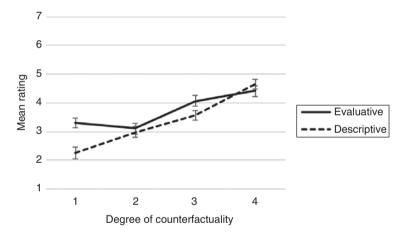
For the dependent variable possibility (Figure 7.3), claim type proved significant F(1,837) = 7.49, p = .006, $\eta_p^2 = .01$, degree was significant F(3,837) = 38.03, p < .001, $\eta_p^2 = .12$, and the interaction was also significant $(F(3,837) = 4.45, p = .004, \eta_p^2 = .02.$

In short, while claim type has a considerable impact on imaginative resistance judgments regarding truth ($\eta_{\rm p}^{\ 2}=.10$, a medium effect), it has next to no effect on either difficulty or possibility judgments ($\eta_{\rm p}^{\ 2}<.01$, i.e., not even a small



Error bars designate standard error of the mean

Figure 7.2 Mean ratings of imaginative resistance in terms of difficulty for evaluative and descriptive claims across degrees of counterfactuality



Error bars designate standard error of the mean

Figure 7.3 Mean ratings of imaginative resistance in terms of possibility for evaluative and descriptive claims across degrees of counterfactuality

effect size). By contrast, degree of counterfactuality has a pronounced effect on difficulty ($\eta_p^2 = .11$) and possibility judgments ($\eta_p^2 = .12$), yet a much smaller effect on truth judgments ($\eta_p^2 = .02$).

Next, we explored whether claim type still had an impact on imaginative resistance once weirdness of content was controlled for. Recall that for each target claim c, participants rated how unusual they considered c, to what extent a world in which c is true would differ from ours, and how surprised they would

be to learn that c was actually the case. Averaging across the results, we calculated a weirdness composite score. Across conditions, reliability analyses produced a Cronbach's alpha of .75 among the questions used to compute the weirdness score, indicating that the composite score was strongly internally consistent. On average, weirdness scores for the counterdescriptive claims (M = 5.31, SD = 1.45) were significantly higher than those for counterevaluative claims (M = 4.77, SD = 1.60), t(843) = -5.19, p < .001, Cohen's d = .36, a small effect.

We also conducted hierarchical multiple regressions (HMRs) in order to explore whether claim type had an impact on the three measures of imaginative resistance, once weirdness of content had been controlled for. Table 7.1 summarizes the HMR results for all three types of imaginative resistance judgments.

Truth: The first hierarchical multiple regression revealed that at stage one, weirdness contributed significantly to the regression model, F(1,844) = 54.71, p < .001, and accounted for 6.1 percent of the variation in truth judgments. Introducing claim type explained an additional 13.2 percent of variation in truth judgments and this change in R^2 was significant, F(2,844) = 100.67, p < .001. Together the two independent variables accounted for 19.3 percent of the variance in truth judgments. Furthermore, the positive value of b = .435 for weirdness shows that weirdness was a positive predictor of truth—that is, the weirder the claim, the less likely one was to accept it as true in the fiction. The negative value of b for claim type (i.e., -1.595) indicates that evaluative claims (coded as 0) were less likely to be accepted as true in the fiction than descriptive ones (coded as 1).

Table 7.1	Hierarchical	regression	analyses	for truth
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	Truth			Difficulty			Possibility					
Predictor	В	SE b	В	p	В	SE b	β	р	b	SE b	β	p
Step 1												
Constant	1.965	0.245		<.001	0.591	0.218		<.01	0.382	0.204		Ns
Weirdness	0.344	0.047	0.247	<.001	0.73	0.041	0.519	<.001	0.636	0.039	0.492	<.001
Step 2												
Constant	2.293	0.229		<.001	0.716	0.217		<.01	0.517	0.202		<.001
Weirdness	0.435	0.044	0.312	<.001	0.764	0.041	0.544	<.001	0.673	0.039	0.521	<.001
Claim Type	-1.595	0.136	-0.369	<.001	-0.609	0.129	-0.14	<.001	-0.657	0.12	-0.164	<.001

 $(R^2 = .061 \text{ for Step 1}; \Delta R^2 = .132 \text{ for Step 2}, \text{ all } ps < .001), \text{ difficulty } (R^2 = .270 \text{ for Step 1}; \Delta R^2 = .019 \text{ for Step 2}, \text{ all } ps < .001) \text{ and possibility } (R^2 = .242 \text{ for Step 1}; \Delta R^2 = .026 \text{ for Step 2}, \text{ all } ps < .001).$

Difficulty: The second hierarchical multiple regression revealed that at stage one, weirdness contributed significantly to the regression model F(1,844) = 311.43 p < .001, and accounted for 27.0 percent of the variation in difficulty judgments. Introducing claim type only explained an additional 1.9 percent of variation in difficulty judgments and this change in R^2 was significant, F(2,844) = 170.90, p < .001. Together the two independent variables accounted for 28.9 percent of the variance in difficulty judgments. As above, the weirder the claim, the more difficult it was to imagine it (b > 0). Furthermore, descriptive claims were deemed less difficult to imagine than evaluative ones (b < 0).

Possibility: The third hierarchical multiple regression revealed that at stage one, weirdness contributed significantly to the regression model, F(1,844) = 269.14, p < .001, and accounted for 24.2 percent of the variation in possibility judgments. Introducing claim type only explained an additional 2.6 percent of variation in possibility judgments and this change in R^2 was significant, F(2,844) = 154.18, p < .001. Together the two independent variables accounted for 26.8 percent of the variance in possibility judgments. Again, the weirder the claim, the more it was considered impossible to imagine (b > 0). Furthermore, descriptive claims were deemed less impossible to imagine than evaluative ones (b < 0).

In a final analysis, we double-checked the results of the HMR analyses. The six scenarios, each of which invoked target claims differing in terms of degree of counterfactuality made for twenty-four individual conditions. We conducted a Tukey post-hoc test for the weirdness scores of the twenty-four conditions, and used the largest homogenous subset to explore the impact of claim type on the three measures of imaginative resistance. Differently put, we explored whether claim type still has an impact on judgments of imaginative resistance (truth, difficulty, and possibility), when the claims at stake were deemed weird to similar extents. Consistent with the HMR results, imaginative resistance conceived in terms of truth in fiction is significantly higher for evaluative claims than for descriptive claims (p < .001), though no significant difference could be detected across claim types for difficulty judgments (p = .32) or possibility judgments (p = .63). For the full analysis, cf. Appendix 3 in the Supplementary Materials.⁶

2.4. Discussion

So far, we have proceeded under the assumption that judgments regarding truth in fiction, difficulty, and the possibility of imagining a non-actual state of affairs all belong to a single, uniform category. They all capture different, yet not unrelated, aspects of imaginative resistance (where imaginative resistance

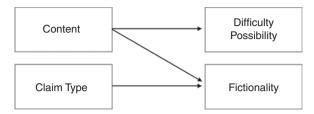


Figure 7.4 The dual process model of imaginative resistance

is understood in a broad sense), just as judgments regarding wrongness, blame, permissibility, and punishment are standardly conceived of as different types of moral judgments. However, given the results, it might be helpful to draw more attention to the distinction between imaginative resistance conceived in terms of truth judgments on the one hand, and in terms of difficulty and possibility on the other. Our findings, we would like to suggest, might support a *dual process model of imaginative resistance*, a model that is structurally (and structurally only) similar to Cushman's (2008, 2013) *dual process model of moral judgment*. According to the latter, wrongness and permissibility judgments are principally sensitive to mental states, whereas blame and punishment judgments are sensitive both to mental states and causal factors and outcomes. In the case of imaginative resistance, we found truth in fiction (or "fictionality") judgments to be sensitive both to claim type (evaluative vs. descriptive) and features of content (degree of counterfactuality, or weirdness); difficulty and possibility judgments, by contrast, were found to be sensitive to features of content only (Figure 7.4).⁷

3. General discussion

There are many questions to ask concerning imaginative resistance. Some relate to its scope. For instance, does imaginative resistance arise from certain moral propositions, evaluative propositions more generally, or also for counterdescriptive propositions? Do we resist any of these types of propositions more than others? And what explains the varying amounts and types of resistance? In the following, we will briefly trace out the implications of our findings for these questions. In closing, we will address some possible directions for future research.

Regarding scope, our pilot data showed that imaginative resistance exists for nonmoral counterevaluative claims as well as for counterdescriptive claims (see also Black and Barnes 2016). In other words, imaginative resistance has

wide scope with respect to claim type. Do the different claim types face different levels of resistance in principle? We found that resistance can be stronger for nonmoral counterevaluatives than for moral counterevaluatives. Thus, if Hume's asymmetry did obtain, Hume, Walton, and Yablo would be correct that it holds for counterevaluatives of all kinds, rather than merely moral counterevaluatives. The overwhelming focus in the literature on specifically *moral* counterevaluatives might therefore be somewhat inappropriate. We have also shown that resistance can be more pronounced for certain counterdescriptives than for certain counterevaluatives. Therefore, the strong claim that counterevaluatives always produce more imaginative resistance than counterdescriptives is false.

More importantly, the results from our experiment show that out of the three measures of imaginative resistance tested (truth, difficulty, possibility), claim type matters only for truth judgments (that is, whether something is judged to be true in the fiction). And even in this case, claim type is neither the only significant factor driving resistance (degree is also significant: F(3,837) = 36.18, p < .001, $\eta_p^2 = .115$), nor is its impact particularly pronounced (the effect size of the main effect of claim type on resistance was medium-small, $\eta_p^2 = .043$). This suggests that with respect to any of the three measures tested here, there is no principled asymmetry we can draw between counterevaluatives and counterdescriptives. Hence the alleged puzzle, according to which a difference in imaginative resistance is due *exclusively* or, at the very least, *predominantly* to claim type, simply does not exist. On the other hand, if Hume's original puzzle is taken to refer only to imaginative resistance *in the sense of resistance to truth in fiction judgments*, and his observation is merely that claim type *partially explains* such resistance, the puzzle remains, though in a substantially weaker form.

Turning to explanations of imaginative resistance, we found that the "weirdness" of a claim was the main explanatory factor for resistance conceived in terms of difficulty and possibility, and a partial predictor of resistance conceived in terms of judgments of truth in fiction. As long as one wants to postulate a general concept of imaginative resistance that captures a variety of distinct, though related phenomena, one might want to adopt a dual process model: difficulty and possibility judgments are influenced principally by features of content (as measured by degree of weirdness), whereas truth in fiction judgments are influenced by both content and claim type. A number of questions now stand out. First, what is weirdness? In our study it was an amalgamation of (i) unusualness, (ii) difference from the actual world, and (iii) surprisingness. But how exactly do these factors contribute to imaginative resistance? Second, what is it about truth in fiction judgments that makes them turn on content and

claim type, while difficulty and possibility judgments are only tied to weirdness? We take up these questions in turn.

3.1. Unusualness

"We happily go along with talking mice and time-travel tales, but we balk if recreational torture is endorsed, or presented as truly permissible within the story" (Driver 2008: 302). Perhaps this is because fictions endorsing recreational torture are more unusual than talking mice tales, in the sense that most of us have some previous experience with fables, movies, and cartoons that portray nonhuman creatures that talk, but we don't typically have as much experience with stories that involve morally permissible recreational torture. If imaginative resistance is a function of unusualness, and unusualness is a function of previous experience, then, a fortiori, imaginative resistance is a function of previous experience. This is just as Hume said: we resist imagining things "different from those to which the mind, from long custom, has been familiarized." Imaginative resistance caused by unusualness might therefore be explained as what happens when a fiction attempts to overcome a certain kind of cognitive inertia established by experience.

3.2. Difference from the actual world

Our different intuitive reactions to time travel and torture might not rely on the perceived difference between the fictional and actual world since it would be very difficult to work out whether the time travel world is *farther* from the actual world than the morally permissible torture world. But the difference between the fictional and the actual world is helpful in measuring the *degree* of imaginative resistance we experience. A story with talking mice is closer to the actual world than a story with talking mice who have also mastered time travel, which is closer still than a world in which those same mice are morally right to travel through time in order to pursue their recreational torture activities.

Also, the perceived closeness of a fictional world to the actual world might contribute to an explanation of the *political* sense of imaginative resistance. This kind of imaginative resistance results any time we are asked to imagine something that we recognize might "contaminate" our actual beliefs, values, and decision-making behavior. And it should hold equally for counterdescriptives as for counterevaluatives; as it does, for example, with imagining there to be important cognitive differences between human races, or imagining that the

refugees in our countries have come purposely to damage our societies. In other words, perhaps distance from our own doxastic-evaluative framework (or distance from the set of evaluative and descriptive propositions we believe) is a type of perceived distance from the actual world, which could explain the political sense of imaginative resistance. We refuse to imagine recreational torture as morally permissible because it would not be morally right in this world, whatever the case in other worlds (cf. Gendler 2000). And we should not spend too much time in those worlds, lest we get any strange ideas.

3.3. Surprisingness

Surprise is a response to a violated expectation, and that expectation can be built upon several things, including previous experience, an inference, or convention. When the expectation violated is based on previous experience, surprise is related to unusualness, as often-experienced correlations that suddenly cease to hold will be judged unusual and can surprise us. When the expectation violated is built upon an inference about what will happen in a fiction, surprise becomes related to perceived nearness of a fictional world to the actual world, since the worlds about which our inferences fail in surprising ways will be judged as distant worlds.

Expectations can also be set up by context, including pragmatic context and genre. Liao, Strohminger, and Sripada (2014) show experimentally that imaginative resistance diminishes or vanishes when dealing with less realistic genres (see also Black, Capps, and Barnes forthcoming). Stock (2017: Chapter 4) provides examples where children murder innocent parents, innocent people are tortured or killed, and women are degraded, and there is very little or no imaginative resistance because of the genre, whether gothic, erotic, horror, or black humor. In these cases we do not balk, presumably because the pragmatic context (including genre) can change our expectations and evaluations by changing our dispositions to characterize and frame certain objects and events (Camp forthcoming). The pragmatic context tells us "what to do" when confronted with a fiction. When we are confronted with a fiction about talking mice, we know what to do: imagine the talking mice roughly as tiny people who like cheese and are afraid of cats. We can experience resistance if those mice do something talking mice don't normally do in their genre. When we're confronted with a story in which recreational torture is morally permissible, we will experience resistance only if that story isn't embedded in a pragmatic context that makes recreational torture morally permissible. Because genre sets

up expectations that are violated, genre could certainly be included in weirdness as an explanatory factor for imaginative resistance.

3.4. Other factors

Our weirdness measure draws on unusualness, distance from the actual world, and surprisingness. But presumably, other factors could figure into weirdness that would make it an even better predictor of imaginative resistance. Another possibility is that a fictional claim is weirder when its assertions contravene commitments that are more deeply held (following Todd 2009). That is, they are "weird" because we cannot work out how to tell a consistent story given the claims made in the fiction plus our existing commitments. We either don't know which claims need to be altered, or how to alter them. Since moral beliefs are plausibly among those things to which we are most strongly committed, this would explain why we often experience imaginative resistance to counterevaluatives: because many of us are strongly committed to our values. But it also explains why we can identify counterdescriptives that produce more resistance (Black and Barnes 2016), because denying these would require equally great (or greater) adjustments to our webs of commitment. Of course, all of this holds only when the reader knows that the author intends her to believe that the weird claim does follow from the narrative in the sense that if the scenario actually obtained, the weird claim would indeed follow (Stock 2017: Chapter 4). This isn't always the case: sometimes authors simply want their readers to entertain weird claims for fun, puzzlement, or some other effect, in which case we experience no resistance. We can set aside these cases, since our studies follow the philosophical literature in presenting cases that do seem to ask the reader to assent that *p* follows from q in the scenario (e.g., that shooting Jack and Jill was the right thing to do, given the other features of the case). If the centrality of the commitments countered by the scenario does play a role in determining weirdness, imaginative resistance can then be used as a partial measure for how central a commitment is. The suggestion would be: the more difficult it is to see a counterfactual inference through, the more likely it is that the inference requires denying a central commitment. Likewise, given increasingly central commitments, we should be able to produce increasing levels of imaginative resistance in an experiment.

Another potential source of weirdness is the epistemological authority of the author (Matravers 2003). According to Matravers, we trust journalists to tell us which events took place, but not what is morally right or hilariously funny. In other words, it isn't the content that drives imaginative resistance, but the perceived epistemological status of the author. While our results show that imaginative resistance is not unique to evaluatives, we have not explored the possibility that we might resist imagining when authorial authority breaks down. We merely urge caution in thinking that such authority only breaks down when it comes to values. People can and do accept value authorities, from advice columnists to religious leaders (Stock 2005), and likewise when it comes to descriptive claims, people can and do reject the authority of certain sources, for example, Breitbart News and Donald Trump. In other words, claims deriving from sources whose authority we do not trust might strike us as weird. The reverse also holds: when we encounter a weird headline, we often inquire about its author or source. Again, this is an idea that could be put to experimental test.

Another possible source of weirdness can be inferred from Weatherson (2004). Weatherson asserts that a fictional claim will be resisted in imagination when it violates his "Virtue" principle, which is premised on the idea that some fictional claims are the kind that must be true in virtue of lower level facts. The principle states that it must be possible to work out (from what's given in the story) what *p* is true in virtue of, when the story is about those lower level facts (Weatherson 2004: 18). When Virtue is not satisfied, we experience imaginative resistance. For example, recreational torture is morally wrong in virtue of the harm that torture does. If it were possible to torture people recreationally in a way that caused no harm, perhaps it would be morally permissible. It is possible therefore that violating Virtue is a further source of weirdness.

In a somewhat similar vein, Kathleen Stock argues that while we do not usually need to make recourse to lower level facts, we can fail to imagine something when we do not understand it (2005). That is, when we fail to find a context that makes sense of the scenario we are asked to imagine. Stock and Weatherson will therefore agree that whether we can find a way to understand the fiction in terms of its context (or lower level facts) will be relative to the individual. In our view, Stock and Weatherson (and others, like Nanay 2010) have identified another possible source of weirdness: we cannot imagine something when we do not understand it (cannot make sense of it), whether because we cannot work out how it could obtain in terms of lower level facts or because of the context, including the presumed intentions of the author. This notion of weirdness as a lack of confidence in the quality of one's epistemological position with respect to drawing certain inferences might be resolved into unusualness and distance from the actual world, but perhaps not, and more empirical work could be helpful here.

3.5. Truth in fiction

What is it about truth in fiction judgments that makes them turn on content and claim type, while difficulty and possibility judgments are only tied to weirdness? Here is a proposal. According to the dual process model of moral judgement (introduced above), wrongness and permissibility judgments are sensitive to mental states, whereas blame and punishment judgments are sensitive to both mental states and causal factors and outcomes. These causal outcomes are important for blame and punishment because there are social, personal, moral, legal and political consequences to our actions (whether they are intended or not), and we feel a responsibility to include facts about consequences in our reasoning about blame and punishment. Analogously, in the case of imaginative resistance, truth in fiction judgments are sensitive to content and claim type. Claim type could be important because we feel we have a responsibility to denounce certain claims as true in the fiction, given a (perhaps implicit) recognition that calling something "true," even if in a fiction, can have social, personal, moral, legal and political consequences. This coalesces with the work of Gendler and others who claim that imaginative resistance occurs when we refuse to imagine certain things to avoid contaminating our moral perspectives (discussed in section 1). We can extend such accounts by taking the empirical results outlined in this chapter as evidence that most of us recognize a responsibility to stand up against anything that might lead to moral contamination in ourselves and others (and thus to morally wrong dispositions and actions), and this is why truth in fiction judgements are sensitive to claim type. We feel responsible for the consequences of fictional claims on ourselves and others, even consequences unendorsed by the author. A fiction writer might not want to contaminate our moral framework, but there's real danger that some of their claims might, and so we refuse to accept certain potentially contaminating claims as true. While counterdescriptives can also contaminate our moral frameworks (see section 3.2), perhaps that kind of case is comparatively rare, and so our consequence-based considerations tend to concern counterevaluatives. This idea could be tested by comparing judgments about truth in fiction for counterevaluatives and counterdescriptives that are perceived as equally dangerous with respect to the contamination of our frameworks. However we should expect this effect to be most pronounced in moral domains, so more work needs to be done to see whether this could also be a good explanation for truth in fiction judgments concerning aesthetic and other domains.

4. Conclusion

With the work of Black and Barnes (2016, 2017), Black, Capps, and Barnes (forthcoming), Liao, Strohminger, and Sripada (2014), and Phelan (2017), we're still just beginning to bring empirical data to bear on philosophical issues of imaginative resistance. With respect to further avenues of research, we think it would be fruitful to follow up on the factors contributing to weirdness. We should like to know how many there are, what the nature of each is, and how each contributes to imaginative resistance.

In addition, more work is required concerning the discrepancy we found between judgments of truth in fiction on the one hand, and difficulty and possibility on the other. Both the claim type and the content seem to affect whether people judge something to be true in a fiction, while only content affects whether people judge something fictional to be difficult or (im)possible to imagine. As we mentioned above, this might be congenial to a dual process model of imaginative resistance, which might be explained by a kind of consequential reasoning based on fictional claims that might contaminate the moral frameworks of others. Another possibility is to exclude truth in fiction judgments as a kind of imaginative resistance. But we have tried to maintain a broad notion of imaginative resistance, and judgments about truth in fiction are important for several authors in the literature. Nevertheless, what we have shown is that the truth in fiction puzzle is quite distinct from the imaginability puzzle (see also Liao, Strohminger, and Sripada 2014: 342), and perhaps different philosophical accounts will be differently suited to explain these different puzzles. For example, those that focus on the authority of an author might be in a better position to explain our unwillingness to claim that a certain fictional statement is true in the fiction, while those who focus on our inability to process certain claims inferentially might be in a better position to explain our experienced difficulty in trying to imagine those claims. In any case, a complete account of imaginative resistance (in the broad sense including truth in fiction judgments) must make reference to content, and not just claim type. And if we want to preserve the asymmetry upon which the original puzzle of imaginative resistance is based, this can only be done, and only partially, in the domain of truth in fiction judgments.

Summing up, in terms of difficulty and possibility, imaginative resistance depends largely on the weirdness of the content, not on whether the claim is evaluative or descriptive. Truth judgments, by contrast, are sensitive to features of content and claim type. In discussion, we have suggested that the weirdness of a scenario is relative to the individual, and might depend on its (i) unusualness,

for example, on how often a subject has experienced the content of the scenario; (ii) the perceived distance between the fictional and actual world, resulting from, for example, the perceived distance between doxastic-evaluative worldviews; and (iii) surprisingness, resulting from violated expectations generated by previous experience, inference, or awareness of fictional context. There is much more to do, including finding other factors that contribute to weirdness. Such factors might include the level of personal commitment to what is violated in the scenario, the epistemological authority of the author presenting the scenario, and how easy it is for the subject to understand the scenario or to work out the lower level facts that justify ascriptions of higher level properties in the scenario. These should be tested experimentally, where possible. Whatever weirdness turns out to be in the final analysis, it is *not* a property exclusive to counterevaluatives, and there is no curious asymmetry of imaginative resistance in the sense of (a) difficulty imagining something or (b) difficulty judging something to be (im) possible. There does, however, seem to be a version of the puzzle that survives. Namely: why is it that when it comes to deciding whether something is true in a fiction, we take into account whether that content is evaluative or descriptive?

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Notes

1 We define a "counterevaluative" as a statement that overturns a held evaluative belief, and a "counterdescriptive" as a statement that overturns a held nonevaluative belief. When we want to be less specific, we will use "counterfactual" to mean a claim that is either counterevaluative or counterdescriptive.

- 2 Others who focus their attention on this assumption in its moral form include Brock (2012), Carruthers (2006), Currie (2002: 217), Dorsch (2016: 50), Driver (2008: 302), Kind (2016a: 8; 2016b: 167), Kung (2016: 234), Mahtani (2012), Matravers (2003), Modrack (2016: 25), Nichols (2006: 3–4), Rosenbaum (2016), Liao (2016), Sauchelli (2016), Stear (2015), Stock (2005), Stokes (2006), and Stueber (2016: 375).
- 3 Appendix 1 in the Supplementary Materials (https://osf.io/n5cpd/) contains the complete text of all scenarios and questions from the pilot study.
- 4 See https://osf.io/n5cpd/ for Appendix 2.
- A potential worry: if weirdness correlated very strongly with the measures of imaginative resistance, one might be concerned that it captures the exact same phenomenon. A lack of correlation, by contrast, would cast doubt on the hypothesis that features related to the content of the target claim could be meaningful predictors of imaginative resistance. Weirdness correlated positively with judgments of truth in fiction (r = 0.23, p < .001), difficulty (r = .52, p < .001), and possibility (r = .49, p < .001), with effect sizes just at the border between medium and large for difficulty and possibility, and a small effect size for truth in fiction; so we do not see any reason for concern.
- 6 See https://osf.io/n5cpd/ for Appendix 3.
- 7 One might object that a dual process model of imaginative resistance cannot be inferred from the fact that claim type has a significant effect on truth but a nonsignificant effect on difficulty and possibility. After all, the difference between "significant" and "not significant" is not itself statistically significant (Gelman and Stern 2006). However, the original mixed ANOVA (withinsubjects factor: measure—truth vs. difficulty vs. possibility; between-subjects factors: claim type—evaluative vs. descriptive; degree—low vs. medium-low vs. medium-high vs. high) showed that the measure*claim type interaction F(1.80,1509.02) = 27.60, p < .001, $\eta_p^2 = .032$ was significant, which means that claim type had a different effect on the three measures. To see whether it was claim type's effect on truth that differed significantly from claim type's effect on difficulty and possibility, we further conducted two 2 \times 2 ANOVAs: (i) 2 (evaluative \times descriptive) × 2 (truth vs. difficulty), and (ii) 2 (evaluative × descriptive) × 2 (truth vs. possibility). For (i) truth vs. difficulty, we found the claim type*measure interaction F(1, 842) = 34.06, p < .001, $\eta_p^2 = .039$ was significant; claim type affected truth (Meval = 4.48, Mdesc = 2.89) significantly more than it affected difficulty (Meval = 4.56, Mdesc = 3.95). For (ii) truth vs. possibility, we found the claim type*measure interaction F(1, 842) = 35.50, p < .001, η_p^2 = .040 was significant; claim type affected truth (Meval = 4.48, Mdesc = 2.89) significantly more than it affected possibility (Meval = 3.91, Mdesc = 3.25). Hence, the effect of claim type on truth judgments differed significantly from the effect of claim type on difficulty and possibility judgments, which supports the dual process model.

8 This extends Walton's account (1994), which also presents a supervenience-based account of imaginative resistance. Walton claims that moral facts supervene on natural facts, and so if we are told to imagine a different moral fact with the same natural facts, we cannot. Weatherson extends this from evaluatives to all facts.

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Aphantasia and the Decay of Mental Images

Steve Humbert-Droz

1. Introduction

At the end of the nineteenth century, Francis Galton made an astonishing discovery: some people have no mental images. Galton also observed in discussions with "men of science" (1880: 302) that most of them considered "mental image" and "imagery" as ineffective metaphors: they seem to consider that there is no phenomenal experience behind expressions such as "I visualize an apple in my head." Meanwhile, two French doctors reported the case of "Monsieur X," a man who lost overnight the ability to invoke and experience mental images (Charcot and Bernard 1883). Recently, psychologists confronted with a similar case described this phenomenon as *aphantasia* (Zeman, Dewar, and Della Sala 2015).

Testimonies about aphantasia are still surprisingly rare, more than a century after Galton. It is therefore difficult to understand how a person devoid of (a kind of) imagination actually thinks. In order to outline "what it is like" to be aphantasic, I will start by compiling two qualitative interviews with aphantasics that I will then compare with other testimonies collected in literature and online. The fact that aphantasia is poorly documented may also explain why few philosophers (with the notable exception of Phillips 2014) seem to take this phenomenon seriously—contrary to other phenomena such as blindsight, for instance. To redress the balance, the second part of this paper will consider three debates to which aphantasia could contribute.

2. Aphantasics' testimonies

Available data—The oldest available testimony comes from Mr. X (Charcot and Bernard, 1883). Recently, Zeman, Dewar, and Della Sala (2015) presented

evidence regarding twenty-one people with substantial (nine of them) or complete (twelve of them) deficit in visual imagery. Finally, the cocreator of *Mozilla Firefox*, Blake Ross (2016), offers a valuable first-person report of aphantasia.

Interviews—I proceeded with two separate sessions (approx. 1h. 30min.) of open questions (e.g., "Close your eyes and try to imagine a beach ... What happens exactly?") to two aphantasics—let's call them Mr. Y and Mr. Z. Both are academic men in their twenties. Neither of them knew each other nor had they read Ross's testimony before the interview. Y knew Zeman's research through newspaper reports; Z was ignorant of the literature on aphantasia. I hadn't met Y before, but I knew Z.

Generalities—Y and Z (as well as Ross) claim to be *wholly aphantasic*—that is, they lack all types of mental images (not only quasi-vision, but also quasi-touch, quasi-hearing, and so on).

Zeman, Dewar, and Della Sala (2015: 378b–279a) report that ten out of twelve complete visual aphantasics experience involuntary "flashes" of colors, especially when they remember or dream. Y and Z report the same experience—Y also reports auditory flashes. They are, nevertheless, unable to intentionally convoke a mental image. When I asked them to visualize a square, it turned out to be frustrating for them. After a few attempts, Z reported a flash and found the experience exhausting.

Like most aphantasics (Zeman, Dewar, and Della Sala 2015: 378b; see also Ross 2016), Y and Z describe themselves as aphantasic since childhood. But Zeman, Dewar, and Della Sala's hypothesis (2015) that aphantasia may be congenital doesn't seem to fit to these two testimonies. First, neither of them have aphantasic relatives. Second, they refer to a traumatic childhood event after which they claim to have "stopped dreaming in images." They both refer to *intense physical pain* followed by *obsessive memories and dreams*. This promotes Vito and Bartolomeo's hypothesis (2016) that aphantasia may have a *psychological cause*.

Self-reports—Subjects claim to *think* "*in concepts*" that aren't always fully focused by attention or labeled by a word—in daydreams, especially, Z reports that his concepts are blurry and (somehow) illogical.

According to all the available sources, there is a presence of an *inner speech*, but they insist that they are unable to reproduce songs or the voices of others internally (see also Charcot and Bernard 1883: 8–9).

When asked to remember a scene from a movie they had recently watched, they both used the metaphor of a Wikipedia summary: they reconstructed the plot, event after event, and freely explored it. Concerning perceptual details (like colors), they "just know it." X had the same expression: "My wife has dark hair, of that I am completely sure. It is completely impossible for me to recall this color in my memory as well as to imagine her or her traits." (Charcot and Bernard 1883: 7, my translation). Ross reports that he is less precise than others when he must recall what he did during the day, but he also admits that he has good short term memory as well as an excellent memory for his creations. Zeman, Dewar, and Della Sala (2015: 379a) report that fourteen of the twenty-one participants of their study consider having difficulties with autobiographical memory. Nevertheless, they observe that aphantasics are perfectly able to recognize faces (Zeman et al. 2010: 147a) and succeed at tasks like "Count how many windows there are in your house" by using alternative strategies (Zeman, Dewar, and Della Sala 2015: 379a). This suggests that aphantasics *preserve visual memory* even if visual imagery is absent (2015: 379b).

When asked to imagine a battle scene where a character loses his hand, Z said: "I have a flash of successive concepts, I imagine the battle scene, I imagine the hand and it explodes. This concept takes a larger place in my mind when that happens. It goes fast." He compares his succession of concepts to a *drop down menu*: sketchy ideas succeed one another in an ordered way, but he can go back and willingly extend one of them.

What aphantasics cannot do—According to all testimonies, the most salient inability of aphantasics concerns their poor drawing skill—remaining at "the level of a child" (Charcot and Bernard 1883: 7).

Reading descriptions is also particularly difficult. Ross describes himself as follows: "I can't hold the scene in my mind. I have to keep reminding myself, 'the monster is hairy' and 'the sneeze-saltines are sitting on a teal counter.' But I thought, maybe that's just how it is." Ross, Y, and Z confess their inability to improvise descriptions when telling a story. They systematically skip descriptions while reading novels.

Y, Z, and Ross claim that they are neither relaxed by thinking about a calm beach nor comforted (or excited) while thinking about the person they love. Ross and Z tell that their biggest regret concerns their lack of vivid memories—testimonies yield similar conclusion in Zeman, Dewar, and Della Sala (2015: 379a). Z also confirmed, upon my request, that he is not disgusted at all while supposing the following: "Would the tablecloth be dirty if the diner had eviscerated a cat at the table and eaten its dripping entrails?" (Nichols 2006: 467).²

Aphantasics can nevertheless be *caught up* by fictions, even when they read. They may cry for a character, be moved by a fictional situation, put themselves in someone else' shoes, and so on. Z recalled powerful projections into Stefan Zweig's novels—which contain almost no descriptions.

3. Discussion

Among the few scholars who write about aphantasia, the main tendency consists in denying that it exists. For instance, Eric Schwitzgebel criticizes the alleged credulity of Galton—Galton is claimed to have given too much credit to self-reports (2011: 36), which is especially problematic given that the subjects could perform well on typical imagistic tasks (2011: 48).

But the claim that aphantasics confabulate is difficult to reconcile with the striking coherence of the testimonies we have reviewed—all subjects report the same experiences and use the same metaphors. Furthermore, their condition has a predictable, even if modest, impact on their life—they skip descriptions, their memories and simple thoughts don't elicit emotions, and so on.

Even the less radical hypothesis that aphantasia should be understood on the model of blindsight—aphantasics would not have a reflexive access to their mental images (Phillips 2014)—is difficult to maintain. Zeman et al. (2010) observed (through fRMI) the cerebral activity of a new "Monsieur X" during a (successful) rotative task and concluded that he *did not actually activate the same areas* as the control group.

Now, if the safest conclusion is that aphantasia is a real phenomenon, this could impact many philosophical issues.

Mind—A striking observation is that aphantasics are difficult to identify. In everyday life, aphantasics behave normally and are as creative as non-aphantasics. This modest impact of aphantasia on cognition seems to rule out imagism \dot{a} la Hume, according to which we actually think in images (for contemporary defenses of imagism, see Prinz 2002, Gauker 2011). If aphantasia is a condition that emerges during childhood, the threat to imagism is especially acute, as it would compromise the idea that concepts are built from images.

Note, however, that self-reports and the fRMI data were focused on *conscious* and *voluntary* imagery. So we don't know whether aphantasics have sub/preconscious imagistic representations like bodily representations—Phillips (2014) convincingly argues for a clear distinction between these two types of mental

images. This should be empirically investigated by proponents of theories such as *embodied cognition* (see, e.g., Rudrauf et al. 2017) in which imagery plays a central roles in cognition.

Imagery—Zeman et al. (2010) claim that aphantasia goes against Stephen Kosslyn's pictorialist account on imagery (see for instance Kosslyn, Thompson, and Ganis 2006). According to pictorialism, mental images are imagistic in nature, which means that they have sui generis representational content that differs in kind from propositional contents (2006: 8 et seq.). On that view, mental images are explained at the sub-personal level by cells that code only for colors and traits (in the case of visual imagery) and are arranged in the brain within similar spatial relations as a conscious image (2006: 141 et seq.). The sui generis nature of mental images implies that they are not epiphenomena (2006: 25, 112). Therefore, Kosslyn (2006: 63) rejects Sartre's idea that we cannot be surprised by our images. On the contrary, images contain information that we don't possess propositionally: if I wonder in what hand the Statue of Liberty holds the torch, I may use imagery to find out (2006: 75).

