

Does Wine Have a Place in Kant's Theory of Taste?¹

Rachel Cristy, Princeton University

Kant's own answer to my title question is "no." One can make of a wine the merely subjective judgment that it is *agreeable*, never the universally valid judgment that it is *beautiful*.

Here is Kant's only remark on wine in the *Critique of the Power of Judgment*:

With regard to the **agreeable**, everyone is content that his judgment, which he grounds on a private feeling, and in which he says of an object that it pleases him, be restricted merely to his own person. Hence he is perfectly happy if, when he says that sparkling wine from the Canaries is agreeable, someone else should improve his expression and remind him that he should say "It is agreeable **to me**"; and this is so not only in the case of the taste of the tongue, palate, and throat, but also in the case of that which may be agreeable to someone's eyes and ears. (KU §7, 5: 212)

Here is Kant's explanation for why wine can't be judged beautiful: "Aesthetic judgments can be divided into empirical and pure. The first are those which assert agreeableness or disagreeableness, the second those which assert beauty of an object... the former are judgments of sense (material aesthetic judgments), the latter (as formal) are alone proper judgments of taste" (§14, 5: 223). Not only flavors and aromas, but also "mere color, e.g., the green of a lawn" and "mere tone...say that of a violin" are relegated to judgments of agreeableness, because they "have as their ground merely the matter of the representations, namely mere sensation" (§14, 5: 224).

Kant anticipates objections to his disqualification of color and "tone" (which he uses variously to mean *timbre* or *pitch*) as candidates for beauty. He acknowledges that "most people" would call a color or tone *beautiful*, and insists that such judgments *are* responding to the formal aspects of the representation (§14, 5: 224). But he does not expect similar objections on behalf of flavors or smells, the objects of the "lower" senses. Recently, however, objections have arisen, in both professional philosophy and popular opinion. Tim Crane (2007) regards wines as "aesthetic

¹ Thanks are due first to Desmond Hogan, whose graduate seminar on Kant's Third Critique inspired this paper, and who first suggested that I consider publishing it. Thanks to Lanier Anderson, Allen Wood, and Raphael Krut-Landau for reading and commenting on earlier drafts, and to the attendees at the 2013 Princeton-Humboldt Graduate Philosophy Conference and the Hopkins-Penn-Princeton-Columbia Workshop in Early Modern Philosophy for helpful feedback.

objects,” bearing aesthetic value that gives us reasons to experience them (144). Steve Charters and Simone Pettigrew (2005) found, in focus groups of wine consumers and industry professionals, that “by a ratio of about three to one, informants considered that the consumption of wine shows some similarities to the appreciation of ‘pure’ art forms—especially music” (126). Charles Senn Taylor (1988) even argued that wine tasting is an aesthetic experience by matching up aspects of the process with Kant’s four moments of the judgment of beauty.

In this paper, I take it as given that Kant was wrong to dismiss wine as a possible object of judgments of beauty. I am also largely setting aside the question of whether Kant’s theory of taste is *correct*. My question is whether Kant’s theory can account for the status of wine as an object of distinctively aesthetic attention, and I am concerned with its truth only insofar as *failure* to incorporate wine constitutes an argument against it. I determine that Kant’s theory is capable of accounting for the aesthetic status of wine, though he himself did not recognize it.

In answering my question, I focus on Kant’s infamous “formalism”²: his insistence that judgments of beauty must be based on the *form* that human cognition contributes to the representation of an object, *not* on the components of the representation that come directly from sensation, which constitute the *matter* of experience. I consider whether the features that give wine its aesthetic value are *formal* in Kant’s sense: basically, spatiotemporal and therefore suited to mathematical description. I rather doubt that judgments about specific flavors and aromas are grounded in their spatial, mathematizable basis: the geometric structure of volatile molecules. But the feature I find most important in distinguishing aesthetically interesting from uninteresting wines clearly is formal: the *temporal* structure of the tasting experience.

² I do not use the term as it is often used in aesthetics, to refer to the view that only immediately perceptible aspects of an object, not its mimetic or conceptual content or cultural context, contribute to its aesthetic value. As Zangwill (1999) points out, Kant was not an “extreme formalist” in this sense, because his notion of adherent beauty allows him to account for the way an object’s function or representational content constrains assessment of its form.