Zeman et al. (2010) show that an aphantasic can resolve a paradigmatic imagistic task (finding the shape of an object after having mentally rotated it) by using a logic as an alternate strategy (2010: 152b)—which is hardly consistent with Kosslyn's claim that "the ability to generate a mental image serves an important functional role in cognition" (2010: 153b). Kosslyn could reply that the existence of an alternative strategy says nothing about the *nature* of images. But Zeman et al. not only show that aphantasics use an alternative strategy in that particular task, they also show that they are *flexible* and *perform normally* in numerous tasks. If aphantasics systematically give the same answers as non-aphantasics, this suggests that the information contained in images is not exclusively given by them. For instance, aphantasics manage to perform pictorial memory tasks. Yet, if the contents of images were completely distinct from propositional contents, it should show up in salient functional differences between aphantasics and non-aphantasics—aphantasics should be unable to answer, for example, the question about the Statue of Liberty's hand.

In general, the only qualitative difference between aphantasics and others concerns their lack of phenomenal experience and, thus, of emotions elicited by memories and other simple thoughts (Zeman, Dewar, and Della Sala 2015: 378b). This phenomenon suggests to me a Sartrian hypothesis about the nature of images. Mental images are not like pictures in our mind—with the same imagistic properties as the object represented, waiting for contemplation

(Sartre 1940: 6–7). Images are rather a special manner of representing a content:

The world "image" could only indicate therefore the relation of consciousness to the object; in other words, it is a certain way in which the object appears to consciousness, or, if one prefers, a certain way in which consciousness presents to itself an object. (1940: 7)

In a more recent jargon, images are not a type of representational content, but rather a type of *mode* (or *attitude*) whereby the contents are represented (Searle 1983). So, when Sartre (1940: 9) says that we learn nothing with images, he (presumably) means that images don't add new contents to our non-imagistic thoughts. What happens when we use images is rather that we adopt a certain attitude toward contents—an attitude that, like perceiving, treats content phenomenally. This view avoids epiphenomenalism: adopting a perceptual attitude for a perceptual task is faster and cognitively less demanding than alternatives (Zeman et al. 2010: 152b, 154a); moreover, as we saw, images have a privileged link to emotions.

Since aphantasics are unable to adopt a quasi-perceptual attitude toward the contents of their thought, they lack the phenomenal experience of quasi-seeing, quasi-touching, and so on. Nevertheless, aphantasics represent the same contents as non-aphantasics and adopt alternative strategies to grasp them. This seems to accommodate the fact that aphantasics realize their condition by comparing their phenomenal experiences with those of others, rarely by comparing their performances.

Imagination—The contribution of aphantasia to the general discussion on imagination is modest and concerns the taxonomy of imaginative modes. Aphantasics do not need to perceive (or quasi-perceive) Anna Karenina's face to feel emotions about her, and they can take someone's perspective by entertaining propositional contents. This pleads for a *non-image-based theory of imagination* (Kind 2005). If projection in a fiction results from an imaginative activity and if it is not reducible to a response to images, then imagination is not reducible to mere images. This thesis, initially defended by Roger Scruton and popularized by Kendall Walton (Kind 2005: §2.b), is nowadays shared by most philosophers.

Note that, even if aphantasia shows us that projection in a fiction doesn't require images, this does not constitute a positive account of projection. Some philosophers think that projection in fictions is underscored by a (or some) specific *mode(s)* of *imagination* (see, e.g., Currie and Ravenscroft 2002, Moran

1994); others think that projection can be analyzed by a combination of non-imaginative modes (Todd 2012).

This being said, Z's avowed passion for Stefan Zweig strikes me as a reason to think that the enjoyment of artworks is *not always related to sensory modalities* (or their simulation). Aphantasia shows us that even if images play an important role in helping fictional immersion, the human ability to be caught up by the possibility of another world is deeper and irreducible to that of contemplating withered pictures.

Notes

- 1 Ross likely forgets details that aren't associated with emotions. And, of course, perceptual details are for him more easily dissociated from emotions because of his aphantasia.
- 2 The disgust seems to be related to the image. Contrary to what Nichols thinks, this thought experiment does not invalidate Moran's distinction (1994) between hypothetic and dramatic imagining—i.e., supposition, which doesn't involve emotions on its own, and projection in fictions.

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The Beautiful, the Sublime, and the Self

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The sublime emerges in the history of philosophy as the object of an aesthetic experience very often contrasted with the aesthetic experience of the beautiful. While the latter experience is mainly positive and pleasurable, the former experience is characterized by ambivalent feelings. On the one hand, the sublime involves an overwhelming vastness, or power, which disturbs and unsettles. On the other hand, the sublime poses a challenge, which is enlightening and elating. The overall experience of the sublime is also frequently associated with the feeling of the insignificance of human life, of our smallness compared to the grandeur we are confronted with. In the light of recent psychological and neuroscientific studies, we claim that the sublime gives rise to an aesthetic experience that, contrary to the experience of the beautiful, involves a diminished sense of the self. More precisely, sublimity experiences are immersive and tend to blur the distinction between the self and the world. Our claim has implications for a vexed question about the sublime, namely, whether it is restricted to natural scenes or extends to artworks. We suggest that in favorable conditions, art can elicit sublimity experiences. We then offer a roadmap to test our claim within an experimental setting, with special focus on music and virtual reality devices to deal with the immersive character of sublimity experiences.

1. Introduction

Our aesthetic relationship with the world is variegated. Sometimes we have a pleasurable experience in admiring a flower or a beautiful face, painted or real. In other cases, our aesthetic experience involves more negative feelings. Philosophers have drawn a distinction between beauty experiences, which are about beautiful (artefactual or natural) entities, and sublimity experiences, which confront us with an overwhelming vastness, or power, which disturbs and unsettles our mind.1 In this chapter, we investigate into the nature of sublimity experiences as a sub-class of aesthetic experiences. In section 2, we rehearse venerable philosophical insights about sublimity experiences and what differentiates them from beauty experiences. In section 3, we survey recent empirical work about sublimity experiences, in psychology and neuroscience. While philosophers have observed that the sublime is intimately connected to the self, empirical findings suggest that sublimity experiences involve suppressed or at least diminished self-awareness. In section 4, we suggest a way out of this puzzle. In our view, the contrast between sublimity and beauty experiences is related to the way the subject's self is involved in each kind of experience. We argue that while the sublime is in fact a relational property involving the self, it is experienced in a way that blurs the boundary between the self and the world. In other words, sublimity experiences are necessarily immersive in a way in which mere beauty experiences are not. In section 5, we examine an important consequence of this view for the question of whether artworks are apt to trigger sublimity experiences in addition to natural scenes. While some authors have given a negative answer to this question, we argue that an immersive experience of the sublime is possible with respect to an artwork, provided the latter is presented in favorable conditions. In the concluding section, we offer a preliminary roadmap for experimentally testing our hypothesis about the immersive nature of sublimity experiences.

2. The sublime and the beautiful: Philosophical insights

Consider the wrath of the sea with its waves flung against the cliffs, the panoply of the stars in a clear night sky, the majesty of a few hundred years old tree, or the apparent calm of the endless desert. In those circumstances, we can undergo a peculiar experience, which may involve a mix of fear and admiration, struck by what reminds us that we are just human beings, animals among other animals, living on a small planet. This is what we call "the sublime." It seems that not only natural scenes, but also human creations can elicit sublimity experiences. This would be the case, when, for instance, we contemplate the greatness of the Pyramids of Giza, we stand underneath (or on top of) an impressive dam, or even when we grasp the deep meaning of the special relativity.

Can we give a more precise definition of what the sublime is? Since classical antiquity at least, philosophers have offered various definitions. A point of agreement is that the sublime gives rise to an aesthetic experience. However, while initially attention was paid to the sublime as a rhetorical style, which mirrors the divine madness that inspired the author and is able to carry away the audience, at a later time the focus became the sublime as the object of an aesthetic experience due to emotional contact with an overwhelming vastness or power.² Focusing on the latter way to understand the sublime, we can try to go further and delineate a cognitive pattern (involving sensory, attentional, emotional, and intellectual aspects) underlying sublimity experiences. Since this pattern involves both negative and positive aspects, the experience of the sublime turns out to involve ambivalent feelings.

On the one hand, there is a negative aspect to the sublime. It involves a confrontation with something that overwhelms us, in size (as a few hundred years old tree or the Pyramids of Giza), scope (as the panoply of the stars or the special relativity), or power (as the wrath of the sea or an impressive dam). Such a mind-boggling encounter disturbs and unsettles, due to the greatness we are confronted with. Very often philosophers have talked about an experience of fear, though there may be no real danger (for a nice review, see Cochrane 2012). It is as if we could foresee a potential danger. The wrath of the sea might turn against us, the dam might crack and provoke a disaster, and we might lose ourselves in the endless desert. It is not straightforward why we should talk about fear in other cases. When the panoply of the stars or a few hundred years old tree fills us with a sublimity experience, it does not seem that we fear that, for instance, the stars or the tree could fall over us. Similarly in the case of the Pyramids of Giza or the grasping of the special relativity, it is not clear what should be the potential danger. Yet, in these cases we may still talk about a negative aspect. We are confronted with something greater, in time or space, than us—at least in the stars, the tree, and the pyramids cases. A sense of smallness may arise and perhaps we may even feel the insignificance of human life. In the special relativity case, we are facing an overturning of our ordinary way of thinking about time and space, which can bewilder us. It might also be that we experience our smallness compared to the genius who could achieve such a conceptual revolution.3

On the other hand, the sublime has a positive aspect. The mind-boggling encounter is enlightening and elating, due to the challenge it poses to our mind, which is prompted to cope with such a *grandeur* even beyond its own power.⁴ As Joseph Addison wrote: "Our Imagination loves to be filled with an Object,

or to grasp at any thing that is too big for its Capacity" (1712). In sublimity experiences, our senses, intellect, and imagination have to handle, for instance, immense expanses, myriads of objects, overpowering forces, and astonishing achievements. It has been underlined that such experiences seem to disclose new levels of reality or knowledge. The experience of the sublime might reveal supernatural values, as Kantian philosophy suggests, or the essence of the universe and the natural forces that govern it, as it emerges in Schopenhauer's view of the sublime (Schopenhauer 1819/1844). The German term for "sublime" is precisely "Erhabene," which is etymologically tied to the noun "Erhebung" meaning elevation. Unsurprisingly, sublimity experiences have been associated with spiritual or mystical experiences.

Notwithstanding the double aspect (negative and positive) of sublimity experiences, arguably their overall valence is positive. By "positive valence" we do not mean that sublimity experiences are pleasurable, although Kant stressed that the sublime seems to give rise to a kind of pleasure "that is only possible by means of a displeasure" (Kant 1790, §27). We mean that sublimity experiences involve what Prinz (2011) calls "appetitive dispositions"; they are the kind of experience that we want to sustain and seek out. This is arguably a symptom of the fact that sublimity experiences are aesthetic experiences just like beauty experiences (see Dokic 2016 on the self-sustaining or "autotelic" character of aesthetic experiences).

Nevertheless, most of the philosophers interested in sublimity experiences have contrasted them with beauty experiences. The latter concern things, such as a smiling face, a colorful flower, or a peaceful countryside landscape, which seem quite different from the objects of sublimity experiences. More generally, beauty experiences may arise when we encounter something that is smaller in size, scope, or power than what we typically face in sublimity experiences.⁵ Several features have been put forward in order to capture what provokes beauty experiences, for instance, delicacy, smoothness, proportion, fragility, harmony (for recent discussion, see Scruton 2009 and Levinson 2011). Here we do not need to take a stance on this issue. It suffices to stress that beauty experiences lack the overwhelming aspect present in sublimity experiences. Thus, the former lack the negative aspect shown by the latter (although they can have other negative aspects—e.g., in cases of "difficult beauty," there is dissonance, but it eventually leads to resolution). We do not feel disturbed and unsettled when staring at a colorful flower, which strikes us with beauty. There is no potential danger in beauty experiences, which are mainly positive and pleasurable. Such experiences are delighting and invigorating, and we can also talk about reward and satisfaction.⁶

The cognitive patterns associated with sublimity and beauty experiences just outlined are prima facie compatible with different views about their nature and mutual relationships. An important issue is whether sublimity and beauty experiences are compatible. Even though they are different types of aesthetic experience, we may ask whether there are token experiences that belong to both types at once. In one view, the answer is negative: the experience of the sublime excludes the experience of the beautiful, and vice versa. When we have an aesthetic experience about something, we experience it as being either about the sublime or about the beautiful, but not both. Another view is that these kinds of experience are co-possible. Some aesthetic experiences are about both the sublime and the beautiful. Many would agree that there are beauty experiences that are not sublimity experiences. A further question is whether all sublimity experiences are also about the beautiful.

Another issue is whether the sublime and the beautiful are experienced as coming in degrees. It seems that we can experience something as being more beautiful than another thing. The matter is more controversial in the case of the sublime. Schopenhauer (1819/1844, §39) has argued that we can also experience something as being more sublime than another thing. However, many philosophers, including Kant and Burke on some interpretations (see Brady 2013 for discussion) have considered sublimity experiences to be limit-experiences, which seems to imply that we do not experience the sublime as a gradual phenomenon.

We do not need to take a definite stance on these issues here. It is enough for present purposes to hold the idea that the sublime and the beautiful give rise to different cognitive patterns as just sketched. Some aspects of these patterns can be retrieved in recent studies addressing these experiences from psychological and neurobiological points of view.

3. Psychological and neurobiological perspectives

There is no specific theory or experimental study (with the notable exception of Ishizu and Zeki 2014; see below) on the sublimity experience in the psychological domain. Nevertheless, the emotion of awe can be considered a close construct that has aroused a certain interest in psychology and is worth mentioning here. Indeed, in their comprehensive review on awe in various theoretical domains (e.g., psychology, philosophy, religion, and sociology), Dacher Keltner and Jonathan Haidt (2003) explicitly mention the connection between awe and the

philosophical concept of the sublime, especially as defined by Edmund Burke (1759). They propose as prototypical aspects of awe vastness and need for accommodation, which echo power and obscurity (in the metaphorical sense of being difficult to grasp by intellect) in Burke's definition of the sublime. Several aspects of their definition of awe (which are clearly in line with the cognitive pattern associated with the sublime as sketched in section 2) can help us in advancing our discussion of the sublimity experience.

As we already seen, the sublimity experience can be characterized by ambivalent emotional reactions. Keltner and Haidt (2003) suggest that the emotional valence of this experience could depend on two different factors. First, since awe is elicited by informationally rich and possibly novel stimuli that call for accommodation, the experience could be pleasant or unpleasant depending on the success of the accommodation. The authors also suggest that beyond the two prototypical characteristics, other factors could "colour" the experience of awe. Among these is the threatening aspect of the stimulus eliciting awe. Indeed, a volcano eruption and a wonderful sunset would probably elicit awe experiences of completely opposite valence.

Keltner and Haidt's model is also interesting in its contribution to the question of whether the sublimity experience can be elicited by artworks (see section 4 and section 5). As mentioned above, they identify additional appraisal themes that can "colour" awe experiences, among which is beauty. They state that beautiful stimuli "can produce awe-related experiences that are flavoured with aesthetic pleasure" (304). Interestingly, they are open to the hypothesis that among the different types of artwork, music can elicit a genuine awe experience as compared with painting, which would lack the two fundamental features (vastness and accommodation).

If we now turn to neuro-aesthetics, we find that the experience of the beautiful has been the elected subject of research of most studies. Indeed, the majority of the works investigating the neural correlates of aesthetic experience have employed judgement of beauty, pleasantness, or attractiveness of different kinds of stimuli (e.g., visual artworks, music). Even if this approach has probably conflated aesthetic experiences and beauty experiences, it has produced abundant data giving some insights worth discussing here.

Judgement of beauty has been repeatedly reported activating medial prefrontal cortex, encompassing both the medial orbito-frontal cortex (mOFC) and the rostral anterior cingulate cortex (rACC) for paintings (Kawabata and Zeki 2004, Ishizu and Zeki 2011, Vessel, Starr, and Rubin 2012), music (Ishizu and Zeki 2011), and even for mathematical beauty (Zeki, Romaya, Benincasa,

and Atiyah 2014). The pivotal role of the mOFC has been supported by a recent meta-analysis of neuroimaging studies (Brown, Gao, Tisdelle, Eickhoff, and Liotti 2011). Indeed, positive aesthetic judgement about stimuli from different sensory modalities (vision, audition, gustation, and olfaction) recruited partially overlapping portions of this brain region. Reviewing the extensive literature on the mOFC is beyond the scope of the present paper. Moreover, a consensual explanation of the function of the mOFC that can take into account its implication in disparate cognitive functions has not yet been put forward (for a critical review, see Stalnaker, Cooch, and Schoenbaum 2015). It suffices to state here that one of the proposed functions linked to this region is tracking the reward value of stimuli. This has led some authors to the speculative proposal that aesthetic judgement could have co-opted the more ancient evolutionary function of forage valuing implemented in this structure (Brown et al. 2011).

One interesting consequence of delineating the neural correlates of the beauty experience is that we can, in principle, compare them with those of the sublimity experience and sketch the relationship between these experiences at the brain level. Nevertheless, to our knowledge, there is only one study directly investigating the neural correlates of the sublimity experience, namely that of Tomohiro Ishizu and Semir Zeki (2014).

The authors asked participants, in a pre-scanning session, to rate on a five-point scale the "sublimity" of pictures containing elements supposed to elicit this experience (volcanoes, tornadoes, ocean waves, etc.). Thus, for each participant thirty-five pictures belonging to each of the five sublimity levels were selected and presented while neural activity was recorded using fMRI. After the scanning session, participants were asked to rate the same stimuli on the beauty (ugly-beautiful), pleasantness (fearful-pleasant), and scale dimensions (small-grand).

Brain areas that showed an increased level of activity with increasing sublimity rating were located in the occipital cortex, hippocampus, and basal ganglia (head of caudate and putamen). Occipital areas are expected to be activated by natural scenes, but the finding of enhanced activation with increasing sublimity level suggests that the very sensory areas responsible for processing the stimulus may code for the sublime. This could suggest that the sublime requires higher processing effort, according with the idea that sublimity elicitors should be rich in information and possibly more complex. Multiple cognitive processes engage both hippocampus and basal ganglia. The most likely explanation for their recruitment in sublimity judgement is their role in emotional processing.⁷

Interestingly, another set of structures, mainly comprising cortical midline structures (CMS, medial prefrontal cortex, and posterior cingulate cortex/

precuneus), showed the opposite pattern of activity (reduced recruitment with increasing sublimity rating). These structures are well-known to be recruited by self-referential processing (for a meta-analysis see Martinelli, Sperduti, and Piolino 2013). We have stressed that the experience of the sublime is frequently associated with the feeling of the insignificance of human life, of our smallness compared to the *grandeur* with which we are confronted. Philosophical discussions clearly point to an intimate connection between the sublime and the self, since as mentioned above they emphasize that sublimity experiences involve awareness of one's own cognitive limitations and shortcomings. Ishizu and Zeki thus expected to find an activation of these self-referential areas. As they put it:

Suppression of self-awareness would not be expected during experience of the sublime, which has been written of as leading to an awareness of one's insignificance in relation to the immensity and grandeur of the Nature. This would imply that one is aware of one's existence and insignificance during such experiences. (Ishizu and Zeki 2014: 9)

Also the idea that sublimity experiences are aesthetic experiences can motivate the expectation to find an activation of these self-referential areas. Indeed, another study showed that activity in these regions was not parametrically modulated by aesthetic judgement ("How strongly does this painting move you?"), but was abruptly recruited only by the most aesthetically pleasing images (Vessel et al. 2012). However, a recent study showed that these regions are strongly modulated by familiarity (after all, what is familiar is what is already known to the self), and that judgements of familiarity and beauty are strongly correlated (Bohrn, Altmann, Lubrich, Menninghaus, and Jacobs 2013). Thus, familiarity could be an underestimated confounding factor in neuro-aesthetic investigation. The idea would be that we find an activation of these self-referential areas mainly due to familiarity; this does not rule out that there are genuine aesthetic experiences that do not involve an activation of these areas, precisely because they are less tied to familiarity. This might be the case for sublimity experiences.⁸

Moreover, empirical findings suggest that awe—which is, as mentioned above, an emotion closely related with the experience of the sublime—also involves decreased self-focused attention (Piff, Dietze, Feinberg, Stancato, and Keltner 2015, Shiota, Keltner, and Mossman 2007).

Thus, collectively these studies suggest that the sublimity experience may be linked to an enhanced sensory processing of the stimulus (increased activity in sensory areas), and to a diminished self-focus—in tension with the

philosophical importance given to the self in sublimity experiences. Concerning the relationship between sublimity and beauty experiences, these works showed that they would engage separate brain systems.

We think that while these findings undoubtedly offer precious insights into the nature of the sublime, they should be taken with caution for several reasons. First, as also acknowledged by the authors, "subjects were asked about their experience of the sublime in images of natural scenes within the confines of a scanner. This inevitably limits the grandeur and depth of the experience and of course limits our conclusions too" (Ishizu and Zeki 2014: 7).

Second, the sublimity experience has been treated here as a continuous experience varying in degrees, while in many theoretical approaches it is conceptualized as a peak experience (see section 2). Third, subjects in the study were explicitly asked to rate the sublimity of the stimulus. Given the heterogeneity of definitions of the sublime, it is not clear how the latter is appraised in folk psychology. For example, subjects might have naïvely conceived of the sublime as one extreme of a continuum of beautiful entities. This hypothesis is supported by the behavioral results of the same study showing that sublimity ratings significantly correlated with post-scanning ratings of beauty.

The aforementioned correlation seems to suggest that the two experiences are tightly related. Arguably, like beauty experiences, sublimity experiences are aesthetic experiences. At least, they naturally feed into aesthetic judgements (although perhaps not always judgements of beauty), such as the evaluative judgement "This is awesome." Ishizu and Zeki seem to think otherwise and reserve the phrase "aesthetic experiences" to beauty experiences. Their terminological choice seems to be based on their neuroimaging findings, which did not show the recruitment of overlapping brain structures between beauty and sublimity experiences. It should be noted that this comparison was made on the basis of results concerning two different studies employing quite different material. In the study on beauty, stimuli consisted in (pictures of) paintings, while in the study of sublimity, (pictures of) natural scenes were employed. Thus, to date, no firm conclusion can be reached on this issue. (Moreover, this points again to the issue about artworks and whether they can elicit sublimity.) We think that their results are fully compatible with the ontological view that sublimity and beauty experiences are two species of the same genus, that is, aesthetic experience (although of course more philosophical work is needed to characterize more precisely the relevant genus beyond our earlier observations that aesthetic experiences have a positive valence and are self-sustaining).

In what follows we shall deal with the tension between philosophical insights and neuroscientific findings when the role of the self in sublimity experiences is at stake. The discussion will lead us to dwell on the question concerning the objects of sublimity experiences: Can a work of art really be sublime or is this only the privilege of Mother Nature's creations? We will conclude with a roadmap for future studies to overcome the limitations we stressed here.

4. The sublime and the self

We have seen that in many respects the psychological and neuroscientific literature is in line with the philosophical literature on the sublime. For instance, both literatures depict the sublime as having a double (positive and negative) nature and stress the importance of the overwhelming aspect in sublimity experiences. However, they diverge as far as the connection between the sublime and the self is concerned. The nature of such connection may seem puzzling. On the one hand, philosophers have stressed that the experience of the sublime is frequently associated with the feeling of the insignificance of human life, of our smallness compared to the *grandeur* we are confronted with. On the other hand, neuroscientific findings suggest that this experience involves suppressed or at least diminished self-reflection. As we are going to claim in this section, there is no real puzzle here, and a proper account of how the self is involved in the experience of the sublime will give justice to both insights.

The connection between sublimity experiences and the self can be highlighted through a contrast with beauty experiences. Sublimity experiences seem to be much more self-centered than beauty experiences. The latter are rather object-centered, in the sense that the features triggering them are (at least mostly) in the beautiful things themselves (e.g., the chromatic harmony of a flower, the symmetry of a sculpture, etc.). In contrast, sublimity experiences seem to result from irreducibly relational properties involving the subject's self and her immediate environment (e.g., not just the highest cliff in the Grand Canyon, but that cliff in comparison with my smallness).

Appearances notwithstanding, the claim that sublimity experiences are self-centered is compatible with the empirical observation that they involve decreased self-focused attention. The point is that even though self-relative properties play a key role in triggering sublimity experiences, they may not be *experienced as such*. In this respect, the case of sublimity experiences is not

unique. As an analogy, consider the experience of colored objects. Even if color is a relative property, it is not usually presented in visual perception as a relational property (see Cohen 2010). We do not see the redness of blood *as* a relational property involving blood *and* our visual system; as far as our visual experience is concerned, the only locus of instantiation of redness is blood itself. Similarly, we might argue that sublimity experiences involve an "error of attribution": when the subject experiences sublimity while being at the edge of the highest cliff in the Grand Canyon, she tends to consider the Grand Canyon itself as the object of her experience, without any apparent contribution of the self, while in fact it concerns herself in relation to the immediate environment.

Kant himself suggested that experiences and judgements of the sublime seem to be object-centered but in fact concern only the human mind, as he thought a good analysis of these mental states should make clear (see, e.g., Kant 1790: §28, where he claims that sublimity "is not contained in anything in nature, but only in our mind"). Our suggestion is less radical. We agree with Kant that the apparent contents of sublimity experiences are misleading because they tend to neglect the contribution of the self, but we insist that these experiences concern both the mind and the world, and not just the mind. It has been underlined that Kant's theory is "radically subjective" (Shapshay 2014: 96), since too much emphasis is put on the subject side. Cochrane has forcefully argued contra "egoistic models" of the sublime, claiming that they ignore "the distinctly other-directedness of the sublime experience" (Cochrane 2012: 135). He favors a model in which the experience of the sublime is primarily object-centered and involves a sense of self-negation. Two remarks are in order here. First, we think that the debate gains in clarity if we observe the distinction between the ontological question of what sublime objects are and the phenomenological question of how they are presented in sublimity experiences. Sublimity experiences can be self-centered in the sense that their objects essentially involve the self but object-centered in the different sense that they seem to attribute sublimity exclusively to the environment—this is arguably Kant's view. Second, if we assume that the debate takes place at the level of the objects of sublimity experiences, we share the idea that we should avoid radically subjective or egoistic models of the sublime. However, we think that we should also avoid accounts that focus excessively on the object side and underestimate the subject side. What we are suggesting here is precisely that the sense of self-negation or, to put it in our terminology, decreased self-focused attention derives from the fact that sublimity experiences are ontologically more self-centered than beauty experiences—they have implications for the status of the self that beauty experiences lack.

Thus, decreased self-focused attention is compatible with the ontological hypothesis that the sublime (i.e., the real object of sublimity experiences) is a relational property involving the self. The next question is of course: If this is so, then why is the self not explicitly represented in sublimity experiences? Our tentative answer is that decreased self-focused attention is the symptom of the fact that sublimity experiences are *immersive*, that they tend to blur the phenomenological boundary between the self and the world. The sublime overwhelms us, to the point that we lose ourselves in it. In our view, immersion is at least a necessary condition for an experience to be of the sublime. We can leave open here whether it is also a sufficient condition (to argue that it is, we would need to show that the relevant notion of immersion is more global than other, more superficial forms of immersion, in that it affects high-level aspects of the self). It follows that non-immersive experiences, whether aesthetic or not, cannot be sublimity experiences.

5. The sublime and the arts

The claim that sublimity experiences are immersive has implications for an important issue that we have already mentioned, namely that concerning the scope of sublimity experiences. Nature, with its huge trees, wide expanse of waters, mountains, storms, is widely recognized as the source of paradigmatic objects of sublimity experiences. We have pointed out, however, that also human creations can give rise to such experiences. As examples, we can mention the Pyramids of Giza or an impressive dam, as well as St. Peter's Basilica and Piazza San Pietro in Rome, the ancient Jordanian city of Petra, or the Great Wall of China. Architecture, then, seems able to evoke sublimity experiences. What about other forms of art? Here philosophical intuitions highly diverge. While some authors have claimed that visual artworks or musical excerpts can elicit sublimity experiences (for a recent positive account, see Shapshay 2014), others banish the latter from the artistic domain.

Consider a recent defense of the radical claim that our experience of the sublime is not an artistic experience, put forward by Emily Brady. Inspired by Kant, Brady argues that most works of art are unable to evoke sublimity experiences. She grounds this claim on the hypothesis that most works of art would lack at least four features needed to evoke such experiences. As she puts it:

First, most works of art simply do not possess the scale of the sublime, that is, the qualities of size and power which characterize actual sublime experiences. Their

smaller size and scope means that they are limited in terms of sublime effect. This relates to the second reason: the formlessness and unbounded character of the sublime is something art has difficulty substantiating, given its various frames and forms, settings, and conventions. Third, art lacks the visceral "wild" and "disordered" character associated with dynamically sublime things—at least where the natural world is concerned. Fourth, artworks, on the whole, lack the capacity to evoke feelings of physical vulnerability, heightened emotions, and the expanded imagination characteristic of the sublime response. (Brady 2013: 119/120)

Brady thinks that no matter how big they are (e.g., Michelangelo's David), representational works of art lack at least one of these features and the same holds for abstract visual art (e.g., Barnett Newman's Voice of Fire)10 and for installations (e.g., Anish Kapoor's Leviathan). Brady acknowledges that some works of art within abstract visual art or some installations can approach sublimity by not being so limited (in size, scope, and power) and in being able to evoke physical vulnerability and the strong and mixed emotions that go with it (e.g., Ann Veronica Janssens's disorienting installation Yellowbluepink, at least to some of us). To put it in another way, these artworks would not lack the first and the fourth features. Brady underlines that some of them can even convey a sense of formlessness (and perhaps even a sense of wildness or disorder), thus meeting the second (and the third) feature. Still, their artifactuality, the fact that they are controlled and ordered, and their being circumscribed within settings (canvases, exhibition spaces, etc.) prevent them from triggering genuine sublimity experiences. Brady also stresses that the fact that even artworks such as some installations, which are potentially good elicitors of sublimity experiences in being disorienting and challenging, in the end lack at least either the second or the third feature is easily seeing by considering how we normally enjoy them. When you venture yourself in the cocoon-like environment of Anish Kapoor's Leviathan, the force of its redness and the sensation of being in a sort of innards do not bewilder you so much, Brady would suggest, because of the many distractions around you (other people, phones, flashes, etc.). Even without such distractions, which can also occur in our experiences of nature, Kapoor's installation might not be enough for us to forget that we are in the confines of a large building (such as the Grand Palais in Paris).

Actually, Brady acknowledges some exceptions. She maintains that two forms of art can genuinely elicit sublimity experiences, namely, architecture and land art. What is crucial in these cases is not only the scale but also, and mostly, the setting. The idea seems to be that although they are human creations, buildings

(e.g., the Pyramids of Giza or Tokyo Skytree), or land artworks (e.g., Robert Smithson's Spiral Jetty or Turrell's Roden Crater) are in their original (urban or natural) environment. This would give them the force to create the sense of formlessness or boundlessness and to show the wildness or disorder Brady thinks are needed to trigger sublimity experiences.

Let us now frame our disagreement with Brady. We think that arts in general (representational or abstract; see below), and not only architecture and land art, can elicit sublimity experiences in suitable conditions of presentation. Brady is right in underlining that distracting factors may inhibit the triggering of a sublimity experience, but these seem to be merely contingent features of the context (that can even be present when we engage with architecture and land art!). Brady's discussion does not seem to point at essential features that would prevent arts from eliciting sublimity experiences.

In our view, the real issue is whether the conditions of presentation of the sublime object are such that an immersive experience is possible. Immersion (a necessary condition of sublimity experiences in our view) can be difficult to achieve in the presence of distracting factors that intervene between the subject and the putative sublimity elicitor. When works of art cannot elicit suitable immersive experiences, the limitation is often epistemic rather than ontological. The works of art are not experienced under the right mode of presentation. The subject must have the right perspective on them to capture the self-relative properties that elicit sublimity experiences. Such a perspective may be cognitively demanding in many cases, but we see no impossibility in principle here.

Consider a piece of abstract work, such as Kapoor's Leviathan. In order for this work to instantiate the self-relative property that constitutes the sublime, the subject must be appropriately related to it. The relevant relation is not merely spatial, of course. The subject must be in a suitable state of mind to appreciate the grandeur of the work. The fact that other persons are walking around, the conscious realization that the installation takes place in a wider museum context and other distracting factors might prevent the subject from playing her part in the instantiation of sublime properties.

The case of representational works of art adds a further level of complexity, since self-relative properties can also be represented, for instance in a picture. Now a property can be represented without being exemplified. For instance, a property (such as a cheerful face) can be seen to be exemplified *in* a painting without being exemplified in the world (the painting has no face). The painting represents a property but does not exemplify it. Similarly, a sublime natural scene can be represented, for instance in one of Caspar Friedrich's paintings, but it does

not follow that it is exemplified by the painting itself. Thus, we might not have a sublimity experience in looking at the picture, however much we admire it.

However, the point is that representation and exemplification can coincide under certain, possibly rare conditions. When the subject is not distracted (she is right in front of the picture and is in the right mood, etc.), she might actually have a sublimity experience while looking at a painting, because the relevant elicitor is not only represented in the painting but *seems* to be exemplified as well (even if illusorily). In this case, the subject is immersed in the scene represented in the picture. There is no need to claim that sublimity experiences are impossible in principle with respect to pictures of the sublime, although more work must be done to fully understand the conditions under which representational works of art can elicit immersive experiences.

Music is an interesting case in point. It is mainly a nonrepresentational art, and it is not clear whether it is always experienced as a human product, or as an artefact. In the literature, not so much attention has been paid to music as an elicitor of sublimity experiences. 11 Bradly briefly discusses music and seems to suggest that it does meet her first and fourth features. Indeed, music is not limited in the way visual arts can be and is able to evoke physical vulnerability and a vast range of strong and mixed emotions. However, Brady claims that "while we may be able to bracket much of the artefactuality of music while we listen, it will always lack the unpredictability and indeterminate character of the natural sublime" (Brady 2013: 134). We take Brady to maintain here that music still does not show her second and third features. We think that there is room for questioning such a view. Music is also not circumscribed in the way visual arts can be, and can be unpredictable and indeterminate. Think when we are at the mercy of the unfolding of the music, unable to anticipate how it may develop (as in the case of compositional techniques associated with the European avantgarde, e.g., Ligeti's Requiem). Even if, among the artistic experiences, music can more easily give rise to sublimity experiences, it is not essentially different from the other arts, which are equally capable of helping us to open ourselves to the sublime if the context is epistemically favorable.

6. Conclusion: A roadmap for experimental studies of the sublime

The experience of the sublime has received little attention compared to other aesthetic experiences. This is probably due to theoretical and methodological

limitations in defining stimuli that effectively trigger sublimity experiences. Indeed, since vastness is an important criterion in defining sublimity-triggering stimuli, we can easily acknowledge the difficulty in reproducing this feature in a laboratory setting. Indeed, even if researchers can present pictures of vast landscapes, these stimuli will nevertheless be presented on a computer screen, inevitably limiting their *grandeur*. We shall propose here two possible settings to get around this limitation.

The choice of pictorial material is probably due to theoretical positions exposed above. Indeed, most theories agree in thinking that natural scenes are the best elicitors of sublimity experiences and, as we have seen, some even propose that artworks cannot in any case (with rare exceptions) elicit sublimity experiences. This state of matter has probably led us to neglect a possible interesting candidate for being a sublimity elicitor, namely, music. Indeed, contrarily to pictorial material, music (and in general auditory stimuli) is not limited in space, and its vastness is linked to other sensory features (e.g., loudness). Moreover, music has been shown to be a strong emotional elicitor (Thompson and Quinto 2011), and is more apt to elicit complex emotional responses, beyond the pleasant-unpleasant or positive-negative dichotomies, that more likely mirror the ambiguous emotional reaction produced by sublimity experiences. Indeed, in an interesting work, Zentner and colleagues (2008) showed that the spectrum of emotional reactions to music could be better described by a domain-specific model comprising nine factors (emotional themes) encompassing: joyful activation, sadness, tension, wonder, peacefulness, power, tenderness, nostalgia, and transcendence. Moreover, they showed that these themes could be regrouped in three superordinate factors that they called sublimity, vitality, and unease. Even if the higher-order factor of sublimity does not completely match the definition of the sublime sketched here and in previous philosophical approaches, it contains aspects related to wonder and transcendence, while other aspects linked to the sublimity experience, such as power, should be subsumed under the two other higher-order factors (vitality and unease). The interest of this study is twofold. On the one hand, it shows that music is frequently associated with emotional terms related to the experience of the sublime—thus confirming our intuition that music could be a good candidate for the study of the sublime. On the other hand, it suggests that a fine-grained analysis of emotional experience, beyond the categorical (basic emotions) or the dimensional approach, could give important hints on emotional reaction toward complex experiences, such as music listening or contemplating an overwhelming sea in a storm.

Our second proposal is to present visual scenarios employing immersive virtual reality (VR). On the one hand, VR can indeed maintain relative dimension and thus vastness. On the other hand, VR is known to facilitate immersion and a subjective sense of presence. Presence is a concept developed in VR and is commonly defined as the feeling of being located and responding to a mediated environment as if it were real (Sanchez-Vives and Slater 2005). It is supposed to be supported by both emotional and attentional engagement toward the stimulus (Witmer and Singer 1998). Absorption, a related concept that is defined as a "disposition for having episodes of 'total' attention that fully engage perceptive and imaginative resources, resulting in a heightened sense of reality towards the object of attention" (Tellegen and Atkinson 1974: 268), has been recently shown to be a strong predictor of the experience of awe (van Elk, Karinen, Specker, Stamkou, and Baas 2016). Thus, we propose that music and VR could be potential elicitors of genuine sublimity experiences in a laboratory setting. Further studies employing this kind of material should elucidate the relationship between beauty and sublimity experiences on the same sample, possibly coupling subjective and neurophysiological data collection. Another open question that could be answered is the link between the experience of the sublime and the self. Finally, employing VR, the intriguing hypothesis of a link between presence and the sublime could be tested.¹²

Notes

- 1 In this chapter, we are interested in a kind of conscious experience that is often informally called "experience of the sublime." We use the phrase "sublimity experience" to refer to this kind of experience. We may call "sublime" whatever in the world the sublimity experience concerns or is about. (For this reason, we avoid using the phrase "sublime experience," which suggests that the sublimity experience is itself sublime.) Sometimes what we informally call the "object" of a sublimity experience is really a "sublimity elicitor," i.e., merely the cause of the experience, which may or may not be sublime. Perhaps a romantic painting of a grandiose scenery can elicit a sublimity experience without itself being sublime. We leave open the difficult question of what the conditions of satisfaction or appropriateness of sublimity experiences are.
- 2 The attention to the sublime within rhetoric acquired full strength among first-century BC rhetoricians, as shown by the treatise *On the Sublime* by (Pseudo-) Longinus (1995). In the seventeenth century several translations of this treatise aroused interest in the sublime as a general aesthetic category, rather than as a rhetorical style. It should be noted that historically the concept of the sublime

- has been also tied to moral values. Benedetto Croce (1902) even claimed that the sublime is a wrongful intrusion of ethics in the domain of aesthetics.
- 3 Tom Cochrane stresses that this negative aspect of the sublime "is not quite fear, but something that often manifests itself as fear" and calls it "a feeling of self-negation" (Cochrane 2012: 125–126). It is interesting to notice that the idea that sublimity experiences do not involve genuine fear seems to be suggested by experimental data. In their study on the sublime, Tomohiro Ishizu and Semir Zeki (2014) have not found an activation of the main areas associated with experiences of fear, namely the amygdala or the insula. Still, they have found a prominent involvement of the cerebellum, especially of Crus II, which previous studies have found to be activated with fear. However, as we point out later (section 3), it is hard to stimulate an ecologically valid experience of the sublime in a laboratory setting.
- 4 According to Sandra Shapshay (2013, 2014), this aspect of the sublime is downplayed by Edmund Burke (1759). She claims that his account of the sublimity experience "sees it as a largely non-cognitive, affective arousal," which she calls the "thin sublime" (Shapshay 2013, 181). By contrast, she points out that this "exaltation" or "elevation" aspect of sublimity experiences has been "exuberantly" articulated by John Baillie (1747) and is clearly important for both Kant and Schopenhauer. She maintains that the latter understand the sublimity experience "as including, in addition to this affective arousal, an intellectual play with ideas involving especially ideas regarding the place of human beings within the environment" (ibid.). She calls this account the "thick sublime." Emily Brady has contended that another interpretation of "the more reflective aspects" of sublimity experiences can be offered. She contrasts Shapshay's interpretation in terms of "cognitive or intellective components" with an interpretation "in terms of aesthetic feeling or aesthetic apprehension" (Brady 2013: 189). It is beyond the scope of the present discussion to examine in depth this debate, but simply note that there might be no genuine contradiction in talking about cognitive aesthetic feelings or aesthetic apprehensions, namely, feelings that in some way depend on, or are penetrated by, high-level cognitive states.
- 5 As Burke (1759) noted, this is not to say that sublimity experiences cannot be elicited by something small but terrible or vertiginous, such as the infinitely small.
- 6 This is not to say that beauty experiences do not involve reverence or submission like sublimity experiences. Within naturalized aesthetics, Jessie Prinz (2011) stresses the importance of elevation and/or feeling of reverence in aesthetic experiences.
- 7 It is interesting to notice that the activation of these areas seems to reinforce the idea that sublimity experiences have a double (positive and negative) nature (see section
 2). Indeed, as Ishizu and Zeki stress, the head of caudate is taken to correlate with experiences of pleasure, the putamen with experiences of hate and the posterior

- hippocampus with experiences of memory, romantic experiences, as well as with anxiety related to interpreting the environment as posing a threat.
- 8 Interestingly, a recent study has reported that only low-arousing, but not high-arousing aesthetic emotions (in response to music) were accompanied by activity in medial prefrontal cortex (Trost, Ethofer, Zentner, and Villeumier 2012). Thus, an alternative explanation for the absence of activity in self-referential areas could be that sublimity experiences would be more arousing compared to beauty experiences.
- 9 Interestingly, Cochrane also suggests that in sublimity experiences our attention may be captured "to such an intense degree that one becomes unreflectively absorbed in the experience" (Cochrane 2012: 129). Another respect in which his theory implicates a blurring of boundaries is that he characterizes the sublime as a kind of empathic experience (feeling connected to the thing); see his reference to Romain Rolland's "oceanic feeling." Note that if our analogy is right, color experiences also are immersive, but of course much more locally than sublimity experiences. The latter experiences seem to affect the whole phenomenological boundary between the self and the world. An interesting question, raised by a referee, is whether our formulation entails that sublimity experiences do not come in degrees (it seems that in our global sense of "immersion," one cannot be more or less immersed). We leave this question to another occasion.
- Barnett Newman himself was interested in the sublime and wanted to convey sublimity experiences via his art (Newman 1948; see also the article by Arthur Danto on Newman and the sublime—Danto 2002).
- 11 For instance, there are only some hints in Addison's writings about the beautiful and the sublime in music. Burke discusses music only in relation to the beautiful; when concerned with the sublime he talks about sudden, unexpected and loud sounds. "The aural equivalent of vastness," as suggested by Todd Gilman (2009: 535). Arguably drawing from Schopenhauer's view about music (see Boogaard 2007), Richard Wagner maintains that the sublime is the only proper aesthetic category that we must use to judge music (Wagner 1896: 77–78).
- 12 We thank Tom Cochrane and an anonymous referee for extremely helpful comments on an earlier draft of this chapter. Margherita Arcangeli's funding has been provided by the Alexander von Humboldt Foundation.

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Part Four

The Languages of Aesthetics

Lost in Musical Translation: A Cross-Cultural Study of Musical Grammar and Its Relation to Affective Expression in Two Musical Idioms between Chennai and Geneva

Constant Bonard

Can music be considered a language of the emotions? The most common view today is that this is nothing but a romantic cliché. Mainstream philosophy seems to view the claim that "music is the language of the emotions" as a slogan that was once vaguely defended by Rousseau, Goethe, or Kant, but that cannot be understood literally when one takes into consideration last century's theories of language, such as Chomsky's on syntax or Tarski's on semantics (Scruton 1997: chap. 7, see also Davies 2003: chap. 8, Kania 2012). In this chapter, I will show why this common view is unwarranted, and thus go against nowadays' philosophical mainstream by defending what I call the *musicalanguage hypothesis*. 1

In section 1, I will introduce the musicalanguage hypothesis and present, based on empirical evidence, some of the many similarities between language and music and explain why we should take them seriously. I will introduce a framework that aims to explain the communicative power of music using what we already know about linguistic communication (section 1.1). I will then outline several working hypotheses about musical grammar, musical meaning, and affective meaning (section 1.2), and thus defend that music is indeed very close to literally being a language of the emotions.

In section 2, I will detail some of the methodology, expectations, and preliminary results of a cross-cultural study on musical grammar that I am presently conducting between South India (Chennai) and Switzerland (Geneva and Lausanne).² This empirical study focuses on two musical idioms and their

grammatical features: Western classical music of the Common Period (ca. 1600–1900) and South Indian classical music (also known as *Carnatic* music). The main hypothesis of this study is that you need to master the grammar of a musical idiom in order to properly understand its musical meanings.

1. Music, language, and affective meaning: Background theory

1.1. Introducing the "Musicalanguage" hypothesis

In the last three or four decades, especially since Lerdahl and Jackendoff's (1983) seminal book *A Generative Theory of Tonal Music*, more and more works in cognitive science have been interested in using the comparison between music and language to understand how music achieves communication, especially of emotions.³ Now, of course, none of these cognitive scientists would argue that music is a language like English or French. The main issue rather is: How much of the cognitive apparatus that makes up the language faculty overlaps with the cognitive apparatus making up the music faculty? Some people, like me, would tentatively answer: "A very significant part, and at all levels of analysis, from the cognitive mechanisms dealing with smallest units of sounds up to the ones dealing with the most complex linguistic and musical productions." Music would thus make use of cognitive mechanisms used in phonetics, phonology, prosody, syntax, semantics, and pragmatics. I call this idea the "musicalanguage" hypothesis (see Figure 10.1).

One of the most central claims of the musical anguage hypothesis concerns musical grammar and, especially, the nature of musical syntax and its relation to musical meaning. It is now widely accepted that the perception of melodies, harmonies, and rhythms (and hence musical understanding) is grounded in our capacity to form mental representations of musical structures that are hierarchically organized, some notes being structurally more important than

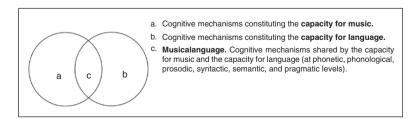


Figure 10.1 The musical anguage hypothesis

others (see, e.g., Brown, Martinez, and Parsons 2006, Granroth-Wilding and Steedman 2014, Katz and Pesetsky 2011, Koelsch and Siebel 2005, Kunert et al. 2015, Patel 2010, Rohrmeier and Neuwirth 2015, Schlenker 2017, Vijayakrishnan 2007). This mental organization is very similar to the one operating in linguistic syntax and can be represented by the same trees that linguists use to represent the syntactic organization of sentences. It can also be formalized by the same conceptual tools.4 It is noteworthy that, based on the theoretical similarities in musical and linguistic syntactic organization, neuroscientists have shown that identical regions of the brain (including Broca's area and its right hemisphere homolog) are used to process both linguistic syntax and musical syntax (Koelsch 2005, Brown, Martinez, and Parsons 2006, Patel 2010, Kunert et al. 2015). Similar works are also happening in psycholinguistics (e.g., Van de Cavey and Hartsuiker 2016). This thriving area of research, which goes far beyond the few examples given here, is especially interesting for us in light of the fact that some eminent language researchers such as Chomsky consider the capacity for syntax to be the only essential feature of our language faculty (see Hauser, Chomsky, and Fitch 2002), which would allow an almost literal reading of our romantic slogan.

Moreover, musical semantics tasks (such as priming tasks) have also been found to require brain activities that have previously been linked with linguistic semantics (the famous N400 response, long thoughts to be activated only with word-stimuli, has been observed with musical extracts, see Koelsch and Siebel 2005). Recently, a program has been launched to establish a formal semantics for music, inspired by truth-conditional semantics (Schlenker 2017). Research on the musical equivalents of phonology, prosody, or pragmatics has also flourished (see, for instance, Rebuschat et al. 2012). All in all, a cognitive science reinterpretation of the romantic cliché that music is a language of the emotions should be taken seriously. This claim will echo in the background of this whole chapter.

1.2. Musical grammar: A working hypothesis

It should not be controversial that there is such a thing as musical grammar for someone who accepts the existence of musical meaning and thinks that grammar (in general) is a cognitive mechanism that mediates between raw sounds (*mutatis mutandis* gestures or written signs) and meaningful entities, which is a common, if rather loose, way of characterizing grammar in linguistics (see Figure 10.2).⁵ Grammar is thus considered here as a higher-order cognitive

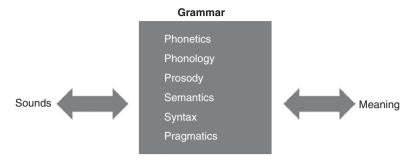


Figure 10.2 A characterization of grammar working for both music and language according to the musicalanguage hypothesis

mechanism that brings together smaller cognitive mechanisms pertaining to phonetics, phonology, morphology, semantics, and syntax. Let me briefly detail these general points about grammar by illustrating five points that are common to verbal and musical grammars.

The grammar of a given *verbal language* allows one (i) to parse a sequence of sounds into relevant discrete elements (e.g., phonemes, words) that (ii) are abstracted from the inevitable physical contingencies (e.g., one phoneme token can be instantiated by different physical sounds), (iii) ignoring irrelevant sounds (e.g., a lisp). This allows one to (iv) fit these discrete elements together into larger, meaningful units (e.g., sentences, arguments). It also allows one (v) to convey, express, or share something with others through a sequence of meaningful sounds. How exactly linguistic grammar should be described is a hotly debated question (see, e.g., Domardzki 2007). Should it be through rules (Chomsky), preference constraints (Prince), constructions (Goldberg), schemas (Lakoff), or in another way? There is no consensus here. However, linguists do agree that a specific grammar yields structural constraints on the formation of acceptable (or natural) sentences and that part of the linguist's job is to make explicit the implicit knowledge we have of these.

Accordingly, the grammar of a given *musical idiom* allows one (i) to parse a sequence of sounds into relevant discrete elements (e.g., notes, motifs) that (ii) are abstracted from the inevitable physical contingencies (e.g., one note token can be instantiated by different physical sounds), (iii) ignoring irrelevant sounds (e.g., the "buzz" of an amplifier). It also allows one to (iv) see how these elements fit together into larger, meaningful units (e.g., melodies, variations). Like the grammar of languages, musical grammar also allows one to convey, express, or share something with others through a sequence of meaningful

sounds. Given a certain musical style or idiom, a musical grammar also yields structural constraints on the formation of acceptable (or natural) sentences, including polyphonic sentences (different melodies that are composed to sound well together). Thus, most composition textbooks largely deal with grammatical issues—at least the ones whose purpose is to formulate explicitly the knowledge of the structural constraints that a composer in that style possesses implicitly. Harmony and counterpoint textbooks thus somehow are the musical equivalents to syntax textbooks we use to learn such or such language.

That being said, linguistic and musical meanings differ so importantly that one might think that talk of musical meaning and musical grammar is merely metaphorical. This is not the place to properly argue for the claim that meaning in music is genuine. What meaning is in language is already a vexed and hotly contested question. One thing that seems secure enough to claim, though, is that meaning, in both music and language, is intrinsically linked with understanding and expression. This is an insight that has been present in most, if not all, philosophy of language since Frege, as stressed by Dummett (1973). Now, when we say that someone has misunderstood a musical passage or that such or such person has succeeded in expressing something in a musical composition, these are not mere metaphors.

Still, though, even if the existence of expression and understanding in music is recognized, one might remain skeptical about genuine musical meaning. What makes it particularly difficult to argue against such skepticism is that, if there is such a thing as musical meaning, it must be ineffable (see Raffman 1993). To give a quick example, in order to understand what Beethoven has conveyed in the *Heiliger* movement of his fifteenth quartet, it is not enough to understand that he expressed his gratitude to the divinity for recovering after a grave illness, although he stated that this is what the piece is about, in the piece subtitle. This factual knowledge can be grasped by someone who is deaf to his music. In order to understand the musical expression, one needs to do so through the very notes that Beethoven composed. This meaning cannot be verbalized.⁶

But a question remains: What exactly is affective meaning in music? I can only briefly say a word about this topic before we go on with the description of the experimental study. To give a simple answer that shouldn't be controversial, we can say that the affective meaning of a musical piece is what one would want to know when asking "What does this music express?" We could also say, with Stephen Davies, that "it is whatever it is that we understand when we (can be said by others to) understand a musical work aesthetically" (Davies 2003: 121).

In the following, I will not only accept this definition but also endorse a stronger claim and characterize musical affective meaning in a more pragmatic way. Following the line of thought inherited by ordinary language philosophy (as in Grice 1957, Strawson 1950, or Wittgenstein 1953), I will adapt to music another slogan: "Meaning is use." I will assume that the affective meaning of a musical extract E of the musical idiom MI corresponds to what competent listeners of MI agree E expresses. Well-trained musicians of MI are here considered as competent listeners.

So, for the remainder of this chapter, think of musical grammar as a cognitive mechanism that takes raw sounds as input and affective meaning as output thanks to a hierarchical, norm-following structural organization that parses raw sounds. Let us now turn to the description of the experiment.

2. Description of the empirical study "Perception and Expression in South Indian and Western Classical Music"

2.1. Main aims

Here are the two main questions that are being tackled in this study:

- (1) Perception of musical structure. Given that different musical idioms have different tonal organizations based on different grammatical structures, would a listener who is familiar with musical idiom MI1, but not with musical idiom MI2, be better than average at perceiving musical structures that respect the grammatical organizations of MI1, but not of MI2? To take an example: if you have listened to a lot of South Indian music and I haven't, would you be better than me at recognizing South Indian melodies? Will you hear the notes, so to say, more distinctly, and thus be able to detect differences in two melodies that will sound the same to me? The hypothesis here is that the answer will be "Yes" to both questions.
- (2) Perception of musical expression. Would a listener who is better at perceiving musical structures from MI1 than from MI2 be also better at telling what is expressed in musical pieces of MI1? To illustrate: if you are better at recognizing South Indian melodies, and hear their notes more distinctly, will you also be better than me at understanding what the musicians/composers wanted to express in South Indian music? I have the intuition that the answer should be "Yes" here too. The main predictive

hypothesis here is that, in order to better understand what is being expressed in a musical idiom, one needs to have developed its musical grammar to a sufficient level.⁷

The main goal of this study thus is to empirically explore how one's familiarity with a given musical idiom affects (1) one's perception of musical structures and (2) the understanding of musical expression in this idiom. The experiment has thus been designed to measure differences and commonalities in populations with varying degrees of familiarity to two musical idioms.

2.2. The grammars of Western classical music and South Indian classical music

The two idioms are Western classical music and South Indian classical music (also called *Carnatic* music). They have been chosen because they are among the only ones whose grammars are described in book-length theoretical works: for South Indian classical music, Vijayakrishnan's *The Grammar of Carnatic Music* (2007) and for Western classical music, for instance, Lerdahl's *Tonal Pitch Space* (2001).

Let me briefly talk about some grammatical commonalities and differences between Western classical and Carnatic musical grammars. In both these idioms, pieces are composed according to principles of *tonality*: they are tonal idioms.⁸ Very roughly, this is the idea that, given a melody, there are some notes that are structurally more important than others, which are the tonal centers, and toward which other notes of that tonality revolve. Atonal melodies, melodies in which there are no perceivable tonal centers, then, are ungrammatical in both idioms.

Both musical idioms are also modal in the sense that their tonal principles are defined by modes. A musical mode is basically a finite set of notes (usually five to nine notes) from which melodies and harmonies are constructed. More precisely, modes are defined by the musical intervals that they allow. A basic principle of tonality is that, given a musical mode, the most important note is the tonic.

Let us give some examples from Western music. In both the modes of C-major and C-minor, the tonic is C. The next most important note in these modes is G (whose interval to the tonic is a perfect fifth). Now C-major uses the note E (interval of major third) while C-minor doesn't and replaces it with the note Eb (minor third). Neither of these modes uses the note Gb (interval of tritone, or diminished fifth). Western classical music is made of only three modes: the major, natural minor, and harmonic minor modes. The first two makes use of seven of the twelve notes available in Western classical music (i.e., the twelve

notes making up the white and the black keys of piano) and the harmonic minor mode uses eight (e.g., the mode C harmonic minor demands an A when the melody goes up and Ab when it goes down). Typically, in a piece of Western classical music, the music changes from one mode to another. This is called a *modulation*. Modulation in Western classical music is very common (there are modulations in virtually every piece), but it is highly regulated. A grammatical principle of Western classical music is that one cannot switch from one mode to another randomly; one must respect the rules governing modulation.

Carnatic music also is made of melodic modes, called *raagam* (singular: *raaga*). In fact, it is made of seventy-two different raagam—sixty-nine more modes than in Western music! Raagam are differentiated not only by which notes belong to the raaga but, among other things, by which melodic movements are authorized or not. As with Western modes, the tonic is the most important note in a raaga but, unlike Western classical music, the perfect fifth may or may not be the second most important one (the perfect fifth is in fact absent in many raagam). As in Western musical modes, there is a total of twelve notes that make up the different raagam, which are roughly the same as the black and white keys of a piano (not quite, as Carnatic music tends to use *just intonation* tuning). Just like Western modes, raagam select a certain number of notes (between five and nine) from these twelve. Unlike Western music, though, Carnatic music can add up to ten more "embellishment notes" called *shruti*. Shruti are micro-tonal intervals, with no fixed pitch, which ornament the notes making up the different raagam.

A very important difference between the grammars of Western and Carnatic music is that in the latter, modulations are not allowed; one must stick to only one raaga during a piece of Carnatic music. Another important difference between the two musical grammars is that Carnatic music uses many raaga that do not fit in the Western minor/major modes. For instance, the raaga called Bhairavi uses the equivalents to C, Db, Eb, F#, G, Ab, and Bb, a mode that sounds very foreign to our ear.

These two grammatical differences are the main ones on which I and K. G. Vijayakrishnan have based the stimuli in the part of the experiment described in section 2.4.

2.3. General procedure

Participants (n = 79) have been recruited according to their familiarity with the two musical idioms. They either come from India (n = 39), or from Europe (n = 40). Fifty-five of these considered themselves music practitioners, that

is, either amateur musicians, semiprofessional musicians, or professional musicians. Twenty-four considered themselves nonmusicians or music lover nonmusicians. Forty-eight were females and thirty-one males. In India, participants were recruited at the University of Chennai (in classes of Carnatic music and of journalism). In Switzerland, they, for the most part, were students of the *Haute Ecole de Musique de Genève* or of the University of Lausanne and EPFL.¹¹

Participants sat together in a room and were asked to fill out a paper questionnaire while listening to musical stimuli through loudspeakers. The questionnaire also included a survey on general background information, musical education, and participants' listening habits with respect to classical and nonclassical Western music, Carnatic, and Indian music in general. After the survey, the experiment came in three parts. For lack of space, the first part of the experiment, on felt emotions, cannot be presented here. 12

2.4. First Hypothesis: Familiarity and the perception of melodic and rhythmic structures

In this part, our aim was to test how participants' familiarity with the two musical idioms affects their perception of musical structures. The musical structures in question were designed to either fit in or to not fit in the grammar of the two musical idioms.

The rationale for this part is the following: it is known that, for Western subjects, atonal melodies are more difficult to encode/memorize/perceive/compute compared to tonal ones (Dowling, Kwak, and Andrews 1995, Schulze, Dowling, and Tillmann 2012, Law and Zentner 2012). The musicalanguage explanation for this phenomenon is that in both music and language, we have more difficulty computing utterances that are ungrammatical in idioms with which we are familiar, and atonal melodies do not respect the syntax of Western tonal music, the idiom with which Westerners are most familiar. This is why they find atonal melodies harder to recognize.

To test this hypothesis as applied to Carnatic versus Western classical music, K. G. Vijayakrishnan and I have designed stimuli that were supposed to either fit in or not to fit in the grammar of the two musical idioms. I then tested how well participants were able to perceive them accurately.

To do so, I used the PROMS (PRofile of Musical Skills) framework. PROMS is a test to measure musical perception skills (Law and Zentner 2012). The paradigm is that subjects are presented (twice) with a first musical stimulus (ca.

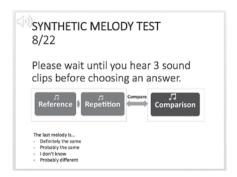


Figure 10.3 The PROMS framework

2–3 seconds long), called the *reference stimulus*, before being presented with a second stimulus, called the *comparison stimulus*. The comparison stimulus is either the same as the first, or slightly different (e.g., one note of a melody is one tone lower). Participants' task is to judge whether they perceive the reference and the comparison stimuli to be the same, different, or whether they don't know, as illustrated in Figure 10.3.

Participants had to answer fifty trials, ten with rhythms and forty with melodies. For half of these fifty trials, the comparison stimulus were the same as the reference stimulus, while there was a change in the comparison stimulus for the other half. The ten rhythmic trials and ten of the forty melodic trials were borrowed from the mini-PROMS (Kunert, Willems, and Hagoort 2016) and were used as control. They won't be described here. I will now describe the thirty stimuli that were specifically designed for the present study. All of them were designed to either respect or not respect the grammars of Western and Carnatic music. They break down into two main categories:

(i) Twelve stimuli were created with a computer sound, the same as in PROMS and mini-PROMS: the "harpsichord" timbre from Logic Pro. This sound has been selected because it is clear, distinct, and relatively neutral, that is, less familiar to most listeners compared to the sounds of other instruments (Law and Zentner 2012: 4). These twelve stimuli were composed of monophonic melodies with constant rhythms (10–18 eighth notes), as in Figure 10.4. Three of these twelve trials were designed to be grammatical only in Carnatic music—they were based on raagam (grammatical in Carnatic music) that do not fit in the Western major/minor modes (ungrammatical in Western classical music). Three of these twelve trials were based on raagam chosen so that they, by



Reference stimulus

Comparison stimulus

These figures show the transcription of the stimuli of two trials where reference and comparison stimuli are different. The difference in the bottom trial is harder to detect than in the top one because the melodic structure is atonal (differences are marked with a *).

Figure 10.4 Examples of melodic stimuli

contrast, fit in the Western major/minor modes (grammatical in both Western and Carnatic music). These three stimuli were thus supposed to be as neutral as Logic Pro "harpsichord" melodies can be with respect to the two musical cultures. Three of these twelve trials were constituted of modulations (harmonic sequences) and designed to respect Western musical grammar, but not Carnatic musical grammar: as said above (section 2.2), modulations are considered ungrammatical in Carnatic music (Vijayakrishnan 2007: 71), but are common in Western classical music. Finally, three of these twelve trials were designed to respect neither Western nor Carnatic systems; they were constituted of completely atonal melodies, not fitting in any raaga or Western mode.

(ii) Eighteen stimuli were recordings of violin played either by a Western semiprofessional violinist (Mathieu Orioli) or a Carnatic professional violinist (Lalitha Raghavan). Each of these eighteen trials were based on the eighteen violin pieces used in the second part of our study (see below). Thus nine were extracted from the Western classical repertoire and nine from traditional Carnatic playing. An example is given in Figure 10.5.

We used both violin and computer-generated stimuli because each has its advantages and disadvantages. The main advantage for recorded violin is that it is more ecological; in Carnatic and Western music, the way instruments are played differ widely, even if it is the same instrument. This is an important part of what makes these musics unique, and the way instruments are played is certainly part of their grammar (on a phonological or prosodic level). The



Comparison stimulus (different notes are marked with a *)

Figure 10.5 A reference and comparison stimulus selected from the Mozart extract

main disadvantage is that it is hard to control for each of the parameters that vary between the comparison and reference stimuli. A violinist might attempt to play the same melody twice and, even though it would sound the same to his or her ears, a slight difference might persist. For the violin stimuli, participants were asked to judge whether *the notes* of the melody in the reference and comparison stimuli were the same or different, and to ignore any difference in rhythm, tuning, or interpretation. Still, human error brings in unknown variables. The main advantage of computer-generated stimuli, on the other hand, is that we can control for each of the parameters that are modified in the comparison and reference stimuli. The main disadvantage is that these sounds are unnatural to both grammars, and especially to Carnatic music. This asymmetry is not surprising since Logic Pro is a computer program designed to reproduce Western music, which unfortunately is the case for any standard music computer program.

As explained above, our overall expectation for these thirty melody trials was that for someone who is more familiar with a given musical idiom, the melodic structures that are grammatical in this idiom will be easier to encode. Thus, we expected that Carnatic musicians would be better than Western musicians at identifying melodic trials that do not fit in the Western modes but fit in Carnatic raagam, while Western musicians would be better than Carnatic musicians for the melodic trials that display modulations.

As data collection ended a few days before this chapter was submitted, the analyses presented here are only preliminary. We took participants' scores (reflecting their performance at the task consisting in determining whether the reference and comparison stimuli were the same) and looked at how they were impacted by the type of music (Western vs. Carnatic) and the demographic origin of participants (Switzerland vs. India). To this end, we conducted a three-way

ANOVA with scores as a dependent variable and the three following factors: (i) whether the stimuli respected the rules of Western music, (ii) whether the stimuli respected the rules of Carnatic music, and (iii) the participants' demographic origin. We hypothesized that the first two factors would interact with the third, so that music stimuli that respect Western or Carnatic rules would yield higher scores, but this effect would be greater for European participants in the case of Western music, and greater for Indian participants in the case of Carnatic music.

As predicted, we found an interaction effect between stimuli's respect of Western rules and participants' demographic origins: F(1,75) = 17.08, p < .001. Music that respected Western norms were more easily recognized (F(1,75) = 126.82, p < .001, but the score increase was higher for European participants than for Indian participants (see Table 10.1). However, contrary to our prediction, we found no interaction between stimuli's respect of Carnatic rules and participants' demographic origins: F(1,75) = .81, p = .37. Music that respected Carnatic rules was also more easily recognized (F(1,75) = 42.87, p < .001), but the extent of this facilitation did not differ between European and Indian participants.

We venture that this asymmetry between Western and Carnatic stimuli might be due to a combination of three factors: (i) As said above, the computergenerated stimuli do not reflect Carnatic music as well as Western music; the Carnatic stimuli might thus have sound "foreign" even to familiar Carnatic listeners. Less foreign than the atonal stimuli, but as much as the Western ones. (ii) Concerning the violin stimuli, the human error variable discussed above might have been greater in the Carnatic stimuli, making them unfit to measure participants' familiarity to Carnatic music. (iii) Concerning the violin stimuli again, since Carnatic music is not a fully written music, it is more ambiguous than in Western music whether the notes of two melodies played on an instrument are the same or not, both for musicians and for listeners. This might have been a source of confusion, especially for the Indian musician participants. In Western music, the notes of two melodies are different if and only if they wouldn't be written with the same symbols on a score. Carnatic music uses no score and the concept of a note in this tradition is not as agreed upon as in Western classical music. For instance, there is an ongoing debate as to how many shruti, or embellishment notes, there are (see Datta et al. 2006 and section 2.2).

In any case, for both Indian and Western populations, the Western and atonal stimuli confirmed the expectation that it would be easier for someone who is more familiar with a given musical idiom to encode the melodic structures

	Western rules		Carnatic rules	
	European part.	Indian part.	European part.	Indian part.
Respected	1.14 (0.66)	0.49 (0.72)	0.84 (0.84)	0.42 (0.74)
Not respected	0.10 (0.53)	0.14 (0.57)	0.40 (0.67)	0.08 (0.60)

Table 10.1 Results for the first part of the study (participants' scores to the recognition task, in function of the type of music and participants' demographic origin)

that are grammatical in this idiom, a result that makes a lot of sense from the perspective of the musical anguage hypothesis.

2.5. Second Hypothesis: Familiarity and judgment of emotions expressed by music

In the second part of the experiment, participants were presented with eighteen extracts of pieces for solo violin of one minute each. Their task was to rate continually, while the music was playing, how much they thought the music expressed a given affective dimension (see Tables 10.2 and 10.3 for the affective dimensions in question; more on this later). They did so for each of the twelve 5-second slots of the one-minute pieces. This real-time methodology was a pen-and-paper adaptation of the "dynamic judgment" framework developed in Torres-Eliard et al. (forthcoming). This dynamic method allows for the investigation of the attribution of emotional characteristics to music in a very precise manner. Hence, through the judgment of competent listeners, this allows for a detailed investigation of what I called above the affective meaning of music.

The nine target affective dimensions are the ones composing the Geneva Emotional Music Scale (GEMS) developed by Zentner, Scherer, and Grandjean (2008). These nine dimensions have been selected through an elaborate empirical process whose goal was to select, from an initial list of about 400 items, the terms that best reflect the affects most frequently expressed and evoked by music. I used the GEMS model as it currently represents the most effective attempt to study affective dimensions related to music (Torres-Eliard et al. forthcoming).

For this second part of the study, the stimuli consisted of extracts from the Carnatic and Western classical music traditions played on a solo violin. The Western classical music extracts were played by renowned violinist René Capuçon. The Carnatic music extracts were played by professional violinist

Table 10.2 Western classical music pieces used in this study and the GEMS affective dimension they target

Piece (first 1 min. of each)	Target GEMS Dimension
Bach, Partita no. 2 in D minor, BWV 1004, I.	Nostalgic, sentimental
Beethoven, Violin concerto in D major, Op. 61, II.	Relaxed, peaceful
Franck, Sonata for piano & violin in A major, FWV 8, II.	Melancholic, sad
Glück, "Melody" from Orpheus & Eurydice	Full of tenderness, warmhearted
Massenet, "Méditation" from Thaïs	Moved, touched
Mendelssohn, Violin concerto no. 2 in E minor, Op. 64, I.	Tense, uneasy
Mozart, Violin concerto no. 3 in G major, K. 216, I.	Joyful, lively
Schumann, Violin concerto in D minor, Op. Posth., I.	Powerful, strong
Sibelius Violin concerto in D minor, Op. 47, I.	Filled with wonder, amazed

Lalitha Raghavan. I chose to use a solo instrument because accompaniment in Western and Carnatic are too dissimilar. The violin was the obvious choice as it is an instrument that belongs to the core of both these musical traditions. Recorded extracts of professional musicians playing solo violin thus constituted a culturally neutral, sufficiently expressive, and musically ecological medium.

Apart from these criteria, these extracts were selected because of their expressive qualities. Each of the nine Western extracts and each of the nine Carnatic extracts target one of the nine affective dimensions of the GEMS (see Tables 10.2 and 10.3). The nine Western classical music extracts had already been selected to target the nine GEMS dimensions in a previous study in which their capacity to evoke the targeted affective dimensions was confirmed (Labbé and Grandjean 2014). I used the same recordings.