1. Wine and Kant's Analytic of the Beautiful

Here I will describe how *some* judgments about wine meet Kant's criteria for judgments of beauty laid out in the Analytic of the Beautiful.³ I leave aside for now the third moment of the judgment of taste, where Kant's problematic formalism comes in.

1.1 The First Moment: disinterested satisfaction

Judgments about wine can involve the satisfaction without interest that Kant names as the characteristic quality of judgments of beauty. He defines *interest* as "the satisfaction that we combine with the representation of the existence of an object" (*KU* §2, 5: 204). I have an interest in an object if I could use it to fulfill some goal or desire; my satisfaction in an object is disinterested if the pleasure comes from attending merely to its perceptible features.

To show that the satisfaction in an object is *disinterested*, one must show that it is not one of the kinds of satisfaction that essentially involve interest: satisfaction in the *agreeable* and in the *good*. Kant defines the agreeable as "that which pleases the senses in sensation" (§3, 5: 205). To say an object is agreeable is to say that "through sensation it excites a desire for objects of the same sort"; "It is not mere approval that I give it, rather inclination is thereby aroused" (§3, 5: 207). The *good* involves interest, because calling something good "always involve[s] the concept of an end, hence the relation of reason to (at least possible) willing" (§4, 5: 207). Something is called good only in relation to an end it promotes, whether an end that reason imposes on all rational beings (fulfillment of the moral law), or some contingently held individual end.

Pleasure taken in wine need not be interested in either of these ways. Finding a wine agreeable is neither necessary nor sufficient for judging it aesthetically excellent. I can appreciate the elegance and complexity of a Cabernet Sauvignon even if I would not typically order it at a bar (because tannins dry out my mouth). Conversely, I can enjoy a refreshing but one-note Pinot grigio on a hot day without claiming it's a great wine. Another interest one might have in wine is a desire

³ I take some cues from Taylor (1988), but the analysis is largely my own.

for the agreeable sensation of intoxication. Wine appreciators, however, wish to *avoid* intoxication, which dulls the senses; expert evaluators spit out the wine after swishing it around their mouth thoroughly enough to experience all its flavors.

Preoccupation with notions of what is *good* for some end can also be an obstacle to the appreciation of *beauty*. This happens, for example, when consumers assume that wine quality increases consistently with price. People even report enjoying the same wine more when they believe it to be more expensive (Goldstein et al. 2008: 2)—perhaps because preconceptions about objective quality interfere with their experience, or because they wish to be seen as having sophisticated tastes. But data from thousands of blind tastings show no significant correlation between price and quality rating among wine experts, and show a *negative* correlation among non-experts (ibid., 4-5). In short, tasting wine with an eye to what is *good*, with respect to the goal of social prestige, distracts from the sensory qualities of the wine and *impedes* aesthetic appreciation.

1.2 The Second Moment: universal validity without a concept

When a person calls something beautiful, according to Kant, he “does not count on the agreement of others..., but rather **demands** it from them. He rebukes them if they judge otherwise, and denies that they have taste” (*KU* §7, 5: 212-3). This is often my approach to judging wine: when I call a wine “good” or even “beautiful,” I don’t just mean that *I* find it pleasant; I think others should share my judgment, and take them to be faulty judges if they don’t.

But although people “speak of the beautiful as if beauty were a property of the object and the judgment logical” (§6, 5: 211), a pure judgment of taste is not conceptual. It has *subjective*, not objective, universality: the claim is that everyone should feel a disinterested pleasure upon experiencing the object, *not* that it has a specifiable feature that makes it beautiful. “[T]here can...be no rule in accordance with which someone could be compelled to acknowledge something as beautiful” (§8, 5: 215). Rather, the *state of mind* involved in experiencing a beautiful object is felt to be “universally communicable” (§9, 5: 217). Pure judgments of taste are *like* cognitive judgments

in their universal communicability and import, but *unlike* them in that they involve no concept or rule according to which one can classify objects as beautiful. Kant concludes from this paradoxical combination that the experience of beauty consists in a harmonious “free play” between the faculties involved in cognition, the imagination and the understanding, in which “no determinate concept restricts them to a particular rule of cognition” (§9, 5: 217).