The nine Carnatic music extracts were selected and designed by K. G. Vijayakrishnan and Lalitha Raghavan. Representative of Carnatic music practice, these extracts were either improvizations based on previous compositions or free improvizations (aalaapanai and/or taanam). Like the Western stimuli, each of them targeted one of the nine GEMS dimensions.

Our general expectations for this section were as follows: Western musicians will be better at recognizing what affective dimensions are expressed in the Western extracts and Indian participants will be better at recognizing what affective dimensions are expressed in the Carnatic extracts. From the musicalanguage hypothesis perspective, the idea here is that participants more familiar with a given idiom will better understand what the musical utterances

Type of Composition and/or Improvization	Raagam	Target GEMS Dimension
The čaraNam of Tanjai Naalvar's composition "Amba Niilaambari" rendered as semi-free variation	Niilaambari I	Nostalgic, sentimental
A mix of aalaapanai and taanam	Reevagupti	Relaxed, peaceful
Aalaapanai	Nadanamakriya	Melancholic, sad
A free rendering of the swara-saahityam of Subbaraya Shastri composition "Eemaninne"	Mukhaari	Full of tenderness, warmhearted
The "Anupallavi" of Maayamma/Shyama Shastri composition rendered as a free, arrhythmic variation.	Aahiri	Moved, touched
Free rendering of a part of the Tillaanaa composed by Lalgudi Jayaraman	Tilang	Tense, uneasy
A mix of aalaapanai and taanam	Moohanam	Joyful, lively
A mix of taanam and aalaapanai	AThaaNaa	Powerful, strong
The chittaswaram of the Tygaraja composition "Nenarunci naanu"	MaaLavi	Filled with wonder, amazed

Table 10.3 Carnatic music pieces used in this study and their targeted GEMS affective dimension

in this idiom are meant to express, better at understanding the musical affective meaning.

Quantitatively, given the available data, this translates in several ways. We will just concentrate on the most straightforward analysis, without taking into account differences between the nine GEMS dimensions, or the time curves resulting from the five-second slots dynamic judgments. These further analyses will be available in Bonard, Grandjean, and Vijayakrishnan (forthcoming).

The hypothesis examined here was that Western participants would judge Western music as more expressive than Carnatic music and vice versa. To test for this hypothesis, we ran a two-way ANOVA with participants' expressiveness judgments as a dependent variable and two factors: (i) the type of music (Western vs. Carnatic), and (ii) the participants' demographic origin (European vs. Indian).

We indeed observed an interaction effect: European participants judged Western music as more expressive than Indian participants, while Indian participants judged Carnatic music more expressive than European participants: F(1,73) = 3.84, p < .001 (see Table 10.4).

	Western music	Carnatic music
European participants	3.38 (0.51)	3.10 (0.58)
Indian participants	2.80 (0.69)	3.16 (0.68)

Table 10.4 Results for the second part of the study (participants' expressiveness scores in function of type of music and participants' demographic origin)

2.6. Further question: Do you need to have learned the musical grammar of an idiom in order to understand its musical meaning?

In the previous sections, we have seen that familiarity with a certain kind of music (i) can improve one's understanding of its grammar, and (ii) can improve one's perception of expressiveness. In light of these results, my overall hypothesis is that differences in the perception of affective expression—that is, differences in understanding musical meaning—might be partially explained by different levels of grammatical mastery. Just as with linguistic idioms, and despite the fact that music lacks vocabulary, a mastery of the idiom's grammar would ground the ability to understand and express meaning. This is tantamount to saying that, as Westerners, we understand our classical music better than Carnatic music because we have a poorer grammatical knowledge of Carnatic music, it being a foreign musical idiom. If this hypothesis is correct, it would in turn explain some cultural asymmetries in musical tastes and aesthetics, and why people tend to better understand the values of musical idioms with which they are more familiar. Perhaps even why someone who has not grown up listening to rap music might find it difficult to understand what is interesting about it, musically speaking, compared with someone for whom rap is like a musical mother tongue. Further empirical studies are needed to explore these more general and exciting hypotheses.

3. General conclusion

In this chapter, I have briefly introduced the notion of musical grammar and its relation to meaning in music. I have situated those concepts in a theoretical framework emphasizing the similarities between music and language and highlighting the fact that they have an important overlap of cognitive properties. I have then presented the musical anguage hypothesis, which states that music

makes use of cognitive mechanisms traditionally ascribed to linguistic phonetics, phonology, prosody, semantics, syntax, and pragmatics.

Within this framework, I have described an empirical study that I am conducting between two musical idioms: Western and South Indian classical music. This study focuses on their grammatical differences. I have shown that it is possible to formulate testable hypotheses about musical grammar and musical meaning by testing perception of musical structures and affective expressions in populations with different levels of mastery for the two musical idioms.

The full results of this study are not yet available, and I have been able to present only preliminary analyses of our findings. However, irrespective of whether the hypotheses given above are falsified or corroborated, they should be of interest to music researchers, especially because of this study's cross-cultural take, an area of research where empirical data is crucially lacking, but which bears on important issues in the aesthetics of music.

Regardless of the empirical results that this study will yield, I hope to have been convincing in arguing that the similarities between language and music should be taken seriously. Combining insights from romantic philosophers and cognitive scientists is a promising research program in aesthetics and allows a fresh look at old philosophical problems from an experimental perspective.

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Notes

1 A note for those interested in the philosophy of language: I agree with Davies's (2003: chap. 8) point that musical meaning is neither propositional (propositions understood as the primary bearers of truth and falsity), nor conceptual (concepts being understood as the essential constituents of propositions and as the arguments of logical structures). Music is thus, strictly speaking, unapt for a truth-conditional semantics, unlike verbal languages. This doesn't mean it is unapt for

- a "super-semantics" (Schlenker 2017). Compare: Most (if not all) nonhuman animal communication supposedly is neither propositional nor conceptual but, as Schlenker argues, something like a truth-conditional semantics can be developed to analyze their communication.
- 2 The data is still being collected as I write this chapter. It will be analyzed with the help of two collaborators and published in Bonard, Grandjean, and Vijayakrishnan (in preparation); submission planned for 2018.
- 3 For an in-depth and very competent discussion, see Patel (2010).
- 4 In the technical terminology of MIT linguistics, Katz and Pesetsky (2011) argue that musical syntax, just like linguistic syntax, yields headed structures generated by an iterated binary Merge.
- 5 Such a characterization can be commonly found in linguistics textbooks such as O'Grady and Archibald (2011). I would have preferred giving a more precise characterization but, alas, being loose unfortunately seems to be a prerequisite for someone who, like me, does not want to exclude a priori either generative or cognitive linguistics.
- 6 For some, this just shows there is no real meaning here. This is not the place to argue against such a view. For arguments that Western instrumental music can have proper meaning, see for instance Davies (2003), Levinson (2011), Schlenker (2017), or Scruton (1997), and for Carnatic music, Vijayakrishnan (2007). In the following, we will thus assume that what we call affective meaning is a plausible candidate for the output of a musical grammar in both these traditions.
- 7 Since this chapter belongs to a book on experimental philosophy and what I have said up to this point primarily comes from psychological and musicological sources, it might be worth at this point listing a few of the philosophical questions that are relevant to the present study: Can music communicate anything objectively or do we just project our personal opinions onto the music? How can music be meaningful given that it is only abstract patterns of sound? What is the difference between linguistic meaning and musical meaning? Can we speak literally of musical grammar? What does it take to be a competent listener of a given musical idiom? Of course, these questions, which have been discussed by philosophers for centuries, are not going to find a definite answer here. The main purpose of this chapter is to show how empirical studies help us to take fresh look at them while supporting or debunking some philosophical claims.
- 8 In the broad sense of the term, which doesn't imply functional harmony.
- 9 Here, in order to simplify terminology and comparison between the two idioms, I use the word "mode" in a broad way and don't distinguish between melodic modes, harmonic modes, scales, and tonality. This also allows me to talk of raagam as modes.
- 10 The number of shruti is a controversial question; see Datta et al. 2006.

- 11 It should already be noted though that, because Western music has been increasingly present in South India through mass-media and cultural globalization, especially in urban environments such as that of Chennai, there should be an asymmetry between Western and South Indian subjects. Even if it is mostly Western *popular* musics rather than Western classical music that has spread to India, we can expect an asymmetry as Western popular music has widely borrowed its harmonies, melodies, and rhythms from Western classical music.
- 12 It will be presented in Bonard, Grandjean, and Vijayakrishnan (in preparation).
- 13 Which, of course, is not completely neutral: Logic Pro has been designed for Western music and its sounds are thus biased (e.g., they use equal temperament tuning, they don't allow for shrutis, notes are attacked staccato, etc.) Still, Indian music students often use Western keyboards to learn music and so the bias might not be so strong.

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An Empirical Approach to Aesthetic Adjectives

Isidora Stojanovic

This chapter surveys some recent studies of aesthetic adjectives in theoretical and experimental linguistics, evaluates the impact of these studies on our conceptual understanding of aesthetic discourse, and discusses the prospects for future investigations. After providing some background on the semantics of adjectives, I present the experiments from Liao and Meskin (2017), which suggest that the aesthetic adjectives "beautiful," "ugly," and "elegant" do not fit squarely into the standard typology of adjectives. I discuss various semantic and pragmatic factors that may be responsible for the observed results, and close with some thoughts about what the next steps of inquiry should be.

1. Introduction

We all have a certain intuitive grasp on the difference between evaluative aesthetic statements and nonaesthetic statements. Consider the following statements about the Korean movie *The Wailing (Goksung)*:

- 1. This is another superb film from Na Hong-jin. (Jonathan Hathfull, *SciFiNow*, July 20, 2016).¹
- 2. Terrible. Overly-long, awfully executed film. (Sam Kearny, Rotten Tomatoes Audience Reviews, November 19, 2016).²
- 3. The movie opens with a police sergeant, Jong-gu, investigating a double murder in his quiet, rural village. (Glenn Kenny, *New York Times*, June 2, 2016).³

The first two statements express aesthetic evaluations of the movie at stake—positive in the case of (1), negative in the case of (2)—and, in this respect, stand in clear contrast with (3), which is a merely descriptive statement about the movie.

While the contrast between (1) and (2) on the one hand, and (3) on the other, seems clear and uncontroversial, there are many statements that broadly belong to aesthetic discourse, yet which we are more reluctant to classify outright as aesthetic statements. Consider:

4. Two-and-a-half hours long, but never slow, *The Wailing* takes its time to burrow under your skin, but by the time it weaves its dark, potent spell, it leaves you with a lingering, unshakeable sense of dread that Hollywood horror films can rarely muster. (David Hughes, *Empire*, November 21, 2016).⁴

Number (4) shares features with descriptive statements such as (3) as well as with evaluative statements such as (1) or (2). Like (3), it describes the movie, but unlike (3), the aim of the description is not, or at least not *only*, to inform the interlocutor about what the movie is like. Rather, the aim of (4) is to describe the movie in such terms as to convey the speaker's overall assessment of the movie. In this case, the speaker conveys a positive evaluation; however, unlike (1) or (2), the way in which the evaluation is conveyed relies on a large array of factors, including general knowledge about cinema, a set of shared (aesthetic and other) values, expectations about the intended interpretation, and similar pragmatic factors (see Stojanovic 2016 for discussion).

Although (4) may be more representative of aesthetic discourse than (1) or (2), current research in the semantics of aesthetic expressions tends to focus on statements like "the movie is superb" or "the movie is terrible," and I shall align here with this tendency. The chapter is structured as follows. Section 2 provides some background on the classification of adjectives. Section 3 presents the experimental studies from Liao and Meskin (2017), which aim to show that aesthetic adjectives pose a challenge for this classification. Section 4 discusses three sets of factors that may be responsible, at least in part, for the observed results, and concludes with some thoughts about possible future investigations.

2. Some background on adjectives: Gradable, relative, absolute

Adjectives have been studied in formal semantics for several decades; a taxonomy has been established that helps to classify them in virtue of their semantic features. One of those features is gradability. Intuitively, gradable adjectives are

those that ascribe properties that an object can have *to a certain degree*, while non-gradable adjectives ascribe properties that cannot be graded, but that an object either has or lacks. To continue in the realm of movie talk, consider the compound adjective "15 rated." Any movie either is or is not 15 rated (that is, is restricted to audiences of 15 years or over), and it makes no sense to ask *how much* a movie is 15 rated, or whether one movie is *more* 15 rated than another. By contrast, the adjective "long" describes a property that movies can have to a greater or a lesser degree. A movie can be *very* long or can only be *a bit* long, and some movies are longer than others. An easy way to check whether an adjective is gradable is to check whether it is felicitous in comparative constructions.

Gradability is probably the feature of adjectives that has been most discussed in the semantic literature on adjectives (see Kamp 1975 or Klein 1980 for early works, Yoon 1996, Rotstein and Winter 2004, or Kennedy and McNally 2005 for classic works, and Morzycki 2015 or Burnett 2016 for more recent works). Gradability is a very common feature, among aesthetic adjectives and in general. "Beautiful," "ugly," and "pretty" are clearly gradable, and so are arguably all the adjectives that figure in the list given in Sibley (1959: 421) as core examples of aesthetic concepts: unified, balanced, integrated, lifeless, serene, somber, dynamic, powerful, vivid, moving, trite, sentimental, tragic, graceful, delicate, dainty, handsome, comely, elegant, garish, dumpy.

Let us momentarily bracket the issue of how best to account for gradability, and turn to a further division among gradable adjectives. Consider these two pairs of antonyms: "long" versus "short" on the one hand, and "full" versus "empty" on the other. All four adjectives are gradable: just as things can be longer or shorter, they can be fuller or emptier. Consider a theatre that is occupied to two-thirds of its capacity on Friday night, and to only one-third on Saturday night. Then we would naturally say that the theatre was fuller on Friday night than on Saturday and, conversely, that on Saturday night it was emptier than on Friday, although on neither occasion was it either full or empty. For a theatre to be full, it should be occupied to the maximum of its capacity, and for it to be empty, there should be not a single person in it.5 Now, "short" and "long" are different in that respect. Consider two roads, respectively 200 km. and 20 km. long. This still does not give us enough information in order to decide whether those roads are long or short. Thus in a situation in which the only way to get from one place to the other is on foot, even the 20 km. road will likely count as long. Conversely, in a situation in which we discuss, say, the China network of bullet trains, even the 200 km. road will likely count as short. The upshot of these examples is that in order to decide whether something is long or short, it is typically not enough to

know how long it measures. What is further required is that the context should supply some reference—a threshold, a comparison class, or a standard—relative to which we assess the length of the thing at stake.⁶

To bring the point home, *relative* gradable adjectives are those that, like "long," "short," "cheap," "expensive," "cold," or "warm," do not already come with a standard, so to speak, but require the context to provide one. In contrast, *absolute* gradable adjectives, such as "empty," "full," "open," "closed," "bent," or "straight" are such that their standard is given in advance. Thus for a thing (such as a door) to be open is for it to have some degree of aperture, and to be closed is to have zero aperture; for a thing to be straight is to have zero deviation, and to be bent is to have some degree of deviation; and so on. While this is an intuitive approximation to the relative-absolute distinction, there are linguistic tests that motivate it more robustly. The tests fall into two categories, the first having to do with the way in which these adjectives combine with various modifiers, the second having to do with the entailments that are triggered by the use of these adjectives in a comparative form. Let us look more closely at each.

There is a fair amount of agreement among scholars that the modifier "very" is felicitous with relative adjectives, but not so with absolute adjectives. Compare:

- 8. This road is very long.
- 9. The rent was very expensive.
- 10. #The room is very empty.
- 11. #The door was very closed.

Conversely, there are modifiers, such as "completely" and "almost," that are felicitous when used with an absolute adjective, but not so with a relative one. Compare:

- 12. #This road is completely long.
- 13. #The rent was almost expensive.
- 14. The room is completely empty.
- 15. The door was almost closed.

As it often happens with felicity judgments, tests of this sort may not always provide a clear-cut division. Take, for instance, the adjective "dark," which appears to work fine with all three modifiers:

- 18. The room was very dark.
- 19. The room was completely dark.
- 20. The room was almost dark.

However, the fact that we may find adjectives that are felicitous with both kinds of modifiers (those, like "very," which are typically felicitous with relative adjectives, and those, like "completely" and "almost," which are typically felicitous with absolute adjectives) is not by itself sufficient to discredit the relative-absolute distinction, for there can be both semantic and pragmatic explanations for a use that one would not initially expect—a point to which I will return in section 4.1.

Let us now look at the second set of tests that aim to track the relativeabsolute distinction. In the case of absolute adjectives, when the adjective is used to compare two things, that normally licenses some inference as to whether the adjective applies to those things or not. Adjectives that pattern like "closed" or "full," and whose standard lies at the upper endpoint of a scale (to use semantic jargon) give us the entailment pattern in (21), as witnessed by the natural inference from (22) to (23):

- 21. A is more F than B. = B is not F.
- 22. The room upstairs is fuller than the one downstairs.
- 23. The room downstairs is not full.

Other absolute adjectives, namely those that pattern like "open" or "bent" and whose standard lies at the lower endpoint of a scale give us the entailment pattern (24), as exemplified by the inference from (25) to (26):

- 24. A is more F than B. = A is F.
- 25. This rod is more bent than that one.
- 26. This rod is bent.

When it comes to relative adjectives, no such entailment patters are available.

3. How do aesthetic adjectives fare with respect to the relative-absolute distinction?

In a pioneering set of studies, Liao and Meskin (2017) set out to examine how the aesthetic adjectives "beautiful," "ugly," and "elegant" fit into the relative-absolute taxonomy. At first glance, "beautiful" and "ugly" pattern like relative adjectives: they are perfectly felicitous when combined with the modifier "very," and sound marked, if not outright infelicitous, when combined with modifiers "completely" or "almost."

- 27. The photography in *The Wailing* is very beautiful.
- 28. ?? The photography in *The Wailing* is completely beautiful.
- 29. ?? The photography in *The Wailing* is almost beautiful.

"Beautiful," "ugly," and "elegant" also seem to pattern like relative adjectives when it comes to entailment tests. Consider two objects, say buildings, such that you would not describe them as "beautiful" (though they needn't be ugly either). It will still make sense to compare them as to which one is "more beautiful," as in:

30. The Ryugyong Hotel in Pyonyang is more beautiful than the Elephant Building in Bangkok (even though neither of them is beautiful).

Although initial evidence suggests that "beautiful" is a relative gradable adjective, Liao and Meskin (2017) seek to establish that "beautiful," "ugly," and "elegant" also differ significantly from paradigmatic relative adjectives, such as "tall" or "expensive," but at the same time also differ from the paradigmatic absolute gradable adjectives, such as "full" or "bent." They write: "Our results present a prima facie empirical challenge to a common distinction between relative and absolute gradable adjectives because aesthetic adjectives are found to behave differently from both." (2017: 371).

Liao and Meskin's motivation for this claim relies on a series of experiments designed to see how ordinary speakers understand those adjectives. For their experiments, they took inspiration from those conducted by Kristen Syrett (Syrett 2007, Syrett, Kennedy, and Lids 2010), who sought to show that the relative-absolute distinction was not just a theoretical distinction but also had a psychological reality. Syrett and her colleagues presented the participants (both children and adults) with pairs of object that are comparable in terms of a given property—such as length, openness, fullness, and so on—and asked them to choose the object with that property. For example, they would present them with two lines of different lengths and would instruct them to pick out "the long one." Or they would present them with two lines that are bent to different degrees and would ask them to pick out "the straight one." The crucial observation that Syrett, Kennedy, and Lids (2010) established with their experiments is that there is a striking difference between relative and absolute adjectives when it comes to answering this sort of task. For relative adjectives, speakers will naturally choose as "the F" that object that has F to a higher degree: for example, they will pick out as "the long line" the line that is longer than the other. In the case of absolute adjectives, on the other hand, speakers are not disposed to understand "the F" as referring to the object that is more F than the other: for example, if neither of the lines is straight, even though one is straighter than the other, they will not pick the straighter line as "the straight one"; rather, they will refuse to make any selection.

Liao and Meskin conducted four experiments, in which they applied Syrett's experimental paradigm to the aesthetic adjectives "beautiful," "ugly," and "elegant." In Study 1, they presented the participants with the following stimuli: disks that were *spotted* to different degrees, rods that were *bent* to different degrees, blocks that were *long* to different degrees, and faces that were *beautiful* to different degrees. The disks, rods and blocks stimuli were taken from Syrett (2007), while the faces stimuli consisted of photographs of one and the same face, digitally manipulated so as to exhibit three degrees of asymmetry. There were two comparison sets created, the first consisting of the least asymmetric and the intermediately asymmetric face, and the second consisting of the intermediately asymmetric and the most asymmetric face. The participants were then asked to select one response among the following:

- 31. Object A is the straight/spotted/beautiful/long object.
- 32. Object B is the straight/spotted/beautiful/long object.
- 33. I can't. Neither object A nor object B is straight/spotted/beautiful/long.
- 34. I can't. Both object A and object B are straight/spotted/beautiful/long.

Study 2 used again the "long" and "spotted" stimuli, but instead of "beautiful" used its antonym "ugly," and in addition to the face stimuli, there were two more sets of stimuli: pictures of one and the same car, digitally manipulated so that it looked brand new on the one, and old and decayed on the other, and pictures of one and the same flower, such that it looked all fresh on the one and all faded on the other. In Study 2, in addition to the multiple choice question as in (31)–(34), the participants were given a comparison task, and were asked to choose among "Object A/B is uglier/longer/more spotted than object B/A," "Neither object is ugly/long/spotted," and "Both objects are equally ugly/long/spotted."

Before we move to the next two studies, let us pause to reveal the results of the first two. In Study 1, 97.4 percent of participants complied with the request to pick out the long object, 17.9 percent, with the request to pick out the straight object, and 10.3 percent with the request to pick out the spotted object. This replicates the results observed by Syrett and her colleagues. On the other hand, 43.6 percent of participants complied with the request to pick out the beautiful object when presented with face stimuli, suggesting that "beautiful" does not behave like "long," "straight," or "spotted." In Study 2, as previously noted, the

participants were also tested for the comparative judgments, which gave a finding interesting in itself, since 37.1 percent did not find one face uglier than the other, 12.8 percent did not find one car uglier than the other, and 23.1 percent did not find one flower uglier than the other. Those participants who were unwilling to make a comparative judgment were then filtered out from the final results, yielding results similar to those obtained in Study 1. In a nutshell, almost everyone will pick out the longer block as "the long one" and almost no one will pick out the disk that has more spots on it as "the spotted one," while roughly one participant out of two (among those willing to make the comparative judgment) will pick out the uglier face, car, or flower as "the ugly one."

In the next two studies, Liao and Meskin aimed to address several concerns with which the first two studies had been met. One of the concerns was the choice of the stimuli. For one thing, they realized that using digital variants of the same original photograph was problematic. As they themselves write, "Perhaps some participants refused to make selective or comparative judgments when they deemed two stimuli as too similar or indistinguishable. Or perhaps some participants refused to make selective or comparative judgments when they saw two stimuli as depicting one and the same object" (2017: 382). For another, they decided to replace stimuli containing mundane objects (people, artefacts, plants) with works of art. The new stimuli consisted of (photographs of) abstract sculptures by Barbara Hepworth, Henry Moore, Constantin Brancusi, and Isamu Noguchi. Another concern was the methodology, which initially consisted in asking participants to assent to statements of the form "Object A/B is the [adjective] object." In the new studies, participants were asked to select "the [adjective] one" by clicking directly on the relevant picture (and were also given the option of clicking on the button "I can't perform this task," which would prompt a window in which they could say why they could not perform it). In both studies, the stimuli were the same: the photographs of abstract sculptures, the blocks, and the disks, and the adjectives tested were "beautiful," "elegant," "long," and "spotted." The difference between the two studies is that in Study 3, the comparative task consisted in asking the participants to "pick out the one that is more beautiful/elegant/spotted/longer," while in Study 4 they were asked to rate the two objects individually, each on a sliding scale from 0 ("not at all") to 100 ("extremely").

The results obtained in the second two studies appear to be in line with those obtained in the first two studies. In Study 3, approximately one participant in five was unwilling to judge that one of the sculptures was either more beautiful or more elegant than the other. Once these participants were filtered out, the

remaining results showed, just as in the earlier studies, that (with respect to the stimuli at stake) "beautiful" and "elegant" pattern differently both from "long" and from "spotted"; and Study 4 yielded similar findings.

4. What do the studies in Liao and Meskin (2017) actually show?

The research conducted by Liao and Meskin (2017) unquestionably constitutes a groundbreaking step in the research on aesthetic adjectives. Its importance is twofold. First, it is one of the few recent attempts to examine how aesthetic adjectives fit into the general classification of adjectives, and to tackle the question of which semantic characteristics aesthetic adjectives display. It must be noted that, with few exceptions such as McNally and Stojanovic (2017) or Liao, McNally, and Meskin (2016), this question has been largely ignored, despite an extremely lively interest in expressions that exhibit subjectivity, but an interest that has focused almost exclusively on predicates of personal taste (for literature overview, see, e.g., Bylinina 2014). Second, the methodology that they adopt nicely reflects a recent yet growing tendency to use experimental methods for the purpose of linguistic discovery.

Despite its unquestionable merits, Liao and Meskin's work and, in particular, the claims that they draw from their findings, have several shortcomings, some of which they themselves note but then discard all too quickly. One of the main shortcomings is that the results of their experiments do not provide the ground for deducing any interesting conclusions regarding aesthetic adjectives. Let me explain. What the results show is that "beautiful," "ugly," and "elegant," as applied to the stimuli presented to the participants, do not align either with "long" or with "spotted." However, the studies do not reveal any stable pattern in the way in which the participants interpreted "beautiful." Recall that for an adjective such as "long," and a stimulus consisting of two blocks, one of which is clearly longer than the other, a great majority of participants picked out the longer block as "the long one." Similarly, for an adjective such as "spotted," and a stimulus consisting of two disks, one of which contains more spots than the other, a great majority of participants refused to pick out the disk with more spots on it as "the spotted one." In both cases, a clear tendency emerges. But what about the findings with "beautiful," "ugly," and "elegant," as applied to the stimuli chosen by Liao and Meskin? Roughly half of the participants comply with the request, and the other half don't. This looks very much like a pattern

of choosing at chance: no stable behavior is observed across the participants' behavior. In a hypothetical experiment in which the participants were presented with a task for which they were clueless, we would expect similar findings: a random choice between two options that might seem equally plausible. In order to demonstrate that aesthetic adjectives behave differently both from relative and absolute adjectives, Liao and Meskin should have provided a study in which a great majority of participants reply in one way in the case of relative adjectives and in another way in the case of aesthetic adjectives, as well as a study in which, again, a great majority reply in one way in the case of absolute adjectives and in another way in the case of aesthetic adjectives.

The studies in Liao and Meskin (2017), as I see them, are only a first step in what will hopefully become a steady and fruitful line of research. In the remainder of this section, I would like to discuss two ideas. The first is the idea that adjectives (like many other words) manifest shifts in meaning and, in particular, that a relative adjective can, in a suitable context, behave like an absolute adjective, and vice versa. The second is the idea that the participants of the studies at stake are unwilling to accommodate the presuppositions of existence and uniqueness for reasons that have little to do with aesthetic adjectives per se, but are due to the choice of stimuli and to the artificial nature of the tasks.

4.1. Meaning shifts and the relative-absolute distinction

My first concern is that it is unclear to which extent the puzzling data that Liao and Meskin (2017) have brought to light are due to features proper to aesthetic adjectives, and to which extent they are due to more general features of adjectival meaning. Let me explain. In section 2, I presented the distinction between nongradable and gradable adjectives as a sharp and robust distinction, and similarly for the distinction between relative and absolute adjectives. However, it can easily happen that an adjective that belongs to one of the categories can acquire a usage that puts it into the other category. Consider the adjective "pregnant," as applied to women or female animals. It means "having a child or young developing in the uterus" (*The Oxford Dictionary*), which is a yes-no property, that is, a property that an individual either has or lacks, and that does not come in degrees. This places the adjective on the non-gradable side. Nevertheless, one can easily find occurrences in which the adjective is graded, as in:

35. By now, just about everyone has seen the cover of that magazine, Demi Moore—regal, nude and very pregnant, a startling icon in those

photographs taken by Annie Leibovitz. (From "Breaking Pregnancy Taboos"; ABC Primetime 1991; source: COCA)

Indeed, there are 108 occurrences of "very pregnant" in the Corpus of Contemporary American English, COCA; and in none of them is the adjective used with its other meaning, which *is* gradable and which The Oxford Dictionary paraphrases as "full of meaning; significant or suggestive" (as "a development pregnant with implications").

What happens in examples such as (35) is that the adjective's interpretation gets shifted to a property that comes in degrees, for instance, "exhibiting those features typical of someone who has a child or a young developing in the uterus." Such meaning shifts are available for a large number of non-gradable adjectives. Take "human": its primary meaning is non-gradable, but it is often used in an extended meaning, paraphrased as "exhibiting the better qualities of the humankind" and which does allow for degree modification. Or take nationality adjectives, such as "English" or "Vietnamese"; non-gradable, they merely mean that the subject belongs to the relevant nationality; gradable, they mean that the subject exhibits properties typical of the relevant nationality—which, again, admits degrees. In fact, it may even be argued that the primary meaning of "spotted," an adjective that figures in all four studies, is a non-gradable one, while the gradable meaning is a derived one.

Just as many adjectives may shift between gradable and non-gradable uses, it is plausible to think that many may shift between relative and absolute uses, perhaps with even greater ease. I stressed earlier that one of the criteria that indicates that a given adjective is not relative is the infelicity of modifying it with "very." Yet "very closed" does have natural occurrences—over fifty found in COCA. To be sure, for most of them, the things described as "very closed" are societies, communities, or circuits, rather than doors, so one could think that the two adjectives, the absolute and the relative one, denote different properties. However, this shift in meaning (assuming that there is one) results from what makes a thing such as a society open (such that you can penetrate it) or closed (such that you cannot penetrate it), and it is that which is responsible for the felicity of combining the adjective with a degree modifier, rather than anything in the meaning of the adjective itself.

Just as "closed," a paradigmatic absolute adjective, can shift to a relative one, we should expect that a relative adjective can also shift to an absolute one—that is, it becomes such that there is a minimum or maximum standard fixed for its application. Take "dark," traditionally classified as a relative gradable adjective

(e.g., Solt 2016). Yet there is hardly any awkwardness perceived in constructions such as "almost dark" or "completely dark," as witnessed by:10

36. When he stepped into the room it was almost dark ... (Kent Haruf, *Plainsong*, New York: Vintage Books; source: COCA)

To bring the point home, it should not come as much of a surprise if the adjectives "beautiful," "ugly," and "elegant" showed some shiftiness in their behavior. And indeed, Liao, McNally, and Meskin argue that "beautiful" and "elegant" come out as relative on some tests and absolute on other tests. They argue, in particular, that both adjectives are felicitous with "almost," by pointing out the following contrasts (2016: 627, their examples 13b, 14a, and 14b):

- 37. #The room is almost big.
- 38. The cemetery was almost beautiful.
- 39. The rooms were clean and almost elegant.

There is indeed a prima facie contrast between (37) on the one hand, and (38) or (39) on the other. However, I contend that the contrast is enhanced by the difference in tense (present tense in 37 vs. past tense in 38 and 39) and, perhaps relatedly, because it is easier for the hearer to imagine a suitable context that makes (38) or (39) felicitous than it is for (37). For instance, a natural way of understanding (38) is as making reference to the appearance of the cemetery on a particular occasion, and reporting it as getting very close (hence the "almost") to what can be described as a "beautiful" scenery.

Conversely, consider the following use of "almost big," minimally different from (39):

40. The rooms were clean and almost big.

Its felicity significantly improves over that of (37), partly because it is easier to hear (40) in an imagined context in which the speaker relates an episode involving his or her perception of the relevant rooms. Indeed, sentences such as (40) can be easily found in hotel reviews.¹¹

Toledo and Sassoon (2011) defend the idea that relative adjectives are correlated with stable properties while absolute adjectives are correlated with episodic properties. This appears to be a promising suggestion to account for the variable felicity of "almost beautiful." As previously pointed out, one of the reasons why (38) sounds natural is that it describes a particular episode, and invites the reader (or hearer) to imagine the cemetery on a specific occasion. Part

of the imagery that gets conveyed by (38) is that the appearance of the cemetery on that occasion came close to being described as beautiful. On the other hand, when "beautiful" is used to attribute a stable property to an individual, its felicity with "almost" is significantly degraded. Consider:

41. ?? Montparnasse cemetery is grid-shaped, quiet and almost beautiful.

To bring the point home, suppose that "beautiful" and "ugly" are relative adjectives, but such that, like "dark" and "bright," (and unlike "long" and "big"), they can easily shift to an absolute interpretation. That would predict that we should not expect them to align either with "long" or with "straight" or "spotted". Similarly, suppose that "elegant" is an absolute adjective, but one that closely resembles relative adjectives in that the minimum standard of application is not determined by the nature of the object to which it is applied. This is, in fact, a view defended in Phelan (ms.), who argues that "elegant" and most aesthetic adjectives, including "poetic," "sublime," and "tragic" are absolute adjectives whose minimum standard of application varies interpersonally. Then again, it would exhibit a behavior that fails to align either with "long" or with "spotted."

Now, Liao and Meskin might welcome this proposal, for they might say that if aesthetic adjectives can easily shift between relative and absolute interpretations, then this only reinforces their claim that these adjectives present an empirical challenge to the relative-absolute distinction.¹² It is unfortunately beyond the scope of the present chapter to show that the distinction still stands solid in face of these adjectives' presumed shiftiness in meaning. Suffice it to note that the phenomenon of meaning shift is much more general and affects all sorts of linguistic classifications. For one, the literature on verb aspect abounds with examples of verbs that fall into one category, but allow for uses characteristic of a different category. For example, the verb "build" is normally classified among achievement-denoting verbs, which are infelicitous with modifiers such as "for seven years," as witnessed by (42). And yet, in a suitable context or construction, "build" will align with activity-denoting verbs, as witnessed by (43) (see Pustejovsky 1991; see also Filip 2012 for literature overview):

- 42. #Sally's construction company built this house for seven years.
- 43. Sally's construction company built houses for seven years.

In sum, the mere fact that an adjective can sometimes behave as absolute and sometimes as relative does not in itself invalidate the relative-absolute distinction, given that meaning shifts are frequent and ubiquitous, and that pragmatic factors, such as those discussed in Toledo and Sassoon (2011), can explain how an adjective that is normally relative can be used as an absolute one, or the other way around.

4.2. Presupposition accommodation out of context

My second set of concerns comes from the fact that the experimental paradigm used in Liao and Meskin (2017) creates an artificial setting, which may partly explain the results. Let us go back to Syrett's original paradigm. Recall that on a standard semantic approach, the way in which a definite description "the F" works is that *it is presupposed* that there exists one and only one x that is F, and, assuming that both presuppositions are satisfied, the definite description denotes x. In ordinary language, we often use definite descriptions even when those presuppositions are not in place. For instance, a colleague of yours might tell you:

44. The daughter of our Department Chair is a mathematician.

You may not have known that the Department Chair had any offspring, hence the daughter's existence and uniqueness cannot be presupposed, and yet the use of the definite description is felicitous. This is because you, as a hearer of (44), can easily *accommodate* this presupposition, that is, assume (for the purpose of conversation) that there is one and only one individual who is a daughter of your Department Chair.

With this in mind, let us look at what happens in Syrett's original experiments. Presented with two lines, neither of which is straight, the participants are unwilling to accommodate the presupposition that there is one and only one straight line (for neither is straight); similarly, if both disks are spotted, the participants are unwilling to accommodate the presupposition that there is one and only one spotted disk (for both are spotted). But presented with two blocks of significantly different lengths, the participants find it easy to accommodate the relevant presupposition. This is because the threshold of what counts as "long" varies from one context to another (recall that a 20 km. long road is short for a long-distance road in China, but long for a road on which to go on foot). In other words, the presupposition that there is one and only one long block can be made true by placing the threshold between the two lengths. Interestingly, however, as Kennedy (2011) shows, even with the relative adjective "long," the participants are not always willing to accommodate the presupposition. If the

difference between the two blocks' lengths is not very significant, the participants will refuse to pick out the longer block as "the long one" (although they *will* pick it out if they are instructed to pick out "the longer one"). In other words, people are generally unwilling to place the discriminating threshold for "long" between lengths that are close to each other.

Going back to Liao and Meskin (2017), there are at least two reasons why many participants may find it problematic to accommodate the presuppositions that for each pair of stimuli there is one and only one that is beautiful, ugly, or elegant:

4.2.1. Not different enough

Even if a participant might recognize one object as "more beautiful" (or "uglier" or "more elegant") than the other, this may not be sufficient to tease apart the two objects in such a way as to place the discriminating threshold between them, so that one of the two comes out as beautiful (ugly, elegant) and the other not. Just as when presented with two blocks whose lengths are not that different, the participants are unwilling to accommodate the presupposition that one and only one of them is long, the same is likely to happen with any two objects that, in the participant's eyes, are aesthetically not that different.

In all fairness, Liao and Meskin are aware of this possibility, to which they refer under the name "*no crisp judgments*" and which they aimed to address in Study 4. Here is what they write (2017: 388):

To operationalize the no crisp judgments hypothesis, we examined the mean of difference in the comparative phase, with respect to the participants who refused in the selection phase. For those participants, the mean differences were: Mdiff = 10.50 for "beautiful"/Hepworth, Mdiff = 14.55 for "beautiful"/Moore, Mdiff = 12.33 for "elegant"/Brancusi, and Mdiff = 9.63 for "elegant"/Noguchi. These are not huge differences, but they are not negligible on a 100-point scale either. Although we cannot definitively disprove the no crisp judgments hypothesis, owing to the fact that what counts as a relatively small difference is vague or highly theory dependent, we think the mean differences observed in this study make this hypothesis less plausible.

Contrary to what they claim, I would like to submit that the mean differences observed speak in favor rather than against the hypothesis. For a participant to accommodate the existence and the uniqueness presuppositions, the two objects should sit at the scale far enough from each other so that a threshold distinguishing beautiful from non-beautiful (ugly from non-ugly, elegant from

non-elegant) can be plausibly placed between the two. When two objects are placed on a 100-point scale at a less than 15-point interval (and often only 10-point intervals), and when there are no other objects to compare them to, then chances are that they will be perceived as close enough to one another so as to stick together when assessed for having the property at stake.

4.2.2. Not discriminatory enough

In ordinary language, when a speaker uses a definite description to communicate with their audience, they normally look for a description that will best do the job of singling out the thing to which they want to refer with the definite description. Suppose that I want to tell you something about one of the two men we see at distance. I could tell you "the man on the left," or "the man holding a glass in his hand" (assuming the other man is not holding a glass)—both of those descriptions will work fine, because they provide easy and salient ways to distinguish the two men. I *could* tell you "the man who earned his degree first" or "the one who lives in a bigger apartment," but this would be extremely uncooperative because, even though both descriptions are such that one and only one of the two men satisfies them, those are not descriptions that are particularly helpful, in the imagined context, in getting you to figure out which of the two men I am talking about.

Going back to the studies in Liao and Meskin (2017), one reason that may make it more difficult for the participants to accommodate the presuppositions of existence and uniqueness is that with respect to the stimuli used in their studies, the property of beauty is not the most discriminatory one. This is striking in Study 2 with the car and flower stimuli. Presented with two photographs of the same car that appears new on the one and old on the other, the most immediate choice of description for the latter would be "the old one" rather than "the ugly one"; similarly, if I wanted you to pick out the flower that looks faded, I would be more cooperative if I used the description "the faded one" rather than "the ugly one." Given that there are discriminatory properties that, in the context at stake, are more salient than aesthetic properties, this could affect some participants' willingness to comply with the task.

A version of this problem also arises for Study 4, where the sculptures are compared for elegance. In the stimuli used, neither of the sculptures is clearly such that it displays the features associated with the concept of elegance to a higher degree than the other. Although Liao and Meskin insist on "elegant" being a *thick* term with a descriptive component, it is far from clear that this

descriptive component is playing any role in the participants' understanding of the term, as used in relation to those sculptures. In order to see how the thickness of "elegant" might affect the pattern of response, it would be desirable to use stimuli that display features conventionally viewed as constitutive of elegance, and which do so to clearly different degrees.

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Notes

- 1 Extracted from larger text: "With beautiful, epic cinematography of the mountain forests from Hong Kyung-pyo, some very effective sudden shocks, and a powerful blend of detective story, occult horror and Stephen King-esque small-town suspicion, this is another superb film from Na Hong-jin." Full review available here: https://www.scifinow.co.uk/reviews/the-wailing-film-review-fantasia-2016/.
- 2 Extracted from larger text: "Terrible. Impossible to empathize with such a useless protagonist. Overly-long, awfully executed film." Retrieved from: https://www.rottentomatoes.com/m/the_wailing/reviews/?type=user
- 3 http://www.nytimes.com/2016/06/03/movies/the-wailing-na-hong-jin-review.
- 4 http://www.empireonline.com/movies/wailing/review/.
- 5 Of course, we may, and do, describe a theatre as "empty" when there are only very few people in it, but even then we would not say that it was empty strictly speaking. I must postpone the discussion of such uses to section 4.1.
- 6 How the context does that is a tricky issue, discussed in the debates on vagueness (Fara 2000) and on metasemantics (Glanzberg 2007).

- 7 In section 4, I will discuss the reliability of such felicity tests. For the time being, let me point out that both "almost beautiful" and "completely beautiful" do appear in corpora. Here is an example for the latter: "The sea can be frightening and threatening, or completely beautiful" (T. Moan 2007, "Capturing the Ocean in Pastel," *American Artist*, 71: 54; source: COCA).
- 8 Full material and data for all studies reported in Liao and Meskin (2017) are deposited in the Open Science Framework repository and openly available for access at https://osf.io/6uztd/.
- 9 Another thing to note concerning the results, yet one to which Liao and Meskin do not seem to pay attention, is that the compliance rate for "beautiful" found in Study 1 was significantly lower than the compliance rate in Studies 3 and 4 (viz. less than 50% vs. almost 80%). This gives further reason to think that the studies taken together do not reveal any stable pattern for the interpretation of "beautiful."
- 10 Admittedly, it is easier to endow "dark" with an absolute interpretation (that is, an interpretation such that there is a minimum and/or a maximum standard that licenses its use) than it is for other relative adjectives, such as "big" and "tall." But even those occur naturally. Here are uses of "almost big" and "almost tall" found in fiction writing:
 - (1) "His name was Steve or something equally ordinary—a fellow almost big, lean and strong in a haphazard youthful way." (Robert Reed, 1994, "The Shape of Everything," *Fantasy and Fiction*, 87 (4/5): 178).
 - (2) Standing in my red sweater and vintage suede skirt, my boots solidly on the floor, I felt almost tall." (Marisa de los Santos, *Love Walked in: A Novel.* New York: Dutton).
- 11 Here are several hotel reviews on TripAdvisor that feature the phrase "almost big" (although it could not be verified that they were actually written by native speakers of English):
 - (1) "Rooms are almost big and clean." Retrieved from: https://www.tripadvisor. co.za/ShowUserReviews-g293974-d605522-r222749033-Abella_Hotel-Istanbul.html.
 - (2) "The room is almost big and has good stuff like Nespresso machine." Retrieved from: https://www.tripadvisor.ie/ShowUserReviews-g186605-d214540-r426023192-Herbert_Park_Hotel-Dublin_County_Dublin.html.
 - (3) "The apartment is almost big with dining room, bedroom, bathroom. It is very clean and fully refurbished." Retrieved from: https://www.tripadvisor.es/ShowUserReviews-g1021473-d4139232-r359664594-Apartments_Bozic-Dreznik_Grad_Karlovac_County_Central_Croatia.html.
- 12 Indeed, Sam Liao commented along these lines on an earlier draft of this chapter.

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The Continuity between Art and Everyday Communication

Alessandro Pignocchi

Whereas various cognitive approaches to art have focused on the perceptual dimension of art experience (Cavanagh 2005), I argue that the reception of artworks is better conceptualized as a particular form of communication. I show that the main mechanisms that frame our engagement with artworks are those involved in the understanding of acts of "weak communication," paradigmatically metaphors, as defined by the relevance theory of communication (Sperber and Wilson 1995). However, in order to correctly account for both everyday weak communication and art reception, relevance theory has to be slightly modified. More precisely, it has to be "grounded," that is, reanalyzed in light of the grounded cognition paradigm (Barsalou 1999). I conclude that one of the main functions of art is to permit the exteriorization and reconstruction of "analog" mental states that are particularly remote from any possibility of explicit verbal formulation. Artistic means of expression enhance the power of everyday weak communication in allowing the exteriorization of mental states that could not have been exteriorized using more economical modes of expression.

1. Art and communication

From an evolutionary perspective, it is unlikely that a cognitive process has evolved specifically to underlie our ability to create and appreciate art (Pignocchi 2009). Thus, the task for a cognitive approach to art is to explain how our artistic practices recruit psychological mechanisms that have not been selected for it. In order to do so, cognitive approaches have to describe how our artistic practices

are in continuity with other everyday cognitive activities that rest on dedicated processes, while describing what is specific in our artistic practices as compared with those other cognitive activities.

The intuition that has motivated the work exposed in this paper is that, contra most existing studies in this domain (Cavanagh 2005), the most relevant and fruitful analogies to understand art reception have not to be drawn with simple perceptual activities, but with communication. More precisely, I will argue that the mechanisms that frame our engagement with artworks are the same as those involved in the understanding of acts of communication that have a loose, fuzzy, and hard-to-paraphrase kind of meaning, such as some acts of pointing and some metaphors.

Imagine that during an enjoyable walk with you, I ostensively point to a nice landscape with a smile, in order to exteriorize what I am feeling in this moment. Or imagine that after the walk, I try to describe explicitly, with precise words, what I felt when looking at the nice landscape and that, after failing to do so, I find a creative metaphor that seems to be more efficient. Neither with the pointing gesture nor with the metaphor do I expect you to reconstruct my impression with much precision. I only expect that you will be able to form a loose, but sufficient, approximation of it. The thesis that I will elaborate in this paper is that there is no clear cut-off point between the understanding of these simple forms of loose communication and the reception of artworks. The obvious and numerous differences between your understanding of my pointing gesture or of my metaphor and the reception of a great painting, movie, or novel lie mainly in the degree of sophistication of the mental states involved, not in the nature of the underlying psychological processes.

Defending and operationalizing this claim require, first, a precise account of loose communication. I will build it in the following sections, using *relevance theory* (Sperber and Wilson 1995). In fact, as opposed to many other theories of communication that have focalized on verbal and straightforward communication, relevance theory has dedicated much energy in describing nonverbal and loose forms of communications.

2. Relevance Theory: First sketch of the *communication model* of art reception

According to relevance theory, communication is fundamentally a process of mind-reading, during which a communicator ostensively "provides evidence of

her intention to convey a certain meaning, which is inferred by the audience on the basis of the evidence provided" (Wilson and Sperber 2002: 607). This account is not limited to verbal communication, since there is an infinity of nonverbal ways to ostensively provide evidence of an intention to convey a certain meaning. And it is not restricted to straightforward forms of communication, since the evidence can be loose and allusive.

Our cognitive systems process their input following a principle of relevance, defined as a trade-off between cognitive benefit and processing effort. Perceptual systems, for instance, have been shaped by evolution and learning to pick out in the environment the input that might provide the greatest cognitive benefit while requiring the smallest processing effort. During communication, a communicator provides evidence (an utterance, for instance) that is expected to be processed by the receiver. So he tacitly assumes that his utterance is relevant enough to be worth processing, that is, that it will provide to the receiver, in a given context, cognitive benefits that justify the cost of processing it. According to relevance theory, we are equipped with processes of mind-reading that have specifically evolved for communication and that exploit this principle of relevance (Sperber 2000). When processing a communicative act, those mechanisms use as a heuristic the tacit assumption that the communicator implicitly believes that, in a given context, his communicative act can provide cognitive benefits that justify the effort invested in its processing. For instance, if I point something that is behind you, you will turn your head and expect to see something that I believe is relevant for you, that is, you will learn something that justifies the effort of turning your head, visually processing the scene, and inferring my intentions. If you cannot see what I point by just turning your head but need to move a bit more, the effort being a bit greater, you will implicitly expect to see something that will provide a little greater cognitive benefit.

Relevance theory allows to quite easily draw an analogy between understanding a simple communicative act and receiving an artwork: during reception of an artwork, the spectator tacitly considers the artwork as a means that the artist uses to ostensively manifest a piece of information that he/she believes is relevant. The situation is comparable to the one where I direct your attention to a nice landscape by pointing, to make an impression manifest. In the case of art, the artist has him/herself conceived—sometimes over a long time and at the cost of much effort—the object that he/she metaphorically points out to an audience (except in the case of ready-mades). The situation is thus far more complex than the case of my simply pointing to a landscape. But the difference might well be only one of complexity.

The artist may have no one in particular in mind when conceiving a work (or have only him-/herself as the main addressee of the work), and the spectator may have no idea of who the artist is; but these and other differences that might be pointed out between art reception and standard communication do not challenge the general claim that an artwork is fundamentally received as a means used to ostensively manifest something that the artist believed to be relevant.

In order to clarify this claim—hereinafter the "communication model" of art—and to specify what is specific to art reception in relationship to the reception of simpler communicative acts, I look in the next section at what I take to be the two main objections that can be raised against this view.

3. Two objections to the communication model

Claiming that the reception of artworks is fundamentally comparable to that of standard communicative acts as conceptualized by relevance theory has some consequences. The main one is that the reception of an artwork is fundamentally a process of attributing mental states to the artist. In the same way that we cannot pay attention to a sentence without guessing (often unconsciously) what its producer has in mind—that is, what the speaker wants to make overtly manifest—we cannot pay attention to an artwork without (often unconsciously) attributing mental states to the artist. This view subordinates other aspects of our relation to artworks—such as the perceptual effects studied in many cognitive approaches—to the process of attributing mental states to the artist. According to this view, those perceptual effects have the same status as the one that relevance theory assigns to the vocabulary and syntax of natural language: they are tools, shared by a producer and a receiver, which the former uses to overtly manifest the content of some mental states and the latter uses to guess what that content might be.

Thus, the communication model is related to classical intentionalist theories of art, according to which artworks have a meaning (Danto 1981), which is related in some way to the actual intentions of the artist (Carroll 2000, Levinson 2010, Stecker 2006). This acquaintance is only partial, however. First, the communication model is concerned with the attribution of mental states in general, and not only with intentions—at least if intentions are conceived as conscious and verbalizable mental states (Pignocchi 2010, 2012, 2014a). As shown by relevance theory, we communicate emotions, impressions, bodily sensations, and many other kinds of mental states that are difficult or impossible

to verbalize. Second, unlike many existing accounts in the philosophy of art, the view defended here is descriptive and psychological, and not normative or metaphysical (Pignocchi 2014b).

Nevertheless, this affinity with classical intentionalism may seem to open up the communication model to the kind of objections that are traditionally raised against intentionalism. Adapted to the present—psychological, descriptive—debate, the two main objections are as follows:

- (1) Plurality of interpretations. A given artwork (at least a successful one) seems to give rise to a plurality of (sometimes incompatible) interpretations (Gadamer 1975, Ricoeur 1976). This would not necessarily be a problem for the view defended here if those various interpretations always emanated from different interpreters, since a communicative act can give rise to contrasting interpretations depending on who interprets it. But a given artwork can generate multiple interpretations even from a single interpreter. Moreover, a single interpreter can interpret and reinterpret a given artwork indefinitely. This seems to stand in clear contrast to standard communicative acts. At first sight, it seems that a sentence, in an everyday conversation, even when imbued with particularly rich implicit meaning, can be paraphrased in a way that is quite precise, unique, and definitive.
- (2) Verbal explanation by the artist. Artists' public explanations of an artwork often have only a marginal impact on our engagement with it (Beardsley 1958) or, at least, they almost never assume more importance than the work itself (Wollheim 1987). For instance, Levinson (1996) notes that "when a poet vouchsafes us, in plain language, what some enigmatic poem of his might mean, we don't react by then discarding the poem in favor of the offered precis" (177). This trivial observation seems incompatible with the communication model, since when the author of a standard communicative act explains what he wanted to say, his explanations are generally decisive (Levinson 1999).

These two objections share a common principle: artworks seem to display a peculiar resistance to paraphrase. When a given person tries to put words to the meaning that she has attributed to an artwork—or to what the artwork did to her, on what it expresses, and so on—the task seems potentially endless. Moreover, attempts to translate the reception of an artwork into words seem themselves to enrich this reception, which may motivate continued striving to put words to it, and so on. This observation seems to reveal a difference in nature

between artworks and standard communicative acts. It is as if we spontaneously approached artworks as objects that have no definite meaning, in opposition to standard communicative acts. Thus, it seems unlikely that a common framework—relevance theory or any other—could ground the empirical investigation of both art and standard communication.

To answer this objection, it first has to be noticed that many standard communicative acts also resist paraphrase and are interpretable and reinterpretable, even if it is to a lesser extent than great artworks.

4. Weak and strong communication

Relevance theory distinguishes between weak and strong communication. An act of communication is *strong* when its relevance comes from one, or few, strongly implicated implications. An act of communication is weak when it evokes a loose array of weakly implied implications. In an act of weak communication, each implication alone would be insufficient to satisfy the receiver's expectation of relevance, but collectively they do end up satisfying it. If, during a diner, I point to the salt cellar because I want it, my communicative act is strong, since its meaning, even if implicit, can be easily paraphrased by explicating the main and strongly implicated implication: "Please could you give me the salt cellar?" If instead, during a walk, I point with a smile to a nice landscape, my communicative act is weak since it evokes an array of implications, such as "this landscape is nice," "the light is very pleasing," "I'm happy to be here with you," "I would like to continue the walk," and so on. In this case your expectation of relevance is satisfied by an accumulation of this kind of weak implications, which are linked to my mood, the landscape itself, our common plan, and so on. An act of strong communication gives the impression of being clear and precise, because the receiver's expectation of relevance is satisfied by one or few implications. An act of weak communication, in contrast, appears looser and its meaning is fuzzier, given the plurality of implications that it conveys.

According to relevance theory, the meaning of an act of strong communication is generally quite easy to paraphrase explicitly. The meaning of an act of weak communication, in contrast, is generally much harder, and sometimes even impossible to paraphrase. Commenting on an example in which Mary appreciatively and ostensively breathes the fresh air of the seaside where she has just arrived with Peter, in order "to share an impression with [him]" (58), Sperber and Wilson (1995) claim that Mary could not have communicated the

same impression with words. Relevance theorists are particularly explicit on the impossibility of exhaustively paraphrasing an act of weak communication when they analyze the case of metaphor, which they take to be paradigmatic of weak communication. Wilson (2009) writes, for instance, that a metaphor "cannot be paraphrased in literal terms without a loss of meaning" (41). This claim echoes various authors who have insisted on the impossibility of exhaustively verbalizing the meaning of a metaphor. For instance, Davidson (1978) notes that the task of paraphrasing a metaphor seems endless, and that this is why "most attempts at paraphrase end with 'and so on'" (46).

If standard communicative acts can display the same resistance to paraphrase as artworks, then the idea of a continuity between art and communication can be maintained. The claim is simply a bit further specified: art reception is in continuity with the understanding of standard acts of weak communication. Now, to reinforce this view and to carefully answer the two objections discussed in the preceding section, the task is to explain where the resistance to explicit paraphrase comes from. Given the claim that art is in continuation with everyday weak communication, it may suffice to adapt the explanation provided by relevance theorists to the more sophisticated case of art reception. The problem is that in its present state, as we shall see now, relevance theory is unable to explain why the content of an act of weak communication is hard or impossible to verbalize explicitly.

5. Weak communication and explicit verbalization: Why don't we speak more clearly?

According to relevance theory, the reason why an act of weak communication gives an impression of looseness and fuzziness is that it conveys many implications. The plurality of implications also explains why an act of weak communication is hard, and sometimes impossible, to paraphrase explicitly. As we have seen, an act of weak communication can, for instance, communicate what Sperber and Wilson call an "impression." In their view, an "impression" is "a noticeable change in one's own cognitive environment, a change resulting from relatively small alterations in the manifestness of many assumptions." Those assumptions can potentially be verbalized, so that the "very vagueness of an impression can be precisely described" (Sperber and Wilson 1995: 59).

This account of weak communication, however, does not explain why the meaning of an act of weak communication is hard to paraphrase. In fact, if

the various intended implications can be verbalized, it should be possible to verbalize them all, even if there are many of them. A somewhat deeper concern targets the very relevance of weak communication: if the various implications of an act of weak communication can be verbalized, why exteriorize them through an act of weak communication instead of formulating them more explicitly? Arguably, an explicit formulation of the same implications would provide the same cognitive benefits while requiring less processing effort than an act of communication that requires the receiver to infer them all. In other words, explicit formulation should be more relevant than loose evocation. As speakers, in order to be relevant, we should always prefer to explicitly verbalize the various implications that might be conveyed by an act of weak communication instead of evoking them loosely. I should have said "This landscape is nice," "I would like to continue the walk," and so on instead of pointing to the landscape with a smile and thus leaving you with the burden of making the efforts required to reconstruct the various implications of my communicative act.

Sperber and Wilson (1995) claim that in order to represent a set of implications we do not need to represent them all individually, and that a representation of the set may suffice. But how is it possible to represent a set of implications without representing each of them? And, if it is possible, the set of implications of an act of weak communication should constitute its meaning. Thus, the problem is the same: it should be easy to paraphrase the content of an act of weak communication by simply verbalizing the set of its implications. Similarly, in order to be relevant, we may verbalize the representation of the set of implications of an act of weak communication instead of evoking them loosely.

6. The case of metaphor

The problem raised by the account based on relevance theory's notion of weak communication is particularly clear in the case of metaphor. Wilson and Carston (2006) and Sperber and Wilson (2008) analyze the following examples:

Caroline is a princess. Robert is a bulldozer. My surgeon is a butcher. Sally is a block of ice.

Relevance theorists argue that the hearer draws relevance-guided inferences leading her to spontaneously understand that the speaker means that Caroline is

spoiled, pampered, and so on, that Robert is forceful, stubborn, persistent, and so on, that my surgeon is incompetent, dangerous, and so on, and that Sally is reserved, impassive, unemotional, and so on (the "and so on" in these examples plays the same role as the "and so on" noted by Davidson 1978). But again, if all the implications of a metaphor were verbalizable, it should be possible to actually verbalize them all. Moreover, why say that Caroline is a princess instead of saying that she is spoiled, pampered, and so on? Why is a metaphor more relevant than an enumeration of its implications?

To answer these questions, the only solution for relevance theory is to claim that at least part of the implications of an act of weak communication is incompatible with explicit verbalization. Otherwise it would always be more relevant to express those implications verbally and explicitly instead of evoking them loosely. The most straightforward solution to the problem of explaining why an implication can be incompatible with verbalization is to exit the language of thought paradigm, which thus far has been endorsed by relevance theory, adopting instead at least some of the assumptions of the grounded cognition paradigm.

7. Language-like versus analog mental states

Explicitly in their core book *Relevance* (Sperber and Wilson 1995) and more implicitly in later writings, relevance theorists endorse the paradigm of the "language of thought," which has long been the dominant paradigm in cognitive science. According to this paradigm, human thinking is "language-like," that is, it is underlain by a set of atomistic, discrete, and amodal representations that are combined in accordance with a set of syntactic rules (Fodor 1975, Jacob 1997, Pylyshyn 1973). On this account, the representational format used by the mind is compatible with verbal language. Thus, there is no a priori reason why the implications of an act of weak communication should resist direct verbalization. Those implications might be hard to verbalize explicitly in practice but theoretically nothing would prevent the production of a straightforward verbal formulation of their content. To remain in this paradigm, relevance theory would have to produce an ad hoc argument explaining why the implications of an act of weak communication resist verbalization despite compatibility of format.

In the last few decades, however, a number of different voices have challenged the main claim of the language of thought that our mental representations are language-like (Lakoff and Johnson 1980, Barsalou 1999, Prinz 2004). According to the theories of "embodied" or "grounded" cognition, the majority of our mental representations are not encoded in a format that is comparable to language. Instead they are encoded in an analog, modal, and continuous format, which is more akin to perception, sensation, emotions, or images than to words and sentences. Analog representations can be implemented, for instance, by simulations, that is, by reactivations of pieces of past experiences in modal areas of the brain. The concept of a chair, for instance, is not a fixed and discrete symbol, but a fuzzy and ever-changing set of simulations that, according to the task that the concept is recruited for at a given time, combine visual simulations of different aspects of chairs in different contexts, simulations of the sensation of sitting in a chair, and so on. Crucially, advocates of the theory of grounded cognition argue that analog mental states can be propositional and combinable. Furthermore, analog mental states can enter into complex inferential chains and represent the most abstract and complex concepts (Barsalou 1999, Prinz 2004). There is no reason, in their view, to believe that these fundamental cognitive abilities require digitalization.

According to the theory of grounded cognition, the combination of analog representations rests not on the application of syntactic rules, but on the construction of new simulations that combine elements extracted from different experiences. It is possible, for instance, to combine a visual simulation of the shape of a chair with the color and texture of another chair, or with colors and textures that have never been combined in the experience of an actual chair. More creatively, it is also possible to combine the visual appearance of a chair with that of an animal running, to obtain a visual simulation—and an ad hoc concept—of a running chair (Barsalou 1999).

A growing body of evidence supports the claim that many, if not all, mental operations—including the manipulation of abstract concepts—relies on analog mental states (see Barsalou 2008 for a review). In the domain of social cognition, conceptual and empirical arguments suggest that our ability to read the minds of others is based in some measure on our own ability to act, feel, perceive, imagine, and so on—that is, to form what seem to be paradigmatic analog mental states (Goldman 2006). Some experiments even suggest that very peripheral sensations play a crucial functional role in the attribution of mental states to others (Ackerman, Nocera, and Bargh 2010, Bosbach et al. 2005, Niedenthal et al. 2001, Oberman, Winkielman, and Ramachandran 2007).

Endorsing the claim that analog mental states underlie a significant part of our mental activity makes it possible to explain why some implications of an act of communication can resist verbalization. The reason is that because of format incompatibility, the content of an analog mental state cannot be exhaustively translated into words and sentences. Trying to verbalize the content of an analog mental state raises the same problem as trying to verbalize the content of a picture: any description, even thousands of pages long, necessarily fails to convey an important part of the information contained in the picture.

8. Grounding relevance theory

"Grounding" relevance theory—claiming that at least part of the implications of a communicative act can be encoded in an analog format—makes it possible to solve the problems faced by its account of weak communication. The meaning of an act of weak communication is hard to paraphrase because of an incompatibility of format between the mental states that it exteriorizes and verbal language. Any paraphrase, however sophisticated, fails to capture some meaning, for the same reason that the verbal description of a picture can never be exhaustive, because of an incompatibility of format. In the same way, an act of weak communication is more relevant than an attempt to express its implications verbally, because those implications are at least in part analog, and thus cannot be transmitted efficiently using a more explicit form of expression. Contrary to the standard account of acts of weak communication, they do not convey a set of language-like implications that could have been formulated explicitly. Instead, an act of weak communication conveys implications that could not have been expressed otherwise, because of their analog format.

If this view is correct, at least a portion of the various language-like implications that relevance theorists postulate when analyzing acts of weak communication are not conveyed by the act of communication itself. Instead they are by-products of linguistic analysis—that is, of the theorist's translation into words of a meaning that is not language-like but analog. And, at least in some cases, the impression of looseness and fuzziness is a by-product too: in the example of the nice landscape that I point out to you with a smile, you may have the impression of perfectly understanding the state of mind that motivated my communicative act. The meaning of my communicative act appeared quite clear during your first, spontaneous interpretation of it. Only if you try to put it into words for one reason or another do you discover that its meaning is hard to verbalize. Then, and only then, you may be moved to enumerate a set of

sentences that may seem to systematically fail to convey part of the meaning of my communicative act.

On this alternative account, the impression of looseness and fuzziness often appears only with the discovery that what seemed quite clear is hard to verbalize. During your spontaneous interpretation of my pointing gesture, you simulate a sensation, an impression, maybe the visualization of our program, and attribute the general state of mind resulting from the combination of these simulations to me—that is, you interpret my communicative act by attributing to me analog representations that you reconstruct in the same analog mode. It is only in a second, nonmandatory phase of interpretation—a phase where you try to put words to the meaning of my communicative act—that you translate these analog representations into a loose array of linguistic implications as best you can.

The fact that at least a portion of the implications of an act of weak communication are analog is clearer in the case of metaphor. The standard account of metaphor cannot explain why the meaning of the examples quoted above (Caroline is a princess; Robert is a bulldozer; my surgeon is a butcher; Sally is a block of ice) is hard to paraphrase, and why those metaphors are more relevant than an explicit formulation of their implications. According to the view defended here, those implications are at least in part analog: to some extent, we see Caroline with a crown behaving like a princess, we see a kind of hybrid between Robert and a bulldozer demolishing a construction, we see my surgeon with a butcher knife in his hand and blood splashed on his apron, and we feel that if we touched Sally her skin would be cold and unyielding (Ritchie 2009). This is all the more clear if we put these metaphors in context, as relevance theorists do in describing the process of understanding. "Caroline is a princess" can, for instance, be an answer to the question "Will Caroline help us clean up the flood damage?" To understand that the intended answer is "probably not," we do not need to activate a set of language-like representations of the kind "Caroline is a spoiled and pampered girl." We just see her dressed and behaving like a princess, and directly realize that this vision does not fit with the scenario of clearing up flood damage.

It might be objected that we do not need conscious visualization to understand the above metaphors. It might even be claimed that visualization, at least for some people, only happens as a consequence of a particular effort of attention and imagination. However, analog representations can be unconscious (Barsalou 1999). Thus, the above argument is that when we consciously visualize the content of a metaphor, we bring to the surface of consciousness a representation that would otherwise remain unconscious—maybe in a simpler form, but it

nonetheless underlies the process of understanding. The claim here is not about phenomenal experience but about the format of the underlying representation at a functional level.

The view defended here does not imply that a metaphor or any other act of weak communication communicates only one analog mental state; an act of communication can exteriorize an array of quite distinct mental states. Moreover, analog and language-like mental states can cohabit within this array. In other words, I do not want to say that an act of weak communication cannot have language-like implications at all. In order to explain why an act of weak communication is relevant and why its content is hard to paraphrase, it is sufficient to claim that *some* of its main implications are analog. Those analog implications can interact with language-like implications. During the process of interpretation—especially when a particular effort is made, for instance because the metaphor is encountered while reading a poem—analog representations may interact with linguistically encoded ideas, and both kinds of representations may enrich one another. Consider the two first lines of Sandburg's poem "Fog," which was discussed by Sperber and Wilson (2008):

The fog comes on little cat feet. It sits looking over harbor and city on silent haunches and then moves on.

Sperber and Wilson note that "'on little cat feet' evokes an array of implications having to do with silence, smoothness, stealth. Taken together with the following four lines, the phrase evokes a movement which appears both arbitrary and yet composed, so that it is tempting to see it not as random but rather as guided by mysterious dispositions" (102). It is tempting to see a mixture of analog and language-like representations behind this evocation. An image of a giant and shadowy cat made of fog, a set of bodily sensations linked to what it could feel like to walk with cat feet made of fog could, for instance, be activated jointly with the contradictory and linguistically encoded idea that fog is not an intentional creature, which could further activate the idea that it is tempting to think that we just don't understand its dispositions. This linguistically encoded idea can activate other images and sensations, which can evoke other linguistically encoded ideas, and so on.

The importance of analog mental states in the interpretation of metaphor may be made clearer by considering cases where the metaphor itself is presented in an analog format, such as in the case of metaphors in movies. The clearest metaphors in movies exploit the resources of editing, as when Fritz Lang, in Fury, uses a splice to associate a group of women talking together and a group of hens, or when Chaplin, in Modern Times, compares a group of workers going to the factory with a group of sheep. A somewhat more subtle metaphor, at the beginning of Kubrick's 2001 Space Odyssey, shows us a furious ape throwing a bone into the air, and then, as the camera follows the bone, a cut establishes a link with a space ship. Movies can also establish metaphorical links inside a single shot: for instance, between a character's personality and his house (as in Hitchcock's Psycho or Rebecca) or between the action and the scenery within which it takes place. For instance, the properties of different kinds of love stories can entertain metaphorical links with the properties of the scenery where they take place (a teenage love story with a wild river, an adult love story with an artificial and highly structured swimming place, as in Mia Hansen-Love's Un amour de jeunesse). To produce an effect on the audience, these metaphors need not be explicitly identified as metaphors, nor, probably, need they activate any kind of language-like representations (Pignocchi 2015).

9. Analog mental states and the function of art

As argued by relevance theorists, strong and weak communications are not categories with clear-cut boundaries: the strength of communication is a matter of degree. Relevance theorists claim that what determines the position of a given communicative act along this continuum is the number of its language-like implications. According to the view defended here, the dimension that determines the position of a given act of communication along the continuum between weak and strong communication is not the number of its implications, but the remoteness of its implications from the possibility of straightforward verbalization.

If I say "this lemon is very sour," or "this pan burned my hand," or "I am happy," "sad," or "melancholic," the mental states that motivate my communicative acts are arguably analog (they are akin to sensations and emotions). However, these communicative acts can be quite strong if I do not need you to precisely reconstruct these mental states. If, for instance, I say that this lemon is sour because I want sugar, or that this pan burned my hand because I want you to bring me ointment, it would be irrelevant for you to reconstruct the precise intensity and the nuances of my sensation, the precise part of the hand that was

burned, and so on. Instead, if I say the same thing but in a context where my aim is for you to understand with some precision what I feel, my communicative act is weaker, since what it conveys is harder to paraphrase. If for one reason or another I want to be more specific, I may enrich my sentence with a particular tone of voice or a facial expression. In this case, my weak communicative act becomes richer, since you will be able to imagine a bit more precisely what I feel. If I want to be even more specific, that is, if I want you to be able to reconstruct what I feel with greater precision, I may describe the context of my situation, clarify its causes and consequences, or use a metaphor or any other kind of more evocative communicative act.

As suggested by Hofstadter and Sander (2013), analog mental states can be very complex. As the mental states that I want to manifest become more remote from any possibility of direct verbalization, my communicative act becomes weaker. In other words, the sparser the lexical entries in the area of a given person's conceptual space where the analog mental state that he/she wants to exteriorize happens to be, the more he/she will have to use a form of weak and indirect evocation to make this mental state manifest. At some point of complexity, the tools of everyday weak communication may become insufficient. This is where artistic means of expression may become essential.