Is this what happens in judging a wine? You could not convince me that a wine is beautiful simply by describing it; I must, as Kant says, “immediately hold the object up to my feeling of pleasure and displeasure” (§8, 5: 215). No combination of concepts is completely adequate to the experience; saying that a wine smells like jasmine, tastes like green apples, and feels crisp in the mouth hardly exhausts it. What’s more, these descriptions do not make it obvious whether, or why, a wine is good. My tasting notes on a Zinfandel I liked say that it tasted like marionberry at first and coffee on the finish, which in the abstract sounds like a bizarre combination. Some Rieslings are described *approvingly* as smelling of petrol. But such comparisons are imprecise approximations; a wine’s aromas and flavors combine in ways that cannot be reproduced by smelling or eating the substances they resemble.

My own experience of tasting an interesting wine and reaching for descriptors does feel like Kant’s “free play” of the imagination and understanding: my senses offer data to my intellect, which throws out concepts that might fit, rejecting some in favor of others (e.g., deciding *marionberry* is closer than *blackberry*), never satisfied that any of them fully captures the experience. I do not expect that everyone will like this wine *because* it tastes like marionberry and then coffee, or that every wine exhibiting those flavors will be beautiful. Nonetheless, I do expect that others who taste this wine will experience a similar pleasure, which is not purely sensory, but also engages the intellect; in this way my state of mind is universally communicable. (In fact, the difficulty people have finding satisfactory descriptors for their experience of wine makes it a *better* target for Kantian *non-conceptual* universal judgments.) Conversely, I find a wine aesthetically disappointing

if some description—for example, that a Chardonnay tastes exactly like buttered popcorn, or a Merlot like cherry jam—completely sums it up.

1.3 The Fourth Moment: subjective necessity

The Fourth Moment expands on the universal communicability and normative force of aesthetic judgments. “Of every representation,” Kant explains, “I can say that it is at least **possible** that it...be combined with a pleasure. Of that which I call **agreeable** I say that it **actually** produces a pleasure in me. Of the **beautiful**, however, one thinks that it has a necessary relation to satisfaction” (*KU* §18, 5: 236). Yet it is not an *objective* necessity: a failure to feel satisfaction upon beholding a beautiful object would produce no internal contradiction, no violation of the conditions that make experience possible, and no breach of the moral law. The judgment is non-conceptual, so it cannot generate any contradiction, propositional or practical. “Rather,” Kant continues, “it can only be called **exemplary**, i.e., a necessity of the assent of **all** to a judgment that is regarded as an example of a universal rule that one cannot produce” (§18, 5: 237).

Since there is no “objective principle” which can prove that everyone *will* or *is obligated* to feel pleasure, aesthetic judgment must presuppose a “subjective principle” according to which everyone *should ideally* feel pleasure. That is, we must posit some perceptual mechanism which is necessarily the same in everyone, and will therefore, when operating properly, produce in everyone the same feeling in response to a beautiful object; Kant labels this mechanism a “**common sense**” (§20, 5: 237-8). The judging subject’s experience of pleasure is thus a fully representative *example* of how this mechanism will, ideally, receive the beautiful object in everyone. In fact, Kant says, such a mechanism exists; it consists of the cognitive faculties: imagination and understanding. We cannot suppose that everyone’s sensory organs will respond to an object in the same way,⁴ but the

⁴ I don’t have in mind physical differences that result in different *objective* judgments—such as having fewer than three cones (colorblindness), or an extra one (tetrachromatism), which lead to unusual judgments about whether two things are the same color. I mean differences in sensation that show up, if at all, only in judgments of agreeableness. For example, people who love coconut and people who hate it can both reliably recognize the flavor and may agree about which flavors it is similar or dissimilar to. They judge differently

possibility of objective knowledge presupposes that everyone's *cognitive* faculties operate in the same manner.