Thus, if one end of the continuum is occupied by strong communication, the other end is the realm not of everyday weak communication, but of artistic expression. Artistic modes of expression are tools that allow people to enhance the power of everyday communication and exteriorize analog mental states that could not have been exteriorized using other more economical and straightforward forms of expression, or at least not without a major loss of content.

In everyday conversation, when an act of communication is implicit and allusive whereas we feel that its message could have been expressed more explicitly without any significant loss of meaning, we judge it as lacking relevance, since we feel that we could have obtained the same cognitive benefit at a lesser cognitive cost. For the same reason, a communicative act that uses an artistic mode of expression is judged to lack relevance if we feel that its content could have been expressed, without significant loss of meaning, using ordinary verbal language or any form of expression that would have required less processing effort. At a larger scale, this principle might have been and might still be a driving force behind the appearance, evolution, and stabilization of artistic means of expression: artistic means of expression have developed to enhance our capacity to exteriorize analog mental states that could not be exteriorized

using a more explicit and straightforward form of expression, or at least not without significant loss of meaning. Progressively, this use of artworks may have been culturally internalized as a core function of art, so that an artwork that seems to exteriorize only mental states that could have been exteriorized using a more explicit and economical form of expression is not only seen as irrelevant but also as running against one of its raisons d'être qua art (Pignocchi 2012).

Notice that the precise relation between a set of mental states and the means of expression that could permit their exteriorization depends on each person's vocabulary and knowledge. Thus, the evaluation of the relevance of a given artwork also depends on these parameters. Knowledge of other artworks, in particular, is determinant, since it can provide linguistic shortcuts to approximately designate complex mental states that would otherwise escape words. The expression "la madeleine de Proust," for instance, makes it possible to approximately evoke a feeling of reminiscence activated by a perceptual stimulus that establishes a memorial connection with a remote and long-dormant memory. As illustrated by this attempt at verbal description, this feeling would be hard to exteriorize (and even to notice) for someone who has not read *In Search of Lost Time*.

The idea that art allows artists to express something that could not have been expressed otherwise, and particularly not with words, is not new. This "something" has been related to intuitions (Croce 1903), expressed emotions (Collingwood 1938), deep feelings (Tolstoy 1898), and deep self (Proust 1954). In addition to a cognitive description of this "something," the originality of the view defended here is that it translates a metaphysical claim into a descriptive theory of engagement with art: we necessarily receive artworks as means that the artist uses to express something that could not have been expressed using more explicit forms of expression. The remoteness of the mental states that we attribute to the artist from any possibility of verbal and more direct characterization is a crucial dimension of our positive appreciation of the work.

This view does not deny that some of the motivations behind an artwork can be language-like and, thus, easily verbalizable. Language-like and analog mental states interact and complement one another in the mind. What the view sketched here predicts is that someone who recovers *only* language-like motivations behind an artwork, and who thus has the tacit impression that the artist could have expressed the same thing in a way that requires less processing effort, will judge the artwork as lacking relevance.

This idea can be tested experimentally. It predicts that one key factor in the positive appreciation of an artwork should be that it induces the attribution of mental states whose content is particularly hard to paraphrase. More precisely,

the prediction is that to be appreciated by a given receiver, an artwork (1) has to activate a rich attribution of mental states (Jucker and Barrett 2011, Jucker, Barrett, and Wlodarski 2014), and (2) the content of these mental states must be hard to paraphrase, otherwise the artwork will be judged poor, weak, uninteresting, and so on. This prediction might be tested by adapting the paradigm used by Jucker and colleagues (2014), which measures the impact of different titles on the appreciation of a given work. The prediction is that a title will enhance the appreciation of a work if its relationship to the work seems both comprehensible and hard to explain that is, if it stimulates the attribution of mental states that resist verbalization to the artist.

Although this hypothesis has not been directly tested, note that it explains why various studies have found an unexpected negative impact of some kind of contextual information on art appreciation (Belke, Leder, and Augustin 2006, Bordens 2010, Cupchik, Shereck, and Spiegel 1994, Leder, Carbon, and Ripsas 2006, Temme 1992). In fact, according to the hypothesis defended here, some kinds of contextual information can inhibit the attribution of analog mental states (for instance, by activating the attribution of language-like mental states instead) and/or digitalize the mental states that the subject has or would have spontaneously attributed to the artist. As a consequence, the work is judged less relevant and the subject likes the work less.

In the absence of more direct empirical verification, the main conceptual argument that can be given for the version of the communication model defended here is that adopting it makes overcoming the two objections raised in section 3 a straightforward task.

10. Plurality of interpretations and artist's explanations

According to the communication model developed in this paper, the main mechanisms that frame our reception of artworks are the same ones that are involved in our understanding of everyday weak communication. In other words, an artwork is spontaneously received as a means that the artist has used to ostensively manifest a set of mental states that could not have been exteriorized using more economical means of expression. The concept of analog mental state was introduced to explain the origin of the resistance to more economical modes of expression, and in particular direct verbalization.

This analysis makes it possible to answer the two objections raised in section 3. Consider the first: a given artwork can generate multiple interpretations even

for a single interpreter. In this objection, the term "interpretation" refers to the verbal translation of the meaning that a given interpreter attributes to an artwork. According to the communication model, a crucial component of the positive appreciation of an artwork is the attribution to the artist of mental states that could not have been expressed more economically, in particular not by means of direct verbal designation. This resistance to direct verbalization comes from the fact that the expressed mental states are sophisticated analog mental states for which language does not provide even coarse approximations. Trying to verbally describe an intentional process involving mental states of this kind is tantamount to trying to describe a movie—each frame, each camera movement, each sound, and so on. Any verbal description, even if it is thousands of pages long, would leave room for thousands of other equally long accurate descriptions. This account not only explains why an artwork can generate multiple interpretations and why the task of interpreting it can give the impression that we are facing a Danaides's barrel into which words can be poured forever, but also why this situation is generally considered as a symptom of success.

It may still be objected that a successful artwork can stimulate completely distinct interpretations, even for a single interpreter, and not only various approximations of the same array of analog mental states. However, as seen in the analysis of Sandburg's poem, an act of weak communication can exteriorize a complex array of quite distinct mental states. In everyday communication, when acts of weak communication involving multiple analog mental states are produced in the flow of conversation, those states generally have some close coherence. In an artwork, which can be worked and reworked sometimes for years, it is much more common for quite distinct clusters of mental states to be expressed. A given interpreter can alternatively explore each of these clusters using words, thus generating quite contrasted pieces of verbal interpretation.

Consider the second objection: artists' public explanations of an artwork often have only a marginal impact on our engagement with it. Again, the core of the answer is provided by the idea that an artwork expresses what could not have been expressed using more economical communication tools: the artist, like anyone else, is unable to translate the complex analog mental states that he/she managed to exteriorize through the work, into words. This is why the artwork itself remains essential even when an artist makes special and sincere efforts to verbally explain the intentions behind the artwork.

However, it may still be objected that this view wrongly predicts that the artist's verbal explanation should nonetheless always have a deep impact on our engagement with an artwork, because they should always enrich the analog

mental states that we are able to attribute to the artist. First, this objection must not be pushed too far. The impact of artists' verbal explanations on personal engagement with the artworks they produce is an empirical question that has begun to be explored, and it seems that at least sometimes the impact is a major one (Specht 2010). Danto (1981) even described a thought experiment wherein two identical artworks are appreciated in a somewhat opposed manner given the different explanations provided by their creators.

Second, it may be remarked that the incompatibility of format between analog mental states and verbalization is not the only barrier separating the artist's verbal explanation from the mental states that actually played a role in the production of the work. Cognitive science has shown how remote the verbal explanations that individuals give of the reasons for their behavior can be from its actual causes. This is true even if the person is perfectly sincere: in many situations, the verbal explanations we give of our own behavior are unconsciously motivated by the public image that we want to display and, in particular, by a search for apparent coherence, rather than by an introspective search for the actual causes of our behavior (Von Hippel and Trivers 2011, Kurzban and Aktipis 2007). This phenomenon of self-deception might be particularly deep in an artistic context, since many artists, as any other public people, are particularly concerned with their public image. Most of us might not be aware of this phenomenon of selfdeception, and might not be able to explicitly reason about it. We nevertheless spontaneously behave in accordance with it, by not taking people's verbal reports about the causes of their behavior as definitive proofs. An example helps to clarify the application of this idea to art reception.

At a conference, a movie critic offered an interpretation of Hollywood Westerns, and in particular of the tumbleweeds that in many Westerns regularly cross the screen, pushed and rolled by the wind. The critic argued that in many such films, in particular those of John Ford, the tumbleweeds symbolize the first covered wagons of settlers exploring the Wild West, which, like tumbleweeds, followed an uncertain path, and finally stopped to put down roots when they had found a watering place. The critic claimed that one argument in favor of this symbolic interpretation comes from a film of Ford's in which John Wayne plays the role of a pioneer who has grown old and who has difficulties finding his own place in the newly industrialized west. In one of the movie's crucial scenes, a tumbleweed is artificially stuck just in front of John Wayne, symbolizing him settled somewhere at the cost of his liberty and, perhaps, against his true nature.

If we watch a John Ford Western with this theory in mind, our experience of each of these tumbleweeds might now be quite enriched. In particular, if we see

the scene with the tumbleweed stuck at the feet of John Wayne, our interpretation of it will spontaneously be enriched by a symbolic component that it probably would not have had if we had not heard the critic's suggestion.

Now, imagine that John Ford himself is in the conference room, that he raises his hand to protest, sincerely, that he never had any such complex symbolic intention. The tumbleweeds in his movies, he says, have no other function than to give an impression of a remote, wild, and hostile West. This public statement, however, would not invalidate a symbolic interpretation of the tumbleweeds in John Ford's Westerns. If we have the critic's theory in mind when we see a tumbleweed crossing the screen, or when we see the tumbleweed stuck at Wayne's feet, we will spontaneously attribute metaphorical content to it despite Ford's denial of symbolic intent. It is tempting to conclude from this kind of observation that the mental states that we attribute to the artist do not constrain our spontaneous interpretation of the artwork.

The explanation favored here is that, in this case, we spontaneously consider that Ford's verbal declarations are not reliable cues to access his mental states, at least not those that actually played a role in the creation of the movie. There are two complementary reasons for this: first, the mental states responsible for the presence of the tumbleweeds includes sophisticated analog mental states that established, in Ford's mind, metaphorical connections between filming tumbleweeds in the way that he did and other motivations that were at play in the creation of his movie. Those relations are nonverbal in nature, and they can play a causal role in the creation of the movie without the artist himself being aware of them. Second, we spontaneously consider that Ford's protest against the symbolic reading of the stuck tumbleweed was motivated, without Ford himself noticing it, by the public image that he wants to present—that of a forthright director who does not imbue his movies with esoteric meanings—rather than by introspective access to the mental states that actually played a role in the creation of the movie.

In further support of this interpretation, imagine that another person raises her arm in the conference room and explains that she was the sound person on the movie with the stuck tumbleweed, and that she stuck it there herself simply in order to hide a microphone. In this case, it would become quite hard to maintain the symbolic reading of that tumbleweed. When we watch this Western again, we will spontaneously see that tumbleweed as a device to hide a microphone rather than a symbol of the situation of John Wayne's character. Of course, it could still be claimed that Ford chose this scene instead of another without the stuck tumbleweed for relevant reasons, and that we can implicitly

see his choice as unconsciously driven by the symbolic virtue of the tumbleweed, but the symbolic interpretation has been significantly weakened. If the anecdote continued in a way that does even more to undermine the view that the artist's mind, even in its most unconscious recesses, causally intervened by virtue of such metaphorical content, the symbolic interpretation would be further weakened as a consequence.

This view explains why, as noticed, for instance, by Collingwood (1938), artists themselves may consider their work as more reliable cues to their own mental states than what they think their mental states are. In fact, artworks can help artists to clarify mental states of their own that they could not verbalize. In the same way as writing a philosophical dissertation helps its author organize and enrich his/her language-like mental states, the creation of an artwork could work as a thinking tool to clarify the artist's own analog mental states (Pignocchi 2015).

11. Conclusion

This paper has tried to clarify the link between art reception and everyday communication. I have argued that, from a psychological point of view, the reception of an artwork is closely related to the understanding of everyday acts of weak communication, such as metaphors. The difference, I contend, is mainly a matter of sophistication, but the psychological processes are the same: in both cases, mind-reading processes drawing on the communicative principle of relevance infer the mental states that an agent wants to ostensively manifest.

If this view is correct, then the study of art could directly benefit from progress made in theories of human communication, as it has benefited from progress achieved in theories of perception (Cavanagh 2005) and emotions (Robinson 2005). And, conversely, the study of art could inspire progress in the understanding of human communication, as it has inspired progress in the domain of perception—for example, in the domain of shadow perception (Casati 2004).

This paper is a first illustration of this kind of exchange. On the one hand, I used relevance theory to discuss classical topics in the philosophy of art: namely, the plurality of interpretations of artworks and the role of artist's verbal explanation. On the other hand, focusing on art revealed a weakness of relevance theory, and the need to accept that the implications of an act of weak communication can be encoded in an analog format. In other words, it showed relevance theory's

need for some degree of hybridization with grounded cognition paradigm. Since this kind of connection generally benefits both sides, grounded cognition might benefit from the establishment of this connection. In particular, thanks to the communication model, the reception of artworks may provide grounded cognition with useful case studies to explore one of its more controversial and essential claims, namely, that analog mental states can produce inferences.

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Part Five Metaphilosophy

Are Aestheticians' Intuitions Sitting Pretty?

Jonathan M. Weinberg

1. Introduction

The debate over the "method of cases" is itself roughly coeval with the initial proliferation of that method in analytic philosophy: wherever there have been philosophers sitting in their armchairs appealing to intuitions about cases in order to test or disconfirm philosophical theories, there too have been yet other philosophers raising concerns about their doing so. Often those concerns have been raised from the armchair in turn, but in recent years this debate has taken a specifically empirical turn, with the widespread growth of the "experimental philosophy" movement putting this practice of appealing to intuitive verdicts to the test. The "negative program" experimentalists have argued that we have sufficient psychological evidence of the systematic fallibility of intuitions to impeach this practice, and that the practice must thus be either abandoned altogether or, more likely, amended in a manner that preserves the appeal to intuitions but at the cost of dismounting the armchair for good. Proponents of armchair methods have of course replied vigorously. Overwhelmingly the attention in this debate has been focused on cases in epistemology, metaphysics, and ethics—with very little experimental attention paid to the corresponding methodological debate in aesthetics.² This chapter aims to offer an initial sortie into evaluating how well these negative program arguments should be expected to project into aesthetics, and to offer the perhaps surprising conclusion that we should expect the use of intuitions in philosophical aesthetics to be in perhaps much better shape than in other areas of analytic philosophy.

A quick preliminary note on terminology: the term "intuition" has become somewhat contested in recent years.³ I myself will be happy to use the term, but it should be understood in a very theoretically light way. What matters to me is the *practice* of appealing to the verdicts about cases, typically hypothetical ones,

as a kind of data to serve as evidence for and against philosophical theories; I will use the abbreviation "PAI" to name this practice of appeal to intuitions, as found currently in analytic philosophy. We consider a case, and we form a judgment about it, and the way we do so, whatever that may be, needs to be of a sort that at least potentially could be mustered as evidence for our theoretical claims. (So, for example, we cannot simply be deducing the verdict on the case as the consequence of our preferred theory.) "Intuition" here is just shorthand for that "whatever that may be" that underlies these case verdicts. I will also talk about the "case verdicts" or "case verdict data," all interchangeably.

2. The restrictionist challenge, in four acts

In order to assess the susceptibility of aesthetics to these arguments about flaws in the case verdict data, and how it might compare with other philosophical fields of inquiry, we first must have the argument on the table. The argument has several moving parts; in order to start with the experimental findings themselves and end up at the conclusion that such findings pose at least a prima facie problem for this philosophical practice. Here are the four separate pieces that constitute one version of that argument, which its negative program proponents have called (for reasons to be explained shortly) "The Restrictionist Challenge":

1. A growing body of experimental results indicating sensitivities in the intuitions of the experimental subjects. Experimental philosophers have examined people's intuitions about cases typical of those used in philosophical thought experiments, and in a number of such studies; their subjects' responses displayed a statistically significant sensitivity to a range of nontraditional factors. These have included the influence of order of presentation, ethnic background, personality type, and even the font that the cases are printed in.⁵ I won't rehearse the details of these studies, or the many substantial debates about them; though I will note that despite a couple of important failures of replication in some "XPhi" work,6 by and large the work has held up well. For example, if one considers the four earliest "negative program" findings—ethnicity effects in knowledge intuitions, order effects in knowledge intuitions, personality effects in free will intuitions, and ethnicity effects in intuitions about reference—all but the first have replicated well. So, there is a growing body of work here, and philosophers interested in continuing to use PAI need to take stock of what it means for their practice.

- 2. An ampliative inference to the presence of those sensitivities in the population of philosophers. The experimental subjects in (1) are most typically from "the folk," either locally recruited convenience samples off the street or in the classroom or, more commonly in recent years, recruited online via services like Amazon's "Mechanical Turk." That these people display various sorts of sensitivities in their patterns of intuitions hardly entails deductively that we philosophers would display the same sensitivities ourselves. Thus the restrictionist challenge requires a premise to the effect that one may cogently infer, largely by abduction, that the philosophers are similarly susceptible, at least to a dangerously large degree. The case need not be made entirely as an inferential step, though, because philosophers themselves have been the target population in at least a handful of experimental philosophy studies thus far.⁷
- 3. A metaphilosophical claim that those sensitivities do not track the relevant philosophical truths, and are thus epistemically deleterious. Not all sensitivities are bad sensitivities, and indeed if our intuitions about, say, whether S knows that p were not sensitive to such matters as the truth of p, then that insensitivity would itself be a flaw. So the restrictionists also need, as an independent moving part of their challenge, that the observed sensitivities are not of a sort that philosophers would generally expect to track the relevant philosophical truths. Some of these are at least contestable; for example, contextualists about knowledge have a case to make that the order in which one considers a set of cases might legitimately alter one's intuitions about the later cases. Still others will likely resist any such rationalization, such as variation in intuitions about free will according to personality type. Thus, premise (3) is a kind of premise that possibly could have more bite in some areas of philosophy than others.
- 4. The epistemically deleterious sensitivities that afflict professional philosophers' intuitions substantially undermine the credibility of the philosophical theories and inferences that those philosophers attempt to base on those intuitions. Even if (1), (2), and (3) all hold true, it does not yet follow that the philosophical practice of appealing to intuitions as evidence is under serious threat. Perhaps these sensitivities would engender errors too rarely; or be adequately compensated for by other aspects of philosophical practice, such as our demanding standards of deliberation and reflection; or be so idiosyncratic and unsystematic that different philosophers' errors would cancel each other out in the public process. So

this one last sort of premise is needed, finally to put the practice of appeal to intuitions under challenge.

Putting these four pieces together, we find PAI confronted by a body of empirical evidence that indicates that the sort of evidence it deploys may be exposed to hitherto unexpected, and uncompensated for, sources of error, to a degree that threatens the kinds of inferences and theories for which PAI is meant to provide premises. Practitioners of PAI are thus challenged to modify, curtail, or otherwise adjust that practice so as better to ensure the accuracy of their results.

3. The aestheticians' advantages?

The restrictionists frame this argument as a *challenge*, because while it places methodological obligations on PAI practitioners, it by no means follows that those obligations could not be successfully met. The idea behind the "restrictionist" name is that the practice may be amended in various ways, such that the resulting, carefully pruned methods might adequately reduce the exposure of philosophical theories and inferences to error, perhaps by preventing those errors from arising in the first place, or perhaps by compensating for them as they occur. The question I wish to focus on for the remainder of this paper is: What resources might aestheticians have at their disposal, perhaps more so than other fields of philosophical inquiry, that they could build upon in trying to meet this challenge?

What follows is an unsystematic set of such resources or, at least, proposals from where we might choose to seek out such resources. I do not intend the list to be exhaustive, and would welcome other candidates. Furthermore, while I claim that these resources may be found to a greater degree in aesthetics than in, say, epistemology or metaphysics, there is an unavoidably hand-waving element to such claims. I will not be claiming that these resources are either utterly absent in other areas, nor that they teem so abundantly in aesthetics that the restrictionist challenge fails to apply. My thesis is a broadly comparative one, not an absolute one.

3.1. Is the lack of negative XPhi findings in aesthetics an advantage?

To start, one might argue on the cheap that aesthetics beats out various other parts of philosophy on premise (1), more or less by default—there just hasn't

been much restrictionist-type program work on aesthetics cases! Lots of exciting positive program work has been done in aesthetics but almost no experimental philosophers have done any work as yet looking to demonstrate epistemically deleterious sensitivities on aesthetics intuitions, or even uncovering some such sensitivities even if that wasn't their aim. But then again, that "as yet" would only underscore how thin an advantage this would be, since it is likely just a matter of time before some such work is done. (And indeed I hope this chapter might serve in some small way as a spark to ignite some such research out there!) And even if there isn't yet much work specifically in restrictionist experimental philosophy of aesthetics, there is still relevant psychological work out there of the right general sort, such as cultural variability in aesthetic attention (Masuda et al. 2008), order effects on the aesthetic evaluations by Olympic gymnastics judges (Damsich, Mussweiler, and Plessner 2006), and the undesirable influence of gender on perceptions of the quality of musical performance (Goldin and Rouse 1997).

So regarding premise (1), at least, I would be hesitant to put forward a claim of comparative advantage for the aestheticians.

3.2. The division of esoteric labor

The practice of PAI is especially susceptible to error when confronting novel, borderline, or esoteric cases—yet it is not an accident that the literature is replete with such cases:

Some of these cases are fairly ordinary, like the intuition that one typically does not know in advance that one has lost a lottery simply in virtue of knowing that the odds of one's having won are miniscule. But very often they are more high-flying or esoteric, such as those involving evil demons (old and new), or clairvoyants, or bizarre brain lesions with weird effects not to be found even in the works of Oliver Sacks. There's a good methodological reason that such funky cases are both common and important in analytic epistemology: we are often trying to get some evidential traction in the slippery effort of rationally preferring one very good epistemological theory over rival, very good epistemological theories... . It doesn't really matter much whether epistemologists sometimes, or even very often, deploy ordinary cases, so long as they also rely crucially on more esoteric cases. Yet the very factors that make intuitions about unusual cases methodologically crucial also lead us to expect them generally to be more errorprone. They will be more susceptible to subtle effects of context, for example, because they will often involve splitting apart distinct features that commonly

go together in knowledge attribution and using them against one another, such as the baseline accuracy of a piece of cognition and the availability of at least some considerations that speak in favor of that accuracy. Different contexts may cue up different weightings of such features in our unconscious categorizing systems, and thus have an increased potential to produce different attributions. (Alexander and Weinberg 2014: 135)¹⁰

Now, aesthetics is hardly devoid of weird, highly atypical cases. For example, in a paper on imaginative resistance, Brian Weatherson offers a set of short stories each but a few dozens of words long, about half a page each. 11 That's pretty unusual as short stories go, in their extreme brevity. But the norms in the philosophical literature show a notable preference for illustration not by means of philosophers' novel concoctions, but with actual and established examples from the relevant artworlds. Philosophers perhaps do not need to think up weird cases of their own so much, in a world that contains cut-ups, readymades, La Jetée, and/or Night of the Lepus—and where the status of those works as poems, sculpture, film, and unsuccessful-horror-flick are not up for dispute. And, for that matter, although Weatherson's stories are unusually brief, there are even shorter stories as part of the record of the history of literature. According to legend, Ernest Hemingway offered a bet to a group of other assembled literary luminaries at the Algonquin that he could craft a short story in only six words. Once the others accepted the bet, he penned: "For sale: baby shoes, never worn"—and thereby won the bet. Now, this is all only according to legend, but it is nonetheless an oft-told and well-received legend, and hearers of the story seem readily to accept that his fellow writers would acknowledge the success of this founding piece of flash fiction, instead of balking at the idea that something so short (a fraction of the length of Weatherson's, after all) could constitute a story.

The work of Arthur Danto also illustrates well how weird cases in aestheticians' arguments often are prefigured in the real creations of the artworld. For example, his series of indistinguishable red painted rectangles in *The Transfiguration of the Commonplace*. The painter "J," whose canvas "Untitled" is entered in Danto's fictional art exhibition is, after all, a clear reference to Jasper Johns; and Danto is counting on his reader's familiarity with works like those of Johns, and of course other works like Warhol's Brillo boxes, to directly inform their judgments about such cases.

As a consequence, aestheticians have less reliance on intuitions about funny sorts of cases, and can instead advert to the established consensus facts about such cases. If you want to think about what it would be like for (say) reliability and internal coherence to come apart, you probably need to make up a case like Mr. Truetemp. But if you want to see whether, say, a work of music could involve the production of no "musical" sounds whatsoever by the assembled performers, you just need to look at the real-world case of Cage's 4'33".

To be clear, I am not saying that aesthetics never needs to engage with its own bizarre hypothetical cases or, for that matter, with real-world cases whose status is liminal. But it does seem, as a philosophical community, to be better off than many of its fellow subdisciplines, in this regard. Not only do they not need to rely on intuitions about novel weird cases as much, but we might also plausibly expect that the intuitions of aestheticians, in virtue of having been raised on a rich diet of such cases, would be healthier regarding new ones that they may need to digest. Perhaps the point can be put this way: aestheticians may not need to rely as much on weird, novel, made-up cases, both because they have a wealth of weird but *established* cases to draw on, and because the weird cases are not really as *novel* in aesthetics as elsewhere, as the outlandishness of philosophers' imaginations can barely keep up with that of the artists whose works they are trying to theorize.

It is noteworthy about Tamar Gendler's (2000) delightful "Tower of Goldbach" story just how much of a real *story* it is, compared to what one so often finds in many parts of the philosophical literature.

3.3. The richness of the stimulus

The most common form for experimental philosophy instruments is also the most common form of philosophical thought experiment, namely, the short vignette. Precisely because such vignettes usually are fairly short—from a couple of sentences to a couple of paragraphs at the most—they leave out a great many details, which must therefore be filled in by readers in their imaginations. Yet, different choices in those details can yield different intuitive verdicts, even when those choices are made subtly, unconsciously, and without trying to bring about any particular result. After all, a primary reason we confront thought experiments in the first place is that we do not know precisely what the contours of the target concepts are or ought to be. This phenomenon of "filling in" is another possible vector for epistemically deleterious effects: different imaginers, with different life experiences, or who have cultivated different tastes in fictions may fill in those details in subtly but tellingly different ways. Different orders or other contextual manipulations may cue up divergent ways of completing the scenarios, with potentially divergent resultant intuitions.

Some philosophers have suggested that this dimension of our practice with thought experiments should provide solace to the would-be defender of the armchair, since professional philosophers confronting a vignette have their years of domain-specific experience in philosophy itself, and their specific training in the delicate art of the thought experiment (Die Kunst des Sessels), and a deeper understanding of the purposes that such imaginative projects are meant to serve. The conjecture is thus that while restrictionist results indicate the presence of epistemically deleterious sensitivities in the folk, the expertise of the professional philosophers will shield them from those sensitivities, to the extent that those effects are the product of variations in filling in. To the extent that this version of the "expertise defense" holds water, I think we might expect aestheticians to have at least a moderately greater such expertise than their colleagues for reasons adverted to in 3.2 above: they will have had a better stockpile of challenging cases with established verdicts to train that expertise on. Nonetheless, there is not at this time any good evidence that the philosophers possess a superior resistance to epistemically deleterious effects, as compared to the folk. Several studies have specifically examined the professional philosophical population, and so far philosophers seem at least as susceptible to the influence of personality type (Schulz, Cokely, and Feltz 2011), and perhaps even more susceptible to order effects than the folk, at least on some case verdict tasks (Schwitzgebel and Cushman 2015). Such results strongly suggest that rejecting premise (2) simply fails as a general strategy for those who would defend PAI from the restrictionist challenge.

So the hypothesis before us is that epistemically deleterious sensitivities in case verdicts about vignettes derive significantly from different filling-ins of those vignettes by people in different situations or with different backgrounds and experiences, and that this holds true for philosophers as well as the lay public. On this hypothesis, the extent to which the considerations in 3.2 hold true confers a further benefit to aestheticians, inasmuch as it would mean that they are relying on long-established consensus instead of their intuition. A further advantage may be found in the fact that the case verdicts appealed to by aestheticians very often are not in response to *vignettes*. For we very often can bring into consideration telling examples by pointing at them or, when necessary, even reproducing them instead of sketching hypothetical scenarios. We ask the reader to consider the works themselves, in their full glory, and no such filling-in is required. (Or, at the very least, it is highly diminished in comparison to standard philosophical thought experiments.) Books and articles in aesthetics not-infrequently include images of relevant artworks (such as Meskin and

Cook's *The Art of the Comics: A Philosophical Approach*, Kieran's *Revealing Art*, or Korsmeyer's *Making Sense of Taste*); or even selections of relevant musical scores (e.g., Kivy's *Music Alone*). Less commonly, authors can manipulate images in ways to make a visual point that thereby need not be entrusted to the various imaginations of their readers, such as when Lopes separates the figure of Edvard Munch's *The Scream* from the painting background in his *Sight and Sensibility*. And of course authors standardly reference such works even where they cannot include reproductions of them, expecting the readers to be familiar with them, and increasingly so in the age of the internet.

All in all, while examples are often useful for illustrating philosophical points, they are even better when they are illustrations themselves.

Now, when the target art form is fiction, be it literary, dramatic, or cinematic, our consideration of the examples will still involve our imagination in a way that will require plenty of filling-in. Nonetheless, adverting to fully real, and thus fully realized, artworks entails that such cases are *vastly* more elaborated than the typical philosophy thought experiment. Gettier's Brown may be in Barcelona, and so too Colm Tóibín's Katherine, but the comparisons end there. So even here, literary artworks that involve filling-in may well display less relevant variability than observed with standard short philosophical vignettes. Common literary cases also have an advantage over vignettes similar to the one observed above about consensus verdicts in weird cases, namely, the existence of well-attested consensus responses to and evaluations of them, such as Radford's (1975) appeal to our affective responses to the death of Mercutio.

We can see the advantages of having rich stimuli available for us to make our arguments from, when we consider a case in the literature that is very much not of the sort in 3.2: Kendall Walton's category of *guernicas*, in his paper "Categories of Art" (1970). Here is the relevant section:

Imagine a society which does not have an established medium of painting, but does produce a kind of work of art called *guernicas*. *Guernicas* are like versions of Picasso's "Guernica" done in various bas-relief dimensions. All of them are surfaces with 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. Some *guernicas* have rolling surfaces, others are sharp and jagged, still others contain several relatively flat planes at various angles to each other, and so forth. Picasso's "Guernica" would be counted as a *guernica* in this society—a perfectly flat one—rather than as a painting. Its flatness is variable and the figures on its surface are standard relative to the category of guernicas. Thus the flatness, which is standard for us, would be variable for members of the other society (if

they should come across "Guernica") and the figures on the surface, which are variable for us, would be standard for them. This would make for a profound difference between our aesthetic reaction to "Guernica" and theirs. It seems violent, dynamic, vital, 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. We do not pay attention to or take note of "Guernica"'s flatness; this is a feature we take for granted in paintings, as it were. But for the other society this is "Guernica"'s most striking and noteworthy characteristic—what is *expressive* about it. Conversely, "Guernica"'s color patches, which we find noteworthy and expressive, are insignificant to them. (347; italics original)

Obviously, Walton is not appealing here to any sort of already established consensus verdict about how people acculturated to such categories would perceive a canvas identical to Picasso's actual one. And nothing about the logical structure of his argument required him to make use of any actual canvas, let alone a famous one. All his argument needs is that the painting be one that is dynamic qua painting, the better to contrast with its placid flatness qua guernica. He could easily have given us a capsule verbal description of such an artwork, inviting us to construct a dynamic painting in our imaginations, instead of recalling a specific one. Had he done that, though, the success of his example would have been prey to the vagaries of the different ways that different readers might imagine the case. Rather, by appealing to such a vivid and well-known artwork to provide the frame for his example, much less filling-in is required. There is still some—just how spiky do you imagine the "sharp and jagged" guernica to be?—but it is markedly less than what may be called for in standard vignette-style thought experiments.

By and large, other parts of philosophy cannot avail themselves of the same rich stimuli. Perhaps in the future we will produce short films of our thought experiments, instead of vignettes, and include links to them in our papers, but clearly our publishing practices are not there yet. One major exception here is the philosophy of language, in that they too tend not to need vignettes, but only individual sentences that can be presented in their totality, even if sometimes a bit of stage setting is required to cue up an intended interpretation.

3.4. An anti-realist advantage

As foreshadowed above, the third restrictionist premise is another place where aestheticians may have an advantage over their colleagues. A sensitivity that

is epistemically deleterious in one domain need not be such for another. An ammeter that changed its readings over the course of the day, even when the circuit was not changing its current over time, would be flawed—as would be a chronometer that failed to change its readings over the course of the day.

Our target categories are appropriately viewed as more dependent on the minds and practices of particular human communities. As such, they are often much more tolerant of interpersonal diversity than categories like knowledge or causation can be. Epistemological relativism can seem provocative, and ethical relativism can seem to threaten disaster. But some amount of aesthetic relativism is, perhaps, the too boringly obvious default, indeed even a longheld truism about what one oughtn't do de gustibus. It should be granted that some forms of aesthetic relativism would be controversial in their own right,14 especially substantially normative claims such as attributions of great artistic merit. Nonetheless, these aren't generally the stuff of PAI in aesthetics, partly for reasons along the lines of 3.2 above. (When we consider Hume's claim that Milton is greater than Ogilby, we have a great deal more to stand on than our intuition about the case.) Rather, if it were to turn out that (say) members of one ethnic group offered systematically different verdicts about what constitutes a piece of music, then I suspect we could fairly cheerfully acknowledge that perhaps what counts as music (versus nonmusic acoustic production) for one group simply isn't what counts as music for another.

This move will only go so far. I don't see how it could apply to intra-cultural variation, for example—could music for introverts just not be the same thing as music for extraverts? I'm just not sure. And it clearly won't apply to other sorts of sensitivities, like order effects. But that's fine; none of these aestheticians' advantages ought to be construed as sweeping solutions for the restrictionist challenge.

3.5. The non-innateness of the target categories of aesthetics

Compare and contrast for a moment some of the main target categories in aesthetics, of the sort that intuitions might be consulted to examine, and the corresponding target categories in other parts of philosophy. On the one hand, we find such categories as ART OF HORROR FILM OR INSTANCE OF A MUSICAL WORK; on the other, we find MORALLY GOOD and KNOWLEDGE and BELIEF and OBJECT and CAUSE. I hope these examples don't look too cherry-picked, but rather are representative of the analytic targets of these respective areas. My conjecture is that if we built out these lists further, very few of the first set, and

comparatively a great many of the latter, would arguably be innate categories. They appear to be cultural near-universals and, for that matter, are the sorts of things that many philosophers have wanted to build right into the fundamental structure of the universe. Now, if you don't like the postulation of concepts or categories themselves being innate, then all I need for my argument here is that our attributions of those categories are substantially guided by some innate cognitive machinery, which is not just plausible but, at the current state of evidence, at least somewhat probable.¹⁵

Because that's where much of the ammunition for the restrictionist program comes from: when our categories in our minds are hooked up to an array of different pieces of equipment. At a minimum, for any category X, we tend to have stored in memory specific X exemplars, a feature-based representation of a prototypical X, and our general theory of Xs. Many of these elements may be differentially cued up by features of the vignettes, or what other cases we have recently contemplated, or even other stimuli or aspects of context not obviously salient to the categorization task at hand, such as the effects of font choice cited above. The more different bits of our mind that subserve categorization for X, the more opportunities for epistemically deleterious sensitivities to develop.

And thus, innate concepts (or, again, concepts subserved by domain-specific innate categorizing machinery) will have *at least one more set* of such categorizers—and thus one more hook for shifts in context, variations in upbringing, and so on, to snag upon. As noted in section 1, Alexander and I hypothesize that epistemically deleterious sensitivities may substantially derive from our having a range of psychological factors that play a potentially conflicting and competing role in rendering our case verdicts. The more such factors that we have in our minds for any given category, the more potential our verdicts about that category will have to respond in an unstable way, depending on odd little shifts in context, word choice, even font choice. Additional categorizers in our heads means additional potential sensitivities in our verdicts. It is thus to aestheticians' advantage that the target categories of our specialty may tend to have at least one less such categorizer.

But the categories of aesthetics are not like that. Our target categories tend to be too culturally local to be good candidates for having substantial innate components. Certainly the specific genres or media, like HORROR OF COMIC, could not be subserved by domain-specific innate mechanisms. Even the category of ART itself, as generally mooted by aestheticians, is likewise too culturally local. *Maybe* we have a few categories that are, such as BEAUTIFUL.

Yet even here we are again prepared to expect significant intercultural and indeed interpersonal variation, and thus for reasons like we saw in section 3.4, the variation is not much of a methodological threat (though it does tend to mean that our theoretical ambitions must be appropriately hedged and modest).

3.6. Our proud heritage of untidy categories and fuzzy theories

So far my discussion has focused mostly on sources of error, of epistemically deleterious sensitivities, in the case verdicts themselves. Yet the fourth piece of the restrictionist challenge also comes into play: just how vulnerable are aestheticians' inferences and theories themselves, to any such errors that they may face? One might think that errors are errors are errors. However, some modes of inference can withstand some fraction of their premises turning out to be false—and some modes cannot. It's assumed in curve-fitting inferences, for example, that there is plenty of noise tangled up in the signal of one's data, and the greater the expected noise, the more one should choose a smoother, simpler curve, and this methodological principle applies to intuition-based methodologies as well.¹⁶ We can consider the error robustness or error fragility of any mode inference to be how likely it is to produce correct or incorrect conclusions, should any of its premises turn out to be mistaken. Practices of curve-fitting include many features to increase the error robustness of their inferences. But analytic philosophical inferential practices tend more toward the deductive than the abductive, especially our practices involving intuitions. Consider, for example, this characterization offered by Weatherson, in a tone that suggests that he does not consider himself to be making any controversial claims here:

In epistemology, particularly in the theory of knowledge, and in parts of metaphysics, particularly in the theory of causation, it is almost universally assumed that intuition trumps theory. Shope's *The Analysis of Knowledge* contains literally dozens of cases where an interesting account of knowledge was jettisoned because it clashed with intuition about a particular case. In the literature on knowledge and lotteries it is not as widely assumed that intuitions about cases are inevitably correct, but this still seems to be the working hypothesis. (Weatherson 2003: 1)

The rest of the paper argues for a loosening of the connection between intuition and theory in these parts of philosophy. And Jennifer Nado has observed recently

how these sorts of practices can make for error-fragile inferences because of their high degree of "epistemic demandingness":

Consider a group of 10 objects, a, b, c ... j, and two properties, F and G. Now consider a subject who possesses a "folk theory" devoted solely to those objects and their properties, on the basis of which the subject makes judgments regarding the applicability of F and G to the objects in the group. Suppose that, by means of this folk theory, our subject produces the judgments Fa, Fb, Fc ... Fj, and the judgments Ga, Gb, Gc ... Gj. Finally, suppose that in actuality, ~Fa and ~Gb—all other judgments are correct. Out of 20 judgments, the subject has made 18 correctly—she is, then, a reasonably reliable judger of F-hood and of G-hood on the cases to which her folk theory applies. We would likely say that it is epistemically permissible for the subject to rely on such judgments in normal contexts.

Suppose, however, that our subject is a philosopher; further, suppose her to be concerned with the nature of F-hood and of G-hood. Our subject might then come to hold certain theoretical claims about the nature of F-hood and G-hood on the basis of those initial classificatory judgments. She might, for instance, infer that everything (in the toy universe of 10 objects) is F, that everything is G, and that if something is F then it is G. She would be wrong on all counts. The example is simple, but it shows that a certain principle—that the general reliability of one's classificatory judgments directly entails the general success of one's theory-building—is clearly false. Generating an accurate theory is highly epistemically demanding; an otherwise respectable source of evidence may not suffice. (Nado 2015: 213–214)

That point about the inadequacy of even fairly high general reliability is important here. For even if one thinks that the case verdicts on imagined vignettes has an overall very high baseline level of accuracy, that does not by itself answer the question as to whether that evidence may be appealed to unproblematically. It also matters what kinds of theoretical claims one is looking to justify by such an appeal, and by means of what sorts of inferences, and how demanding they are.

And here we have another salient difference between aesthetics and many other subfields in philosophy. For we are used to our target categories being somewhat wild and woolly, "out of the crooked timber of humanity," and so on—and we have explored a number of different ways of trying to theorize about such categories, beyond "iff"s.

Perhaps the most prominent such alternative theoretical structure is the family resemblance/cluster structure. Speaking very generally, such accounts

would list off features of a target category that may be criterial but are not necessary. That is, such theories appeal to features that speak in favor of (or against) any individual's being a member of that category, but in a way that is overrideable and defeasible. Such theories have what one might call soft logical edges: they are not amenable to refutation by single or small sets of cases that are members of the category but lack a criterial property, or which fall outside the category even while instantiating several of those properties. For an individual may lack any subset of criterial features, so long as it possesses others to a sufficiently strong degree, and still be in the category. And some features may count more significantly than others (e.g., the feature VIEWED BY PROJECTING A MOVING IMAGE is likely more strongly weighted in the category FILM than is the feature RECORDED INITIALLY ON CELLULOID.) Berys Gaut has defended such an approach to the category ART (citing Weitz and others as important historical precursors to his view, going back to the 1950s—which makes sense, given the historical impact of the later Wittgenstein). In addition to an active literature focused on (and sometimes challenging; see, e.g., Meskin 2007) Gaut's account, a number of variant approaches have been articulated and defended, including concept pluralism (Mag Uidhir and Magnus 2011), and Boydian homeostatic property clusters (Murphy 2012).

One need not look only at theoretical approaches that have been directly influenced by the Weitzian tradition in aesthetics. Some have been more influenced by work in cognitive science on prototypes (e.g., Dean 2003), or connectionist networks (e.g., the account of genre in Currie 2004). We also have the example, already canvassed briefly above, of Walton's "Categories of Art." Walton situates his *guernica* example in terms of what features are standard, contra-standard, and variable features for any given category.

My point here is not to defend any particular version of this soft-edged theoretical approach (although Meskin and I do make use of the Waltonian framework in our 2006 work). What is salient to my arguments here, rather, is that this whole kind of theory is not seen within aesthetics as out of bounds, or even out in left field, but rather as unexceptionable fair play.

The philosophy of art's unblinking inclusion of these sorts of fuzzy categories in its theories suggests one possible source of facility with messier—and thus more error-robust—modes of theorizing. Yet the categories of the arts are not the only messy materials aestheticians are comfortable working with. Not just the structure, but the materials of these categories are themselves frequently untidy, as when aestheticians set forth accounts grounded in the frequently twisted and accidental contours of the history, practices, and narratives of the

arts themselves. One of Arthur Danto's key insights in the philosophy of art was the importance of both institutional and historical factors in how we think about what is or isn't art, and as Carroll (1993) has argued, our interest as philosophers in the avant garde and the problem of the shifting boundaries of what counts as art means that aestheticians' attention to the contingent tales of history is in itself no accident. Not just art, but specific categories and media have also been theorized in terms that are essentially historical or narrative, such as Stanley Cavell's account of the genre of the "comedy of remarriage" (Cavell 1981), or Meskin's (2007) account of the comics medium in terms of its own historical developments.

As with the previous sections, I do not want to over-sell the point. So, to be clear, I am not claiming that other fields of philosophy have not had their own experiments with alternative forms of theorizing, which may themselves prove more error-robust. Just within epistemology, one might consider William Alston's (2005) plea that we go beyond "justification," seeking to enumerate epistemically desirable features of beliefs without stipulating which are or are not necessary for the justificatory status; or Sally Haslanger's (1999) arguments that we must bring in considerations of whether our current attributive practices (which may be poisonously gendered) square with our broader epistemic commitments; or Edward Craig's interesting (1990) revamping of "state of nature" arguments for the purposes of epistemological methodology; or Timothy Williamson's recent defense of the importance of mathematical models that are not just non-definitional, but indeed explicitly a form of abstraction and simplification (as models are in the sciences more generally). These are all, at best, well-regarded but have remained marginal to current practice, as seems to me clearly the case with Alston and Craig.¹⁷ The sort of critical, conceptrevisionary feminist epistemology of Haslanger seems to me to be getting more attention of late, yet provides at best something for epistemologists to argue about, without much shaping (yet) the ways in which actual epistemologists conduct their arguments.

And it's not that we don't have plenty of "Necessarily all F's are G's" kind of theories in aesthetics, including some of my personal favorites, like Carroll on horror. The Meskin piece on comics cited above is, after all, aimed at rival attempts to provide a definition of the comics medium. And many philosophers have drawn upon the historical nature of the arts to offer classically structured definitional theories of art (e.g., Dickie). But it does not seem to me to be written as deeply into the institutional culture of these other areas, as it is in aesthetics. These other sorts of theories are not nearly as error-fragile as the more rigid

sorts of upside-down-As-and-backwards-Es sorts of principles that are still an important part of the theoretical machinery of many other areas in philosophy. Again, I don't want to oversell the basic comparative point—plenty of people across all subfields of analytic philosophy are skeptical about the possibility for necessary and sufficient conditions sorts of analyses. But my informed speculation, as a participant observer if you will, is that the argumentative norms do vary in this way. (It would be interesting to compare to, say, more applied parts of political philosophy, or the philosophies of the special sciences.)

4. Conclusion

All in all, then, aestheticians may have a stockpile of resources for constructively and creatively meeting the restrictionist challenge, and which may not be quite so ready to hand in many other parts of philosophy. I would emphasize one last time the generalized and comparative nature of that latter claim. We should, for starters, expect a fair amount of methodological variation both within aesthetics and within other fields, and the sorts of resources available may vary accordingly. For example, some parts of metaphysics cleave closely to the sciences, especially physics, and they may have there a body of unusual-but-consensus cases from the scientific literature that will function like the arts cases discussed in 3.2. If my arguments here lead to a better mustering of similar sorts of resources not just in aesthetics but in other parts of philosophy as well, on the one hand that may well be a refutation of my comparative claims but, on the other hand, it is a result I would happily welcome.

One might well ask, after all this: Will these resources be enough to meet the challenge? By themselves, I expect not, though it is very much an empirical question. More work needs to be done on just what epistemically deleterious sensitivities may yet lurk in the unconscious shadows of aestheticians' own corner of PAI. Perhaps such research will reveal that no adjustments are in fact called for. Or perhaps only some gentle adjustments will be called for, like focusing yet further away from hypothetical vignettes and toward established consensus cases, or a more self-conscious pursuit of more soft-edged forms of theorizing. Or perhaps more radical restrictions and reconfigurations will be needed. But I am optimistic that, whatever such further research may reveal, and thus whatever specific contours the restrictionist challenge will take for aestheticians, they will find themselves well-situated to face up to them directly.

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Notes

- 1 In analytic philosophy, going back at least to, for example, the debate in the 1950s between Benson Mates (1958) and Stanley Cavell (1958) about the methods of ordinary language philosophy.
- 2 With one important exception, from Richard Kamber; see note 9 below for further discussion.
- 3 See, e.g., Deutsch (2015), Cappelen (2012), Williamson (2008).
- 4 See Alexander and Weinberg (2007) for an initial formulation.
- 5 Swain, Alexander, and Weinberg (2008), Machery et al. (2004), Feltz and Cokely (2009), Weinberg, Nichols, and Stich (2001); see Machery (2017) for an excellent summary of much of the work to date.
- 6 Including one of my own, alas, see, e.g., Kim and Yuan (2015).
- 7 E.g., Schwitzgebel and Cushman (2015), Schulz, Cokely, and Feltz (2011). The subtleties here need not concern us, but note that it is possible that philosophers may be overall less susceptible than the folk, but still be too susceptible for the purposes of philosophical inquiry. For what the folk generally want to do with their intuitions, these sensitivities may not be that problematic. But they aren't trying to justify philosophical theories for a living; we are. See the discussion of "epistemic demandingness" below.
- 8 See Cova, Garcia, and Liao (2015) for a recent review; and, of course, this volume!
- 9 I am not including Kamber (2011) here, because his project was not looking to establish any such epistemically deleterious sensitivities. Rather, he documented a lack of univocity in art/not-art verdicts among both expert and lay population, looking at a large range of cases including a number that one might antecedently have thought were either paradigm cases of artworks (like Frith's painting *The Railway Station*) or of non-artworks (like clouds). These findings do have potentially negative methodological consequences, and Annelies Monseré has in particular vigorously argued to that effect in her 2015 work. Nonetheless, I have some methodological concerns about the study itself and its interpretation. For example, Kamber does not offer his participants any instructions to help guide them toward

the aestheticians' target understanding of the term "art," so some of the noisiness of the data may come from some of them judging that the Iliad is art, in some general sense like being an object of artistic appreciation, others refraining from using the term "art" because the Iliad is not a piece of graphic art but rather an epic poem. And for a large number of the cases, while there was a lack of univocity, there was still a fairly strong majority, as with the 71 percent of art professionals who rated the Iliad as "art" (Kamber 2011).

- 10 See also Nado (2015) for a similar argument.
- 11 Weatherson (2004). I was originally going to cite Walton's famous (1994) Giselda case: "In killing her baby, Giselda did the right thing; after all, it was a girl." But upon checking it, I saw that Walton did not offer it as a complete story, but only as a sentence one might come upon in a story.
- 12 See, e.g., Liao, Strohminger, and Sripada (2014).
- 13 See, e.g., Sosa (2009), Weinberg (2008), Ichikawa and Jarvis (2009), Williamson (2011).
- 14 I am grateful to an anonymous referee for bringing this necessary qualification to my attention.
- 15 See, e.g., Nagel (2017).
- 16 See Hanson (2002), with explicit connections to philosophical methodology made in Talbot (2013) and Weinberg (2015).
- 17 Though, see, e.g., Fisher (2014), Weinberg (2015).

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Beauty and the Agreeable: A Critique of Experimental Aesthetics

Nick Zangwill

1. Beauty and agreeable

Immanuel Kant made a famous distinction between judgments of beauty and judgments of the agreeable (Kant 1928: sections 1-8). According to Kant, they are similar in that both are based on pleasure and, in that sense, they are both "subjective." Beyond that, they differ significantly. One difference, for Kant, lies in the relation of pleasure to desire. Pleasure in the agreeable, but not pleasure in the beautiful, has an internal connection to desire. This is what Kant calls the "disinterestedness" of pleasure in beauty and the "interestedness" of pleasure in agreeableness. ("Interest" and "disinterest" should be seen as technical terms.) Kant also thinks that there is a difference in normative demand of each kind of thought. This difference is the focus of this paper. (For a partial defense of Kant's views on disinterestedness, see Zangwill 1992 and 1995.) One way to put the normative point, in a contemporary idiom, would be to say that judgments of beauty claim a certain kind of correctness, which judgments of the agreeable do not claim. Or, there are certain judgments of beauty that we think we ought to make and certain judgments of beauty that we think we ought not to make, in contrast with judgments of the agreeable. In this Kant follows Hume, in his essay "Of the Standard of Taste" (Hume 1985).

There is a question about the *constituency* of the aesthetic ought—of aesthetic normativity. What is the *domain* of those who are bound by aesthetic oughts? Kant's view is that, unlike morality, it does not bind all *rational* beings. It binds only those of our sensibility—those whose perceptual experience of the world is like ours (1928: section 7). The "universal voice" of the judgment of beauty binds only human beings—those who share our sensibility. Martians, and other

rational animals if there are any (perhaps dolphins?), or angels (on some views of angels) should obey morality; but they may reject or ignore our aesthetic judgments, since they have a different sensibility. What about God? He not only lacks *our* sensibility, He lacks *any* sensibility. So, it seems that God cannot make aesthetic judgments, according to Kant (which is unPlatonic). God cannot know beauty, and He is not all-knowing in this respect. (I do not know whether Kant draws that consequence.) Kant thinks that our aesthetic oughts bind only human beings, of a normal sensibility. My view is that Kant is right about this (Zangwill 1998, 2000, 2013). Kant has, I think, located an important distinction here between aesthetics and morality. They differ in the *scope* of normative demand. So aesthetics and morality are not "one and the same," as Ludwig Wittgenstein said (Wittgenstein 1922: 6.421).

There is another question: Why should we heed aesthetic oughts? Why do they matter? This is a difficult question. Following Christine Korsgaard, we can call it the "aesthetic normative question" (Korsgaard 1996). I shall not address this question here, but I do want to note its existence. I also note that it is not a merely "academic" question, since philistinism concerning aesthetic matters is a live and occupied theoretical option. Some people make aesthetic judgments with full normative demand, but do not think they matter much and do not give such judgments much weight in their practical reasoning. (The film *Taking Sides*, which is about the conductor Wilhelm Furtwängler, nicely contrasts an amoral aesthete with a philistine moralist.)

It might be argued that norms for judgments of the agreeable are more robust than I am assuming. Cannot one learn about the agreeable, and become an expert on wine, chocolate, olive oil, honey, or whatever? There is indeed training, learning, and cultivation of taste of these kinds. We may even talk in terms that suggest normative claims. Certain Greek honey and olive oil, for example, seems plain better than what is produced in most other countries. What would Kant say? He would say that these claims have general validity but not universal validity (Kant 1928: section 7). I would also claim that a consistency requirement does not apply to the agreeable as it applies to judgments of beauty. However delicious the first taste of some delicious food, we find it disgusting after we have eaten too much of it. It is also true that we can get bored of some kind of beautiful things, and want stimulation by other kinds of beautiful things. One cannot listen only to Bach. And sometimes we want to change the kind of cut flowers one has in one's house. But a difference, I conjecture, is that we will never be revolted by what has once pleased us by its beauty, unless we are also prepared to condemn our initial pleasure and verdict as misguided or superficial, whereas too much

of the same agreeable thing leads to revulsion. What this shows, if it is a fact, is that the pleasures in the beautiful and the agreeable are of fundamentally different kinds, and they differ in the kind of normative demand that is intrinsic to judgments of beauty and the agreeable.

I note that Carolyn Korsmeyer has argued against the downgrading of the senses of taste and smell below those of seeing and hearing (Korsmeyer 2002). But the beautiful/agreeable distinction does not necessarily coincide with that distinction among the senses. There is pleasure in agreeable things that are visible and hearable, although it is true that examples of the agreeable tend to be from the "lower" senses. The agreeableness of Canary wine is Kant's example.

The claim in question, then, is that a feature that characterizes judgments of beauty, but not judgments of agreeableness, is their normative aspiration: they aspire to correctness. The kind of correctness in question implies that the opposite judgment is not equally correct, or is a mistake, or at least is less appropriate. Let us try expressing this idea like this:

There is the idea of correctness in *aesthetic* judgment—judgments of beauty and ugliness may be correct or incorrect. It is part of this idea that a judgment that is correct is not also incorrect and a judgment that is incorrect is not also correct.

I say more about this below, but this will do to for the time being. This is not the only distinctive feature of aesthetic judgment. I mentioned disinterestedness. And I think there are also other distinctive features.

Terminological note: I am using the word "aesthetic" in the modern way, not in Kant's way. He used it for both the beautiful and the agreeable, whereas I use it to apply to the beautiful and to exclude the agreeable.

Note also that I have not yet mentioned *interpersonal disagreement*, something very common in writings on these matters. The lack of the norm of correctness in judgments of the agreeable does indeed mean that where two people disagree in judgment about what is delicious, no side is mistaken in judgment. But this follows from the lack of normativity as I stated it in the non-interpersonal way. That way is more fundamental.

The claim in the spotlight is that judgments of beauty and judgments of the agreeable are subject to different norms—in particular, that an idea of correctness is in play for one kind of judgment but not the other. How is this difference manifested? How can we verify this difference? What if this were denied? What is the epistemology of such claims? This will be the concern of many contributors to this volume on "Experimental Philosophy"—or "XPhi" for short—as applied in aesthetics.

The claim is one about "folk aesthetics"; and it is true that it is a descriptive psychological or sociological claim—one that could be verified. That claim is that we—where "we" is all or most of us who make judgments of beauty and ugliness—make this distinction between judgments of beauty and judgments of the agreeable. This is a claim about our notions of beauty and the agreeable, or about our practices or judgments that deploy these notions. As such, I concede that this is a psychological or sociological claim, and thus in principle can be investigated by empirical methods. The question is, which empirical methods?

2. Cova and Pain's questionnaires

Let us now turn to consider a particular case of XPhi, which is concerned with this alleged normative difference between judgments of beauty and judgments of agreeable.

Florian Cova and Nicolas Pain claim that they have empirical arguments against the "normativist" view that ordinary thinkers are committed to an idea or ideal of correctness in aesthetic judgment (Cova and Pain 2012).

They use questionnaires. Let us put to one side, until the next section, general problems with questionnaire research, and focus on their particular questionnaires. Their questionnaire research went like this: subjects were asked to imagine that there are two people, Agathe and Ulrich, who disagree. One says that something is beautiful while the other says that it is not beautiful. The subject then is asked to assent or not to the following sentences:

- 1. One of them is right and the other is not.
- 2. Both are right.
- 3. Both are wrong.
- 4. Neither is right or wrong. It makes no sense to speak in terms of the correctness in this situation. Everyone is entitled to his own opinion. (Cova and Pain 2012: 245)

Cova and Pain report that most people presented with these options chose to endorse 4. Cova and Pain then conclude that folk aesthetics is not normativist.

But their "option 4" is defective. It is not a good characterization of the normativity of aesthetic judgment. It does not provide a clean target. Their description of the normative claim in question is not adequate.

The first thing to say about option 4 is that it includes are three different ideas! That must have confused the subjects!

The second thing to say is that even if we just focus on the first idea (that "neither is right or wrong"), it is unsatisfactory. This is because it does not separate correctness from the right to make a claim. Any normativist could agree with the claim, on one reading. It is a matter of elementary epistemology that correctness and justification are separate ideas. Ptolomy had a perfect right to assert his astronomy. He was even justified and virtuous in doing so. But his view was incorrect. Option 4 does not separate these ideas.

In addition, subjects were told that they were supposed to imagine that the people disagreeing with each other about beauty belonged to different cultures (Cova and Pain 2012: 248). This increases the likelihood of confusing correctness with other properties.

Third, and closely related to the confusion of correctness with justification, there is the confusion of the correctness *of a judgment* with the justification *of a person* for holding that judgment. This is clear when they propose to test layperson normativist commitments as follows:

Subjects are asked whether one of the *individuals* [making the judgements] is correct and other incorrect. (2012: 245, my emphasis)

But what does it mean for an *individual* to be correct? This sounds like a category mistake. It is like they have asked people whether colorless green ideas sleep furiously! Correctness holds of what people judge, not of their judging it. By contrast, justification holds of a person, not of what is judged. Persons are appropriate bearers of epistemic and other justification, not correctness and incorrectness. In English, one can just about describe a guest as being "correct." But then one might criticize him or her for being too correct and overly formal. *People* can be justified in making both correct and incorrect judgments.

Fourth, the use of imaginary examples clouds the issue. Would the choice be the same in a real case? A differently designed experiment could involve real cases. There are cleverly designed psychology experiments that deal in real cases, such as experiments that test whether people cheat in experiments that appear to be about something quite different.

Thus Option 4, which was offered to subjects in the experiment, makes various confusions. It confuses correctness and justification. It confuses agreement with a *person* with agreement with a judgment. And it confuses imaginary and real cases. It is crucial that any questions asked should be sensitive to these

distinctions. There are similar problems with the experiments of others that they cite with approval (Cova and Pain 2012: 254).

In sum, while Cova and Pain's goal of testing whether folk aesthetics is normativist—that is, whether it makes claims to correctness and incorrectness—is fine, their proposed test is not fine. Option 4 is, in fact, an inadequate probe for assessing whether folk aesthetics is normativist. The methodological shortcomings of Cova and Pain's questionnaires means that their empirical arguments are weightless. They give us no reason to doubt Kant's distinction.

In this section, I have focused on the flaws of a particular case of XPhi, but this says nothing of the general methodological problems with *any* questionnaire research, which we will address in the next section. Cova and Pain's paper also suffers from these general problems.

3. Questioning questionnaires

Those who are sympathetic to XPhi think the method for verifying conceptual commitments is obvious: we ask people. But I think that the way the difference in normative demand manifests itself is not obvious. If so, the kinds of empirical methods that we need to reveal this difference in our conceptual practices is not obvious.

XPhi is characterized by the use of questionnaires in order to probe our conceptual commitments. This is not the only possible method. I shall stipulate that XPhi is defined by the use of questionnaires to probe people's intuitions about cases, which is supposed to reveal the concepts they accept. If a philosopher appeals to the results of brain science, for example, I would not class it as XPhi or criticize it. I stipulate that "XPhi philosophers use questionnaires" is an analytic truth.

I do not object in principle to the use of empirical evidence for theories in aesthetics, in particular, to reveal the nature of aesthetic experience. Indeed, I gave one such argument in Zangwill 2015a where I discussed empirical research on musical experience. But there were no questionnaires in the experiments I cited. In those experiments, the subjects listened to music and their galvanized skin-responses were measured. This was then correlated—negatively, as it turned out—with the subject's satisfying "autism spectrum" criteria. I inferred a negative conclusion about the nature of musical experience—that it is not a matter of

imagining emotions or other thoughts about emotion, as many philosophers of music maintain (Scruton 1997, Levinson 2006, Walton 1988).

The question is about questionnaires. Why should we set so much store by what do people *say* they do in questionnaires? They may want to please those doing the asking. They may simply not know the answers, and may make something up ("confabulate"). It cannot be assumed that questionnaires reveal what people think. They may or may not do so. Think of the number of elections where voter intention polls have been very inaccurate.

I am not suggesting that questionnaires never reveal anything. But it is certain that they must be carefully handled, because on many many occasions they have provided what we might call "fake evidence." I recommend that the whole XPhi community reads Brian Hughes's excellent book *Rethinking Psychology: Good Science, Bad Science, Pseudoscience* (Hughes 2016). He details many difficulties with questionnaire research. A great deal of questionnaire research is *highly* unreliable. There is considerable empirical evidence for thinking that much questionnaire research is systematically unreliable. Indeed, double blind research on the effectiveness of questionnaires reveals their unreliability

There is one flaw in much XPhi research that I particularly want to highlight here, which we saw very clearly in the Cova and Pain case. This is a lack of a disciplined approach to the probe—that is, to the questions asked in the questionnaires. This is necessary to avoid confirmation bias. For without it, how do we know we have asked questions that cover the full range of variable factors? I have elsewhere worried about the dominant methodology of questionnaire research on musical experience (Zangwill 2015b). In such research, subjects are exposed to a musical stimulus and they are then given a questionnaire asking them to select from a list comprising only emotions, which was the emotion that they felt. There is no "none of the above" option. Of course, empirical confirmation of the connection between music and emotion is speedily reached (see for example, Juslin and Sloboda 2011; for an insightful critique, see Konečni 2003).

There is serious experimental flaw in the selection of questions. They are cherry picked. If we are searching for radioactivity, we can use a Geiger counter to do that, but this is only because we have independent reason to believe that the Geiger counter is an accurate measure of what we are looking for. Similarly, we need reasons to trust our questionnaires as evidence for whatever they are supposed to be evidence for. (See, further, Strickland and Suben 2012 on confirmation bias in experimental philosophy.)

The choices offered in a questionnaire may impose certain views, thus begging important questions. That is the case in those experiments I have complained about, where an experimenter asks subjects which of several emotions they felt when listening to music, without including an option "none of the above." Even if it did include that option, the experiment would still suggest that one of the other choices is expected. Thus, there appears to be experimental confirmation of a very controversial thesis connecting musical experience and emotion. But we need to be given reasons to believe that the questionnaire method, or a particular case of it, is reliable.

It is also true that XPhi questionnaire research is not double-blind. That may not itself show that it is unreliable, although it would be better if it were doubleblind. Much quite robust replicable psychology research is not double-blind, such as Daniel Kahneman and Amos Tversky's results concerning systematic faulty reasoning (Kahneman and Tversky 1974). Some non-double-blind research is reliable. But note that even in those cases, what is being tested is opaque at least to the subjects. In the "Linda" experiment, for example, subjects gave their probability verdicts on various possibilities, but they did not know that conjunctions of probabilities, in particular, were being probed. So the results (which were replicated) support the hypothesis in question. In good experimental design in psychology, there is a requirement or at least a virtue of naivety: the subjects should not know the aim of the experiment or the experimental hypothesis. Without that, there is a very large danger of what is called "demand characteristics," where subjects try to satisfy the experimenter (Williamson 2007). That would prevent a correlation from supporting the hypothesis, since the result has another explanation.

Cleverly designed psychology experiments, such as many of the more famous experiments in social psychology, make the point of the research, and even its subject matter, invisible to the participants. This is not the case in XPhi, where subjects are baldly asked what they think about some imagined case, of free will, or knowledge, or reference. The lack of naivety of the subjects is matched by the naivety of the experimenters!

Another requirement or virtue of good experimental design is the need for *screening off* extraneous causes. Suppose people drink tea and are asked if it tastes of salt or of pepper and those are the only two options. There might be a "significant" result. But it could be due not to the taste of the tea but due to priming phenomena, although one could test for that (by randomizing the order). Or it could be due to the greater familiarity of one option. A badly designed experiment invites extraneous causes.

Suppose one is to classify music as "happy" or "sad." There might be convergence. But perhaps there would also be convergence in descriptions in terms of "sunny" and "rainy." If so, then what the happy/sad result tells us is not obvious. There is the correlation/causation distinction; so even if there are "significant" results, what they show may be due to another factor, unless that can be ruled out experimentally. Good experimental design must do that. A correlation can be accounted for either by a direct causal relation between two kinds of things or by an extraneous factor that stands in systematic relation to both things.

In this respect, many philosophers' efforts in XPhi that I have encountered are classic examples of what Ben Goldacre calls "bad science" in his book of that name (Goldacre 2008; see especially chap. 3). The uncritical use of questionnaire research in "alternative medicine" has shamefully been used to attempt to vindicate the effectiveness of homeopathic medicine, whereas, whenever properly conducted, double-blind experiments with a placebo control completely discredits homeopathy. Much XPhi questionnaire research by philosophers is at a similar level of scientific credibility to the questionnaire research aimed at vindicating homeopathy.

4. Lack of self-knowledge

Having probed one piece of questionnaire research and then questioned questionnaire research, let us now turn to more basic mistakes that underlie the questionable questionnaire methodology. I focus on three such mistakes.

(A) Engaging in normative guidance in our thought—following a rule would be an example—does not imply self-conscious explicit knowledge of what one is doing, any more than does walking, swimming, or riding a bicycle (Zangwill 2017b). But only such self-conscious knowledge is the kind of thought that could be reported (perhaps accurately and perhaps not!) on questionnaires in an XPhi experiment. People probably have all sorts of half-baked views about what they do while walking, swimming, or riding a bicycle, many of which have nothing to do with what they actually do. It is the same with our conceptual practices. Asking what is involved, for example, in moral or aesthetic conceptual practice is like asking how we perceive three-dimensional depth. Why expect moral thinkers or ordinary perceivers suddenly to have expert psychological knowledge?

Why should the nature of our thoughts about beauty or the agreeable be transparent to us? Those such as Rene Descartes or Thomas Nagel might be right that the nature of pain or yellow is something we grasp immediately in the experience of them (Descartes 1985, Nagel 1974). But the deep nature of various kinds of conceptual thinking is another matter. Perhaps reflection on our thoughts about beauty may reveal *some* essential properties of judgments of beauty, even if it does not reveal the deep nature of judgments of beauty (whether they are cognitive or noncognitive, for example). We might know the conceptual face of beauty, but not the deep explanation of that conceptual face. Aesthetic judgments are subject to conceptual norms, and perhaps we can know that by conceptual analysis or reflection. But they are subject to those norms because of what they are; and conceptual analysis or reflection does not tell us *that*. That deeper essence of thought may be hidden or not obvious to those engaging in the conceptual practice.

(B) Putting the deep essence to one side, the conceptual face of our thought may be known or understood in a tacit rather than an explicit way and, if so, what we know may not be retrievable in consciousness. Normative aspiration, for example, might be tacitly known propositional presuppositions of aesthetic thought without our having reliable meta-knowledge of that tacit knowledge. People might even have absurd meta-beliefs—perhaps they think that the treespirits tell them these things. Why not? Absurd meta-beliefs would not interfere with bicycle-riding. They might even help. Why should absurd meta-beliefs about conceptual practices not happily coexist with those conceptual practices?

It is common for people to be in denial about the norms they are following. Consider those who try to abandon deeply held norms, which nevertheless retain force in their minds even though they are unaware of it. Lapsed Catholics, Jews, and Hindus, for example, may adhere to norms typical of their faith or culture, while denying that fact. Norms may govern mental and physical behavior even though people are unaware of it, and they may even deny it. (It is sometimes obvious to others.) XPhi, in its naïve Cartesianism about self-knowledge, is out of step with almost the entire twentieth century in its approach to the mind. It is as if Freud never wrote.

An alternative would be to say that conceptual aspects of our thought, like normative aspiration, might be known in a *practical* way without even being propositionally recoverable in principle. People know how to ride bicycles but would do badly on questionnaires put by experimental philosophers about what it is that they know. We make judgments bound by constitutive norms, and have something like practical knowledge in doing so. But that need not be translatable into propositional knowledge of what they are doing.

The point, which makes trouble for XPhi, is that we can distinguish a conceptual practice from meta-beliefs about that practice. Why should one

trust the amateur speculations of those who think in a certain way about what they are doing? Compare pain. Persons have pains; but should we trust people's raw unformed opinions about what pain is and their amateur attempts to do philosophy or psychology in the boxes they tick in answer to arbitrarily selected questions on a questionnaire? It is similar with people's conceptual practices. These are subtle matters, like the nature of pain. Perhaps people do have a kind of knowledge by experiencing pain or by engaging in a conceptual practice. I do not deny that. But it is far from infallible. The idea that people have fully formed philosophical views about these matters is incredible. They are not protophilosophers. If this is true for pain, it is also true for conceptual practice with the notions of beauty and ugliness.

An example, familiar to all who teach introductory ethics, is what is called "student relativism." Some nonreligious students confidently assert in the first week of the course that there is no right or wrong in moral judgment. Yet they also hold plenty of strong moral views. So they do not really believe their meta-view, or perhaps they both believe it and do not believe it. They might, for example, strongly believe in tolerance, which is why they assert relativism. That is, they think that tolerance is very good and intolerance is very bad, and also that all views are equally right and wrong. But this is inconsistent, if not hypocritical. Student relativists are in the situation of naive set theorists before Russell's contradiction was revealed. Now what would an XPhi approach be in this case? Surely, the wrong one! It seems that they would take the student relativists' ill-formed second-order views in week one to be authoritative and correct as a self-description. Instead, student relativists are obviously defective in self-knowledge. They are mostly teenagers, after all! Their teachers typically tease out the implications of their practice and, in a few weeks, the inconsistent relativism is gone, because the students realize that the price of holding it is to give up their everyday judgments, which, they recognize, is too massive a dislocation. They hold strong moral views, and they realize that to keep them they must jettison the rarified and intellectual meta-belief in relativism that does not fit their first-order views. But XPhi would just blunder in and ask them for their teenage views in week one!