Kant concludes that encountering a beautiful object produces a "disposition of the cognitive powers...in which [their] inner relationship is optimal for the animation of both powers of the mind...; and this disposition cannot be determined except through the feeling (not by concepts)" (§21, 5: 238-9). The pleasure we feel in response to beautiful objects is our vague awareness of this optimal animation. We think everyone should feel the same because the workings of everyone's cognitive faculties are supposed to be the same, including which objects induce their optimal configuration. If someone does not feel the same pleasure, we assume that something in his experience is defective: either he is not properly attending to all of the object's features, so his faculties are not disposed as they should be; or something is amiss with his faculties themselves or his attunement to their operation—that is, his organ of the "common sense," his *sense of taste*.

Does this account of the necessity of aesthetic judgments also apply to the judging of wine? Insofar as I demand that everyone agree with my judgment that a wine is beautiful, I regard the representation as combined with pleasure necessarily, not contingently for this one taster on this one occasion. If I demand that others share my judgment, but not because they subsume the wine under a concept that applies to it objectively, it is because I think they should *perceive* it in the same way, with faculties that operate in the same way as mine. I do not require that everyone apply the same concepts to the wine; but I do think it should induce in everyone the same part-sensory, part-intellectual pleasure.

only about whether it is pleasant or unpleasant. The *cognitive* apparatus is operating the same way in both subjects, but we cannot say whether the difference in preference arises from the way coconut interacts with the *sensory* apparatus or merely with, in Kant's terms, the faculty of pleasure and displeasure: does coconut present a different *quality* to the two subjects, albeit in a way they cannot describe, or do they merely have different reactions to the very same quality?

2. Form and matter

2.1 The form of purposiveness

Now I turn to the Third Moment of judgments of taste, where Kant introduces his infamous formalism. First he claims that beautiful objects exhibit *purposiveness without an end*⁵ (§11, 5: 221):

An object or a state of mind or even an action...even if its possibility does not necessarily presuppose the representation of an end, is called purposive merely because its possibility can only be explained and conceived by us insofar as we assume as its ground a causality in accordance with ends, i.e., a will that has arranged it so in accordance with the representation of a certain rule. (§10, 5: 220)

It is *possible* that a beautiful object (a flower, painting, or poem) arose through a causal process that did not involve a preexisting concept in the mind of an intelligent maker; but human beings can only comprehend such things by viewing them as products of this kind. Yet this is purposiveness *without* an end because the intellect can find no concept adequate to the experience of a beautiful object. If we judged the object to be an excellent realization of some concept, it would be a judgment of the good, not of beauty. Rather, the object seems like a skillful execution of *some* design we cannot reconstruct. “Thus we can at least observe a purposiveness concerning form” (§10, 5: 220)—or as Kant phrases it later, “the mere *form* of purposiveness” (§11, 5: 221)—“even without basing it in an end (as the matter of the *nexus finalis*)” (§10, 5: 220).

This merely formal purposiveness is mirrored in the play of the cognitive faculties. They interact *as if* to the end of producing a determinate cognition, but “without being restricted to a particular cognition” (§12, 5: 222)—because they cannot determine *what* concept in the mind of the beautiful object’s (hypothetical) maker guided its production. But this free play, while having no specific *end*—no conceptual synthesis toward which it aims—does have a consistent direction or tendency, namely, of *continuing* in free play (as one might expect, given an object that presents a puzzle that only appears to have a solution). That tendency is why this state manifests itself as a feeling of pleasure, which Kant defines in functional terms as “[t]he consciousness of the causality

⁵ *Zweckmäßigkeit ohne Zweck*. Although this is often translated as “finality without an end” or “purposiveness without a purpose” to preserve the symmetry of the German, Guyer (2000) translates it as “purposiveness without an end,” sacrificing symmetry for clarity of meaning and consistency of translation across Kant’s oeuvre (2000: xlvi).

of a representation with respect to the state of the subject, for **maintaining** it in that state” (§10, 5: 220). Contact with beauty is pleasurable because we sense that our faculties are trying to remain in the beneficial state induced by the beautiful object. In Kant’s words: “We **linger** over the consideration of the beautiful because this consideration strengthens and reproduces itself” (§12, 5: 222).⁶