(C) Another point is this—what we are pursuing is the question. How do we *know* the conceptual features of aesthetic thought? For example, what are the *marks* of normative demand? How do we spot a conceptual principle at work in thought or talk? As soon as we state the issue like this, it is obvious that it cannot be a straightforwardly empirical matter of observing what people do or say, since these conceptual principles are normative not descriptive aspects of aesthetic thought

(Zangwill 2017a). Norms are not necessarily obeyed. Stealing is wrong but there are many thieves. Some thieves might also think it is wrong. It is similar with norms that constitute thinking in aesthetic terms. We might offend against them, either occasionally or systematically, just as the empirical psychology of reasoning uncovers systematic offenses against the norms of both practical and theoretical reasoning. The fact that norms for aesthetic thought are not obeyed universally or even usually, would not show that they are not norms for our thought.

It is true that the fact that people *accept* certain norms in their thought is a psychological or sociological fact, which should be empirically verifiable. But verifying that is different and more complex than verifying conformity to the norm. In making aesthetic judgments, we *should* obey the normative constraints on them; whether we do is another matter.

From this it follows that we should be wary of ascribing conceptual features by looking at what people do or say. The norms constitutive of thinking in a certain may or may not be respected. A norm that is constitutive of people's thinking a certain way is one thing, whether people obey these norms is another.

(D) One last point about empirical research on these matters is that we should be especially wary of thinking language will tell us what we want to know. There is no reason to think that the nature of a kind of thought, or the difference between two kinds of thought, will be conveniently manifest in syntax. Language may disguise thought, or at least not flag differences. A similar syntactic or semantic or conceptual surface might be explained by quite different psychological states or mechanisms. (This is a central Blackburnian thought [Blackburn 2010, essay 11, for example]; perhaps Wittgenstein too [he writes, "Language disguises thought" 1922: 4.002].) There no reason to believe that the difference between the beautiful and the agreeable will conveniently manifest itself in *syntax* as some recent writers believe (Stojanovic 2007, Sundall 2011).

In the absence of convenient semantic markers, there is no escaping traditional philosophical and psychological probing of the kinds of mental states or acts involved in aesthetic and agreeable thinking and the norms constitutive of practices of aesthetic and agreeable thinking. Examining language will not tell us what we want to know.

5. Logical form and empirical possibilities

Thus far I have been rather negative (the reader may have noticed). But I owe something, surely. How do I think that we can know the conceptual features

of our judgments? It is a fair question: How is the normative aspiration of folk aesthetics manifested so that its presence in folk aesthetics may be verified? It is easy to be negative—harder to put something positive forward.

In this last section, I make some remarks about what the empirical verification of the beauty/agreeable distinction should look like. The difference between judgments of beauty and the agreeable manifests itself, surely. But how? Let us ask: How exactly does that difference in normative demand manifest itself at the more superficial conceptual level of thought? My positive model is modeled on logical form in Donald Davidson (1967). I suggest that the answer is: inferential behavior and inferential dispositions, which arise from grasp of entailment relations. This is not the same as a subject's reflective knowledge of their own inferential behavior, which is what XPhi philosophers would investigate.

As Davidson understands the logical form of action sentences, it may come as a surprise to us that there is quantification over events in our actual thought and talk. Nevertheless, that is how we think, even though we are not aware of it. It is revealed in people's inferences, which shows people's commitment to certain entailment relations. If there is to be an empirical or experimental approach here, it should aim to track people's inferential dispositions. It should not target their meta-beliefs about conditionals or about their inferential dispositions but their disposition to make inferences. It should not ask people: "Do you think we are committed to the existences of events in our action descriptions?" The quantification over events is a commitment by the theorist that is supposed to be a good explanation of people's inferential dispositions. It should be similar with the normative aspirations of aesthetic judgments.

The task is to tease out implications of ordinary aesthetic practice, just as Davidson finds quantification over events in thought and talk about actions. If normative aspiration and systematicity marks a difference between judgments of beauty and the agreeable, whatever the deeper nature of these judgments, then people should make inferences corresponding to these normative conceptual features.

If we are testing Davidson's view of action ascriptions, we *might* ask those who make action descriptions whether *they* would make certain inferences concerning that action, but we would not ask what they would think about *other* people making judgments of actions. That would confuse the issue. It is similar with judgments of beauty: other people are not the point. But even their own predictions about themselves are not authoritative. The question is whether they make such inferences, not whether they think they would.

So what inferences should we be looking for? Let us assume that we have predications: "is beautiful" and "is nice," or rather the concepts corresponding to these sentence parts. What does the norm of correctness in judgment imply? How is it manifest? We could say something negative. The rule for a judgment of the agreeable about a thing is that we may (or should) make such a judgment just when we find the thing in question pleasurable, or overall pleasurable, or when we think it likely to be pleasurable. By contrast, judgments of beauty are not restricted to such judgment norms. But we also want to say something positive about judgments of beauty: What is it that they aspire to?

What we need is not just to be able to say that there is an inconsistency between "X is beautiful" and "X is not beautiful," for that may also be true of judgments of agreeable that lack normative aspiration. To speak loosely, there would not be enough normativity in that formulation. One formulation of our target that does better would be:

Some judgements (of beauty) are better than their opposites; and this is not true of judgements of the agreeable.

(Compare Hume's discussion of mountains and molehills in Hume 1985.) Another formulation, which I prefer, is the following:

To judge that x is beautiful is *ipso facto* to judge or assume that the judgment that x is beautiful is better than the judgment that x is not beautiful.

I prefer this because the normativity is internal to the practice. More on this below.

If we were, XPhi style, to ask questions of people who make judgments of beauty, we should not ask what they think of *other people* who make the opposite judgment, but what they think of the opposite judgment, that x is not beautiful. It is the content of the judgment that is in question. The normativity is not essentially interpersonal. (Kant's view *seems* to be essentially interpersonal; but, in fact, his view about this is complex, and I believe that in the end there is a normative claim that explains why we may demand that others agree.)

I would not want to reduce normative constraints on our thought to something else, but there are *marks* of respect for norms of correctness. There is at least something like goal-directed behavior, where there is self-correction, given permutations (Usher 2006). People who take themselves to be following a rule persist when obeying it and they self-correct when they violate it. For example, those who aim to follow the rule of avoiding cracks on the pavement behave distinctively when they step on a crack.

We could ask people if they self-correct, in XPhi style. But surely that expects too much sophistication of ordinary aesthetic thinkers. It would be better not to ask people, but to arrange an experiment that takes actual judgments of beauty, not imagined ones, and then present a scenario in which other judgments are elicited. It would have to be opaque to the subjects what the experiment was about, as in good individual and social psychology experiments.

The relevant issue is whether people judging "X is beautiful" are disposed to make the second-order judgment that the judgment that X is not beautiful is not equally good. If not, then I would worry. But nothing like this has been investigated thus far.

Another formulation of our target would be:

In many cases, although not all (see Hume's discussion of Ovid and Tacitus in Hume 1985), where we consider two judgments "A is more beautiful than B" and "B is more beautiful than A," we think that one judgment is better than the other and it is not that both are equally right.

We must note something very important here: that this invokes a second-order or "reflective" judgment. This is something general that we can learn from Kant's work. One thing that I believe Kant taught us is that our mind is a reflective mind—something that, so far as I know, was not recognized or not properly recognized by the British empiricists. This is because of the central role of the faculty of reason in Kant's thinking about the human mind. In particular, reasoning, practical or theoretical, cannot be understood in first-order terms alone. (On this issue, see further Korsgaard 2009. Hilary Kornblith has argued against a reflective conception of human reasoning and conceptual norms [Kornblith 2012]; but his regress argument is ineffective, because no third level is required for reasoning, and he leaves us without any believable account of reasoning [Boghossian 2016].)

This means that a fully satisfying empirical psychology of the human mind needs to include this sophisticated aspect of our minds, and that will certainly be more complex than recording the outputs of various cognitive or affective "systems." The inner structure of mental activity needs to be probed. That is a difficult task for empirical psychology, but if we are to understand our psychological life, including our aesthetic life, by empirical psychology, it is such an empirical psychology that we need.

We need the idea of the reflective mind in order to understand aesthetic judgments because of the aspiration to correctness of those judgments and we

need the idea of the reflective mind in order to distinguish aesthetic judgments from judgments of the agreeable (which may have "general validity"). The idea of correctness cannot be characterized without second-order resources.

What kind of second-order aesthetic phenomena might we look at? I claimed that the normative aspiration is not essentially interpersonal. So I suggest this, as a first suggestion, which no doubt needs much refining and modification: we should examine people's attitudes to their own past judgments—cases of change in taste. For example, many teenagers think that Shakespeare or Bach are boring. We should take the adults that those same teenagers become, who value Shakespeare and Bach. These would be actual, not imaginary, adults with actual, not imaginary views. We can then investigate their attitudes to their earlier judgments.

I suppose we *could* ask them, XPhi style: Do they think that they made a mistake previously? But given all the problems with questionnaire research, a better test would be to find some way that reveals their second-order judgments without asking for them. Choices may reveal judgments of beauty. The problem is how to reveal second-order aesthetic judgments. What are the marks of judgments about the correctness or incorrectness of judgments of taste? There can surely be empirical evidence for that. But there need to be ways of verifying it in experimentally respectable ways.

I do not want to pursue my amateur efforts at designing psychology experiments here. I am just suggesting the kind of empirical research there might be into folk aesthetics, one that recognizes second-order mental phenomena. The empirical investigation of folk aesthetics is a legitimate enquiry. What should be rejected is the defective questionnaire method for pursuing this.

6. Conclusion

There is a distinctive aspiration to correctness in judgments of beauty that is not shared by judgments of the agreeable. I concede to XPhi philosophers that the nature of aesthetic thought is a matter of fact, one that can be empirically investigated. The question is, which empirical methods? What we should refuse is the dubious questionnaire methodology for investigating that matter of fact. Furthermore, we need a deeper analysis of the conceptual features in question. What norms people accept is an empirical question, granted. But we need the right kind of empirical evidence. Furthermore, that empirical evidence must fit with a proper conception of what is being investigated. We need a proper

conception of our target if we are to investigate it. There is something of a hermeneutic circle here, but there is no escaping it.

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Experimental Philosophical Aesthetics as Public Philosophy

Aaron Meskin and Shen-yi Liao

Experimental philosophy offers an alternative mode of engagement for public philosophy, in which the public can play a participatory role. We organized two public events on the aesthetics of coffee that explored this alternative mode of engagement. The first event focused on issues surrounding the communication of taste. The second one focused on issues concerning ethical influences on taste.

In this paper, we report back on these two events that explored the possibility of doing experimental philosophical aesthetics as public philosophy. We set the stage by considering the significance and current state of efforts in public philosophy (section 1), and by introducing the emerging subdiscipline of experimental philosophical aesthetics (section 2). Then, we discuss the research and outreach aspects of the two events on the aesthetics of coffee (sections 3 and 4). Finally, we conclude by reflecting on the prospects and potential pitfalls of experimental philosophy as public philosophy (section 5).

1. Public philosophy

1.1. Public philosophy is valuable

Public philosophy brings the ideas and practices of academic philosophy to a nonacademic audience. Almost all would agree that public philosophy is a good thing—it allows academic philosophers to make their knowledge and expertise more than just a resource for the privileged few by making it accessible to the many.

There have been a number of recent calls to rethink philosophers' attitudes toward public engagement. For example, in their essay "The Value of Public Philosophy to Philosophers" (2014), Massimo Pigliucci and Leonard Finkelman argue that "public philosophy is a valuable, indeed even vitally necessary, philosophical activity and should be pursued by professional philosophers for both practical and theoretical reasons" (87). And although Pigliucci and Finkelman are concerned to establish the theoretical value of public philosophy to philosophers, they are also centrally concerned with the (alleged) external perception of philosophy as useless; this, they argue, can only be changed by philosophers engaging in public outreach.

Similarly, in the blog post "Does Philosophy Matter?" (2015), Walter Sinnott-Armstrong raises concerns about the extent to which philosophers and philosophy are, as he puts it, "out of touch with the rest of society." Sinnott-Armstrong concludes by suggesting that

there must be some way for philosophers to show why and how philosophy is important and to do so clearly and concisely enough that non-philosophers can come to appreciate the value of philosophy. There also must be some way to write philosophy in a lively and engaging fashion, so that the general public will want to read it. A few philosophers already do this. Their examples show that others could do it, but not enough philosophers follow their models. The profession needs to enable and encourage more philosophers to reach beyond the profession.

1.2. Public philosophy standardly operates via a transmission model

To some extent the situation does not seem to be so bad with respect to philosophy and public engagement. In 1999, the Australian Association of Philosophy instituted the AAP Media Prize, designed to honor "the best philosophical piece(s) published by a professional philosopher in the popular media in Australasia," and the American Philosophical Association has been running the Public Philosophy Op-Ed Contest since 2011. *The Stone* column at *The New York Times* has been publishing reflections by philosophers and other leading thinkers for a number of years; the *Philosophy Talk* radio show has been running since 2004; and *The Philosopher's Zone*, broadcasted on the Australian Broadcasting Corporation, has run since 2005. The *Philosophy Bites* podcast continues to release short interviews with leading philosophers, and Peter Adamson's history of philosophy podcast "without any gaps" is up to its 290th episode.³ Festivals

devoted to (or including) philosophy such as *HowTheLightGetsIn* and the recent *A Night of Philosophy* event in New York City have begun to emerge. And the *Public Philosophy Journal* looks like it is poised to make a major contribution by providing an open-access, peer-reviewed online journal of public philosophy.⁴

As it stands, the vast majority of these valuable public philosophy efforts conform to a fairly traditional mode of public engagement. In most of these cases, public engagement consists primarily in the transmission of some information by the philosopher to a largely passive audience. Of course, audience members are sometimes able to ask questions or comment on the material presented, but it cannot be said that these activities are typically *participatory*.⁵ Although philosophers can provide a valuable service by engaging in such activities, we believe that this is not always the ideal mode in which to teach and learn philosophy.⁶ Like many others in philosophy, we think that "active learning," which engages learners in their own process of learning, is often more pedagogically effective.⁷ As we shall see below, an active approach to public philosophy is possible.

1.3. Public philosophy standardly operates distinctly from research

In addition, as it stands, public philosophy is often thought of as something distinct from philosophical research; that is, public philosophy is seen as primarily involving the dissemination and popularization of research rather than as being part of the research process itself.

Consider the discussion on the blog *Daily Nous* that ensued after Sinnott-Armstrong's blog post (Weinberg 2015). One central theme that emerged in the discussion of this issue was a distinction between philosophical research and public engagement. "I've never seen philosophers criticized for doing public philosophy and I've never copped any flak for doing it myself. As a few people have already noted it doesn't count as research." And "I have not heard good public philosophy denigrated, I don't think ever. Maybe it is useful to explicitly add: public philosophy is typically not research." The standard understanding of public philosophy therefore makes it peripheral to "real philosophical work."

We note that this is not always the case in other disciplines. So, for example, the Living Laboratories program at the Museum of Science, Boston, brought child development researchers to the museum in order to run studies that both enhanced public understanding of science and provided the basis for numerous peer-reviewed research publications (Biarnes and Kipling 2013). Another example of this sort of activity was the research on plating orientation

at the "Cravings" exhibition held at London's Science Museum in 2015 (Michel et al. 2015).

In our view, it is no accident that public philosophy standardly operates distinctly from research, given that it standardly operates via the transmission model. The public lectures, opinion pieces, podcasts, and radio interviews that comprise the majority of public philosophy are largely devoted to informing the public of relevant philosophical ideas. One-way dissemination makes sense for completed research.

1.4. Expanding the scope of public philosophy

Make no mistake; we believe that recent efforts of public philosophy have been tremendously valuable for making public concerns relevant to professional philosophy, and for making professional philosophy relevant to public concerns. Nevertheless, we also believe that the standard modes of operation limit what public philosophy could be.

We believe that the methods of experimental philosophy offer an alternative mode of engagement for public philosophy. The public can play an active role by experiencing and participating in the philosophical project. Moreover, the public events can become part of ongoing research. In this respect, we are agreeing with Eric Schwitzgebel (2015) in recognizing the philosophical value of "engaging with the world, trying out one's ideas in action, seeing the reactions of non-academics." In two recent public events involving coffee tasting, we aimed to put these ideas for expanding the scope of public philosophy into practice.

2. Experimental philosophical aesthetics

The projects we undertook were located in the emerging research field of experimental philosophical aesthetics, the subbranch of experimental philosophy that deals with issues of concern to philosophical aestheticians. Like many other experimental philosophers, we maintain a broad conception of experimental philosophy—one that includes a variety of methods from the cognitive and social sciences (Rose and Danks 2013). Like many other aestheticians, we maintain a broad conception of aesthetics that include questions that overlap with ethics, epistemology, and many other philosophical subfields (Walton 2007). The diversity of experimental philosophical aesthetics is best illustrated with some

of the projects that have been undertaken thus far: Meskin et al. (2013) on the mere exposure effect and bad art; Cova and Pain (2012) on folk aesthetics and aesthetic realism; Liao, Strohminger, and Sripada (2014) on the phenomenon of imaginative resistance; and Liao, McNally, and Meskin (2016) and Liao and Meskin (2017) on the linguistic properties of aesthetic adjectives.

The studies we discuss below focus on issues relating to gustatory taste. In fact, both studies have to do with the taste of coffee. Some aestheticians would be hesitant to count issues surrounding gustatory taste as aesthetic (e.g., Scruton 1979). This is a mistake. In the first place, the locus classicus for contemporary discussions of the aesthetic, Kant's Critique of Judgment ([1790] 1987), characterizes a wide notion of the aesthetic that encompasses judgments of agreeability (including tastes "of the tongue, palate, and throat") as well as judgments of beauty. In the second place, authors such as Telfer (1996) and Korsmeyer (1999) have presented convincing arguments that experiences and judgments of gustatory taste can count as aesthetic even if we understand the latter category in the narrow sense in which it is often used by contemporary aestheticians. For those who still resist the idea that the study of gustatory judgments falls under the heading of aesthetics, we suggest that our projects could also be seen as located in the emerging research field of philosophy of food (Korsmeyer 1999, Allhoff and Monroe 2007, Kaplan 2012, Meskin 2013, Bramble and Fischer 2016).

3. The communication of taste

3.1. Background

Our first event focused on the challenge of communicating taste judgments. Although it has become a commonplace of contemporary philosophy that the word of others is the central source of knowledge, philosophical aestheticians have often been skeptical of our capacity to gain aesthetic knowledge by means of what others tell us (Tormey 1973, Whiting 2015). The same sort of skepticism is often expressed about gustatory judgments. In fact, a number of philosophers have explicitly linked the gustatory with the (narrowly) aesthetic in terms of this feature. Kevin Sweeney, for example, claims that "gustatory judgment, like critical appreciation, must be based on our own sensory experience" (2007: 120). If this is right, then the testimony of others does not look like it could provide the basis for (warranted) gustatory judgment.

One potential explanation for the failure of aesthetic testimony to transmit knowledge is that aesthetic communication is, in some sense, impossible. We are skeptical of this view. It would be hard to make sense of the persistence of the practices of film, music, and restaurant reviews if communication about aesthetic matters were impossible. Our alternative hypothesis is that aesthetic communication is quite difficult. In ordinary circumstances (that is, with normal nonexperts in normal conditions), attempting to transmit aesthetic information from one agent to another is an activity that is prone to failure. The difficulty of aesthetic communication is, we suggest, misdiagnosed by those who are skeptical about the transmission of aesthetic knowledge via testimony: they mistakenly treat something that is merely difficult as impossible. In the first event we set out to find support for this view by exploring how difficult it is to transmit gustatory judgments about coffee.

Our research on the communication of taste judgments about coffee is rooted in the work on the language of wine that was begun by Adrienne Lehrer in the 1970s (1975; 2009). Lehrer, a linguist, was interested in the nature and function of wine talk and designed a number of studies to explore various features of that domain of discourse. In some of her earliest work on the topic, she conducted experiments in which one member of a pair of participants wrote descriptions for three wines belonging to the same broad class (e.g., white table wine), which the other member of the pair then tried to correctly match. Results showed that participants performed no better than chance at matching wines to the correct description. As Lehrer put it, "The communication attempt was unsuccessful" (2009: 110). In various follow-up studies, Lehrer largely confirmed this main finding—"The results showed that one person's matching of wines with a second person's descriptions was not generally better than chance" (2009: 155), and this was even the case with subjects who were scientists at the Department of Viticulture and Enology at University of California at Davis. 11 Lehrer concluded from this early work that much wine talk was phatic; that it is used to create and maintain social bonds rather than to communicate taste information. Although this is an interesting hypothesis in its own right, we were more interested in Lehrer's main finding and the methods that she used.

Moreover, there has been a great deal of research following up on, and extending, Lehrer's wine studies. Lawless (1987) recreated Lehrer's experiment and found that expert wine drinkers were significantly better than novices at correctly matching flavor descriptions to the correct wine. Hughson and Boakes (2002) found that participants were better at correctly matching wines to flavor

descriptions when given a small list of 14 wine terms rather than a long list of 125 wine terms or no list at all. Solomon (1990) tested the ability of experts and novices to correctly match flavor description written by other novices and experts. It was only when experts matched descriptions written by other experts that they performed better than chance. In brief, it appears that research largely supports Lehrer's claims that untrained folk find communication about wine very difficult, but it also suggests that experts may be better at such communication than her early results suggested.

Using a version of Lehrer's experimental paradigm, would we find that ordinary folk could successfully communicate the flavors of coffee?

3.2. Event

In February 2015, we held a public event on the communication of coffee at Colours May Vary design and print shop in Leeds, in collaboration with the online food journal *Food* (foodand.co.uk). Twenty-four people paid 5 GBP to participate in the event. Our experimental design was based on Lehrer's earliest wine communication experiments described above.

The participants were split into two groups (each n=12). The first group ("describers") was sequentially presented with small cups of three distinct coffees. Two of the coffees came from the same farm in El Salvador using the same Kenia and Bourbon beans but processed differently (either washed or natural) to give related but distinct flavors. The third coffee came from Rwanda using heirloom and Bourbon beans. Coffees were batch brewed by Laynes Espresso, a well-regarded Leeds coffee shop, and kept at the same temperature to ensure taste consistency.

Describers were also given Counter Culture Coffee's flavor wheel (Figure 15.1) and a form with spaces to describe each coffee (Figure 15.2). We recommended to the describers that they use the more basic descriptors in the center of the wheel (such as "floral," "earthy," "nut," or "spice") rather than the more specific descriptors on the outside (such as "burnt sugar" or "dried fig"), but they were told that they were free to describe the coffees as they saw fit.¹² Describers were given five minutes to taste and describe each coffee.

The second group ("identifiers") were also presented with the three coffees (served sequentially) and the flavor wheel. In addition, each identifier received a completed form from one randomly assigned describer. Identifiers were then asked to correctly match the descriptions with the coffees. Identifiers were also given five minutes to taste and identify each coffee.

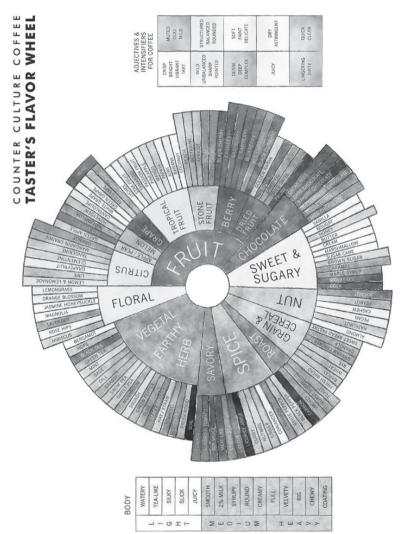


Figure 15.1 Counter Culture Coffee's flavor wheel. Courtesy Counter Culture Coffee

_TALKS ABOUT COFFEE. 01. What we talk about when we talk about coffee.

DESCRIBERS. IDENTIFIERS. You should taste each coffee and You should taste each coffee and then. You should taste each coffee and then describe it using the descriptors given on the flavor wheel, write your descriptions under each 'descriptor' label. When you are done with the task, please turn this sheet over to answer using the descriptions that you have been given, to try to identify it. write your best guess under each 'coffee. Ox' label. when you are done with the task, please turn this sheet over to answer one question about yourself. one question about yourself. HOW KNOWLEDGEABLE DO YOU HOW KNOWLEDGEABLE DO YOU CONSIDER YOURSELF TO BE ABOUT CONSIDER YOURSELF TO BE ABOUT [] Very knowledgeable [] Very knowledgeable [] Knowledgeable [] Knowledgeable [1 Somewhat knowledgeable [] Somewhat knowledgeable [] Not at all knowledgeable [] Not at all knowledgeable DESCRIPTORS. COFFEE, 01. DESCRIPTORS. COFFEE, 02. COFFEE, 03. DESCRIPTORS.

Figure 15.2 Material for participants at the communication of taste event

The results surprised us. Not only did participants do no better than chance at matching coffee to descriptions, they actually did worse than chance. Out of twelve participant pairs, none correctly identified all coffee tasted, four correctly identified one coffee tasted, and the remaining eight correctly identified none of the coffee tasted. (For comparison, if participants simply guessed at random, we would have expected that out of twelve participant pairs, two would correctly identify all coffee tasted, six would correctly identify one, and four would correctly

identify none.) The difference between the actual response we found and chance is statistically significant, $X^2(2) = 6.667$, p = 0.036. This result suggests that it is very difficult for people to communicate about coffee tastes. Of broader significance, this result suggests that aesthetic communication could indeed be quite difficult.

3.3. Public philosophy

In addition, this event also demonstrated that experimental philosophical aesthetics is an effective mode of public philosophy. Not only were the people at this event participants of an experimental study, they were also participants in a public philosophy dialogue. After the result was revealed, they were given the opportunity to interpret the result and discuss its philosophical significance.

Dave Olejnik, head barista of Laynes Espresso, thought that he could have chosen the coffees so that everyone identified all three perfectly. This led to a discussion of whether this result really provides any reason to think that communication about coffee is difficult or, instead, that our results were just an artifact of the particular set of coffees used. In addition, although we had recommended to the participants that they use the more basic descriptors in the center of the flavor wheel rather than the more specific descriptors on the outside, many admitted to not following our advice. The crowd then engaged in an interesting discussion about why they might not have followed our advice and how that could have influenced the result. A number of participants suggested various subjectivist or relativist interpretations of the result, and this led to another interesting discussion about what the point of giving tasting notes might be, if communication about coffee tastes was really so difficult. In short, the people who attended the event were not just passive recipients of philosophy but also participants in philosophizing.

4. Ethical influence on taste

4.1. Background

Philosophers have long debated the connection between the moral value and the aesthetic value, primarily focusing on artworks.¹⁴ How do ethical aspects of an artwork influence aesthetic judgments? With some nuances, the debate on the interaction between morality and aesthetics in art can be extended to apply to food.¹⁵ For our purpose here, we will focus on two views. Food moralism says that a food's moral value is directly connected to its aesthetic value. Food autonomism says that a food's moral value is unconnected to its aesthetic value. If people were

food moralists, then we would expect that learning morally positive information about the coffee would make it taste better to them. Conversely, if people were food autonomists, then we would expect that learning morally positive information about the coffee would make no difference to how it tastes to them.

There is very limited empirical research on ethical influences on people's taste perception. And only two articles specifically address this influence with coffee. De Pelsmacker, Driesen, and Rayp (2005) found that consumers are willing to pay more for fair trade coffee, but at a premium below the typical markup. However, they do not directly address perception and experience of tasting coffee. Sörqvist et al. (2013) presented participants with two cups of coffee, one of which was unlabeled and the other was labeled as eco-friendly, even though they were in fact qualitatively identical. Across three studies, they found that found that participants who had sustainability-congruent attitudes rated "eco-friendly" coffee as tastier. They thus conclude that "Eco labels not only promote a willingness to pay more for the product but also lead to a more favorable perceptual experience of it" (Sörqvist et al. 2013: 1).

4.2. Event

In March 2015, we held another public event—this time, on the ethical influence on taste—again at Colours May Vary and in collaboration with *Food&_ and Laynes Espresso*. Twenty people paid 5 GBP to participate in the event. Our experimental design was inspired by Sörqvist et al. (2013), but with two important modifications.

First, instead of a within-subject design, we employed a between-subject design. So, we divided up participants into two groups, one in the morally neutral condition (n = 11) and the other in the morally positive condition (n = 9). The coffee was batch brewed and kept at a constant temperature. Participants in the morally neutral condition did the tasting first, while the other participants engaged in an unrelated activity.

Second, instead of an eco-labeling manipulation, we manipulated participants' moral attitudes toward the coffee producers' work conditions. So, participants in the morally positive condition received the following text prior to their coffee tasting (the italicized parts are the additions to the information given to participants in the morally neutral condition):

Square Mile in London roasted the coffee beans used. The beans are a mix of Bourbon and Kenia varieties. They were produced in El Salvador and wet processed. *The farm owner is very welfare conscientious: she pays the workers*



_TALKS ABOUT COFFEE.

Square Mile in London roasted the coffee beans used. The beans are a mix of Bourbon and Kenia varieties. They were produced in El Salvador and wet processed.

What do you think of the taste of the coffee?



Can you explain your rating? (For example, which flavors did you like and which flavors did you dislike?)

How much would you pay for this cup of coffee?



TALKS ABOUT COFFEE.

Square Mile in London roasted the coffee beans used. The beans are a mix of Bourbon and Kenia varieties. They were produced in El Salvador and wet processed. The farm owner is very welfare conscientious: she pays the workers 50% above minimum wage and provides social services, such as medical care, for their families.

What do you think of the taste of the coffee?



Can you explain your rating? (For example, which flavors did you like and which flavors did you dislike?)

How much would you pay for this cup of coffee?

Figure 15.3 Material for participants at the ethical influence on taste event

50% above minimum wage and provides social services, such as medical care, for their families.

They then answered the question "What do you think of the taste of the coffee?" on a seven-point unnumbered scale, from "among the worst I've tasted" on the left to "among the best I've tasted" on the right (Figure 15.3).

While the responses were being collected and analyzed by our research assistants, participants were given a brief primer on the philosophical debate on the interaction between morality and aesthetics, especially with respect to food. And then the results were revealed to everyone at the same time.

Contrary to our expectations, we did not find an ethical influence on people's taste of coffee. In fact, the morally neutral condition group (M=5.23; SD=0.343; Figure 15.4 left) thought the coffee tasted better than the morally positive condition group (M=4.89; SD=1.294; Figure 15.4 right) did, but the difference is not statistically significant, t(8)=0.763, p=0.467. However, given that the study has relatively few participants, we hesitate to say anything definitive on the basis of this nonsignificant result.

4.3. Public philosophy

Still, the result was good for generating discussion. The participants were briefly told about potential explanations due to experimental artifacts, such as the relatively low number of participants and the difference between Sörqvist et al.'s study design and ours, and then asked to think about why we found this result. Some participants made interesting empirical conjectures. For example, one thought many participants already have positive associations with the coffee provider,

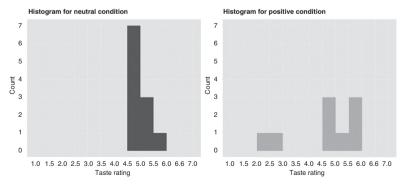


Figure 15.4 Taste ratings at the ethical influence on taste event

which could lead them to assume positive moral standing of the coffee served. And, as such, even in the morally neutral condition, the assumed positive moral standing remained on participants' minds during tasting. Other participants drew on their own experiences to theorize about the results. For example, one made the fine distinction between how something tastes and the experience of tasting something, and conjectured that although positive moral information can improve the experience of tasting something, it cannot change how something tastes. The experimental results, and participation in this exercise, thus gave participants an opportunity to draw on seemingly mundane experiences (like drinking coffee!) to philosophize about the complicated relationship between ethics and taste.

5. Prospects and potential pitfalls

As we highlighted at the start, nearly everyone agrees that public philosophy is valuable. But standard approaches, which operate via the transmission model and present already completed philosophical research, have drawbacks. We hope that by sharing our experiences in organizing these two public events on the aesthetics of coffee, we have shown that experimental philosophy—perhaps especially experimental philosophical aesthetics—can be a way to expanding the scope of public philosophy. Specifically, we think the methods of experimental philosophy can be incorporated into public philosophy to encourage more two-way interactions between the academic philosopher and the public, and to integrate the aims of outreach and research.

Still, we would be remiss to not mention some trade-offs and limitations. An advantage of the transmission model is that it allows philosophical ideas to reach many people with a single effort. In contrast, our public events were necessarily limited to relatively few participants in order to preserve interactivity. Moreover, the transmission model is applicable to a wider range of audiences. In contrast, given that experiments were central to our public events, ethical considerations may make them unsuitable for people in vulnerable circumstances, such as prisoners and children. We must keep these potential pitfalls in mind in conducting experimental philosophy as public philosophy.

The recognition of the prospects and the potential pitfalls of experimental philosophy as public philosophy underscores the necessity of methodological pluralism in public philosophy. Different audiences, considerations, and contexts call for different models.

Notes

- Since public philosophy and university teaching both aim to bring the ideas and practices of academic philosophy to a wider audience, some of the points we make will unsurprisingly echo Thomas Nadelhoffer and Eddy Nahmias's "Polling as Pedagogy: Experimental Philosophy as a Valuable Tool for Teaching Philosophy" (2008).
- 2 We use the term "taste" in the everyday broad sense that encompasses both what scientists count as taste and as flavor. For discussion, see Spence, Auvray, and Smith (2014).
- 3 As of December 6, 2017.
- 4 See Pigliucci and Finkelman (2014: 90–92) for a discussion of different modes of public philosophy.
- 5 As a reviewer pointed out, a plausible exception is public philosophy for children.
- 6 Indeed, it is highly questionable whether the transmission model—also known as the banking model—is the best way to teach and learn, period (Freire [1968] 2000).
- 7 For a discussion of active learning and an overview of some of the research that supports its effectiveness, see Prince (2004).
- 8 See Cova, Garcia, and Liao (2015) for an overview of the research field and Torregrossa (forthcoming) for a defense of the research field's viability.
- 9 For a response to this skepticism, see Meskin (2004). For an overview of the literature on aesthetic testimony, see Robson (2012).
- 10 For a similar view, see Korsmeyer (2013: 258–259). For criticism of this sort of view, see Meskin and Robson (2015).
- 11 It is, however, the case that those subjects did do significantly better than chance in a matching experiment run later by one of those UC-Davis subjects.
- 12 The main flavor wheel has 20 distinct flavor categories in the center (some of which contain more than one descriptor) and 120 on the outside. There are additional descriptors for body, faults, and "adjectives & intensifiers."
- 13 Some studies suggest that people are better at communicating about the taste of wine when they are presented with a short list of wine terms rather than a long list (Hughson and Boakes, 2002).
- 14 See Eaton (2016), Giovanelli (2007), and McGregor (2014) for recent overviews of the debate.
- 15 See Liao and Meskin (2018) on the interaction between morality and aesthetics in food. See Korsmeyer (2012) for arguments for food moralism and against food autonomism.
- 16 Participants' responses to the question of how much they'd pay for the cup of the coffee showed the same pattern.

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