2.2 Purposiveness of form

A major puzzle about Kant’s theory of beauty is how he makes the step from discussing “the form of purposiveness” (the appearance of intention, with no concrete aim) in §§10-12 to “purposiveness of form” in §§13-14, where he restricts judgments of beauty to the *form* of objects, as opposed to their *matter*. As Henry Allison remarks, “since the form of purposiveness is clearly not equivalent to the purposiveness of form, Kant owes us an argument, which he never provides, for the sudden move in §13 from the former to the latter” (2001: 132); Paul Guyer speculates, “Perhaps Kant’s formalism...has its roots in an inversion of terms” (1977: 58). In §§13-14, Kant dismisses elements like color and timbre as mere “charms” belonging only to “the matter of satisfaction,” suitable only for “empirical” aesthetic judgments, i.e., of agreeableness (5: 223). Components admitted as eligible for “pure” judgments of beauty include the outline of a painting or sculpture, and the composition of a piece of music, i.e., the placement of intervals in a rhythm. “All form of the objects of the senses,” Kant says, “is either **shape** or **play**..., either play of shapes (in... mime, and dance), or mere play of sensations (in time)” —this last referring to music (§14, 5: 225).

Kant explains what he means by the *form* and *matter* of objects in the *Critique of Pure Reason*. In the Transcendental Aesthetic he says: “I call that in the appearance which corresponds

⁶ Why should this state of trying to solve an unsolvable puzzle be pleasurable rather than merely frustrating? I can best explain it in terms of an experience I’ve had with some novels and films I’ve greatly enjoyed: I want to know how they turn out, but I also never want them to end. Nehamas’s (2007) account of our relationship with beauty is also helpful: to find an artwork (or person) beautiful is to want to get to know it better, while believing that exploration can continue *indefinitely* without ceasing to uncover interesting, pleasing new aspects. Indeed, if one can easily figure out the entire purpose of an artwork and all its features—to teach a moral lesson, for example—it seems simplistic or trite.

to sensation its **matter**, but that which allows the manifold of appearance to be ordered in certain relations I call the **form** of appearance" (*KrV* A 20/B 34). He argues that the form which gives sensory matter a comprehensible order must "lie ready for it in the mind *a priori*" (A 20/B 34), and that space, time, and the categories constitute this *a priori* form. Thus an object's form comprises, first, its spatiotemporal features, including size, shape, duration, and number (i.e., aspects that can be measured or counted and conform to mathematical rules); and second, the ways it exemplifies the categories (including its causal relations and division into substance and accidents). However, Kant says in the Anticipations of Perception, "[a]pprehension, merely by means of sensation, fills only an instant" (A 167/B 209). Individual sensations have neither duration nor extension; only their degree of intensity (*intensive magnitude*) can be quantified, and thus count as formal structure. Kant names color, weight, warmth, and taste as sensations constituting the *matter* of experience (A 169, 175/B 211, 217).

How has Kant determined that only the form of an object can be judged beautiful, while its matter can merely be judged agreeable? Due to features of his epistemology, judgments about the matter of sensation fail to meet all the criteria for judgments of beauty that he has discussed hereto: disinterestedness, universality, and formal purposiveness. Kant says in the Anticipations that sensation is "merely subjective representation, by which one can only be conscious that the subject is affected, and which one relates to an object in general" (B 207-8). Sensation, the representation of the matter of an object, requires the actual presence of the object to affect the subject at some time; even imagining an object's matter in its absence requires some *past* contact to provide the sensory quality. Therefore, pleasure in sensation must involve *interest*: "the satisfaction that we combine with the representation of the existence of an object" (*KU* §2, 5: 204). But judgments

about an object's *form* can be understood, in abstraction from the object's existence, as describing structures in the *a priori* formal intuitions of space and time, and can therefore be disinterested.⁷

Judgments about the matter of sensation also cannot have the universality required of a judgment of beauty. Although sensation is the data that comes from the thing in itself, while the framework of space and time comes from the subject's faculties, it is sensation that Kant calls *subjective*, while perception of shapes or intervals of time is *objective*. This counterintuitive designation flows from the central thesis of the First Critique: that the forms that order our experience, although they come from the cognizing subject, apply to the objects of experience because they make these objects possible. Without them, there would be no countable, measurable, locatable *objects* to talk about, only a chaotic flood of sensory stimulation. We can assume these forms are the same in every human subject because they alone make a shared world of objects possible in the first place. Whatever cannot be ordered according to these forms—the *quality* of a color, sound, pain, smell, or taste—“cannot be assumed to be in accord in all subjects” (§14, 5: 224), and cannot be fully communicated between subjects. For all I know, the object that produces one quality when it affects my senses may produce a very different quality in someone else. The state of mind that prompts a judgment of beauty must be universally communicable; but the only sensible aspects of an object that can be represented in a universally communicable way are those which constitute its *form*. Kant's deduction of pure aesthetic judgments turns on their restriction to formal features: I am justified in demanding that everyone share my judgments of beauty—and the mental state that underlies them—because the spatiotemporal *form* of objects is constituted by “that subjective element that one can presuppose in all human beings (as requisite for possible

⁷ This also explains why only judgments about form can have the (subjective) *necessity* required by the Fourth Moment, in light of Kant's principle that only *a priori* judgments can carry necessity (*KrVB* 3). Judgments involving sensory *qualities*—not just intensive magnitudes—are always *empirical*, because qualities can only be known through perceptual experience. (Note that *quality* is distinct from *intensity*. Converting an image to grayscale preserves the relative *intensities* of the colors, but not their *qualities*.) But since Kant had not discussed necessity by the time he makes the restriction to form in the Third Moment, his argument cannot lean on it.

cognitions in general)” (§38, 5: 290). We are *not* similarly justified in assuming that contact with the same sensory matter will produce the same mental state in everyone, so we take judgments of agreeableness to be restricted to the person who makes them.⁸

Finally, our response to sensory matter cannot display merely formal purposiveness. We cannot expect that the matter of sensation will strike others the way it strikes us; so we can only judge it agreeable, not beautiful. To find something agreeable, Kant explained, is to form a *desire* for things of that kind, and desire always involves an *end*. Therefore, the state of mind underlying our response to an agreeable sensation cannot exhibit the mere *form* of purposiveness required for a judgment of beauty, because the end, which Kant identifies as “the matter of the *nexus finalis*” (§10, 5: 220), is present: possessing the agreeable object. The faculties do not spend much time trying to figure out what the object is for: the agreeableness of the sensation makes it seem obvious (it’s to be enjoyed), and contemplation quickly gives way to desire. But our mental state in response to the *form* of an object *can* exhibit this mere form of purposiveness; the universally communicable pleasure we take in features that can be represented *a priori* need not involve any interest in or desire to possess the object. The cognitive faculties can perceive purposiveness in the form of an object (e.g., judging that the shape of a wheel serves its function as a rotating conveyer of motion) without entering harmonious free play; purposiveness of form does not entail merely formal purposiveness. However, the reverse entailment does hold—which explains Kant’s abrupt move

⁸ Guyer disputes that “the variability of sensation” and “the requirement of universal subjective validity” (1979: 235) justify Kant’s restriction of pure judgments of taste to the form of objects, because (1) there seems to be no reason why sensory matter cannot be part of what induces harmonious free play in a subject’s faculties, and (2) the universality requirement for judgments of beauty is (or should be) logically independent from the mechanism that generates them, so Kant cannot appeal to it to specify restrictions on the mechanism (235-6). However, I am not sure Kant intended them to be independent; he proposes the mechanism of free play of the cognitive faculties *on the basis* of the universal communicability of judgments of beauty, despite their lack of a determinate concept (*KU* §9, 5: 217; Johnson 1979: 168-9 makes a similar point). The presupposition of Kant’s inference seems to be that insofar as we feel our judgment to be universally communicable, we implicitly suppose that it involves only capacities that are universally shared, which means it cannot depend on elements of the object to which our response is wholly private. Johnson (1979: 171) rebuts Guyer’s charge that Kant’s importation of the form/matter distinction from the First Critique is “*ad hoc*” by pointing out that if concepts are ruled out as the ground of the universal validity of judgments of beauty, the only candidates left are the *a priori* formal conditions of intuition: space and time.

between §12 and §13 from the form of purposiveness to purposiveness of form. An object can display the mere form of purposiveness only if its purposiveness resides solely in its form, because only then can the sense of purposiveness be registered in the cognitive faculties alone, through the merely formally purposive free play, and not also in the faculty of desire.

3. The formal beauty of wine

For Kant, flavor and smell are among the sensations constituting the matter of experience. Since these are the primary traits of a wine, how could Kant's theory admit wine as beautiful? What characteristics would Kant recognize as formal, hence eligible for pure judgments of taste? Obviously wines do not have shape or outline. They are sometimes said (metaphorically, it seems) to have "structure"; I explain below how this counts as form, according to Kant's criteria. But one formal property that wines clearly have is *duration*. Tasting a wine is a temporally extended process, at the level of the bottle, the glass, or the mouthful; a good wine will take advantage of that duration to exhibit an interesting progression that engages the taster's cognitive faculties.

In "Knowledge, Wine and Taste" (2007), Kent Bach draws a musical analogy: "the overall experience of a single sip of wine is comparable in duration and complexity to savoring one sustained musical chord" (28). "Over a few seconds, it has a beginning, a middle, and a finish, during which different qualities will reveal themselves... if you pay close attention." His analogy is, he says, "unflattering" (27). "No matter how sensuous and complex... no one would attend a concert just to hear even the greatest orchestra play a beautiful sustained chord every few minutes, even a little differently each time" (28). But people would attend a concert to hear Mozart's variations on "Twinkle, Twinkle, Little Star." Twelve sips of even a truly great wine probably would not exhibit the same variety and complexity; but I do think a sip of a good wine is more like a short harmonized melody than a chord. Different flavors take center stage at each phase of the taste; the successive primary flavors gain depth from "secondary notes" of (e.g.) mineral, earth, or spice.

And while the basic structure remains the same from sip to sip, the expression may deepen and embellishments be added as the taster's focus shifts, or as contact with the air releases new features. Wine critic Robert Parker describes this phenomenon in his tasting notes on a Rhône-style blend from Sonoma: "intense notes of sweet black cherries intertwined with herbal nuances. As the wine sits in the glass, tell-tale notes of raspberries...also emerge" (quoted Gray 2011). Even the harmonic underpinning may vary, if the wine reveals substantially different characteristics in subsequent mouthfuls. In 2010 I tasted a young Cabernet Sauvignon-based blend (the 2007 Ridge Monte Bello), which needed to be aged for at least ten more years before reaching optimal drinking age, and I found that it evolved dramatically across sips: the first was spicy and strongly tannic; the most noticeable flavor in the second sip was dark plum; the third sip was characterized mainly by a smoky, cedar-like flavor; and the flavors continued to occur in this cycle throughout the taste. As the wine ages, these flavors will blend more smoothly, layering over each other like themes in counterpoint. But tasting them distinctly in successive sips was nonetheless fascinating in its way.

The most obvious instance of temporal structure in wine is found in a single mouthful. The experience begins with the aroma, which may showcase elements that are present only weakly or not at all in the flavor. Take these *Wine Spectator* tasting notes on a pair of 1999 Rieslings from the Mosel Valley. Of the Spätlese, the review reads, "Oodles of slate greet the nose, followed by peach and citrus flavors on the palate"; the notes on the Kabinett read, "Earth and almond aromas introduce this off-dry white. Bracing in structure, with stone and lime notes" (quoted RWS 2005).

Once the wine has entered the mouth, it can continue to be a complex extended experience. Wines are divided into three flavor stages: the "front" or "attack," the first impression the wine makes as it hits the tongue; the "middle palate," which describes the flavors that emerge as it sits in the mouth; and the "finish," the aftertaste that lingers once it leaves the mouth (via swallowing or spitting). Not all wines show substantial evolution between the front and middle palate; not all wines have much of a finish, or one that introduces new flavors. Most tasting notes are divided only

into aroma, palate (comprising front and middle), and finish, like this review of a 2008 Argentinian Malbec: “Marked by juicy plum-like fruit, with floral hints in the bouquet and a note resembling black-licorice in the finish” (Lukacs & Thomas 2010). Some wines, however, take advantage of the full span of time from attack to finish by exhibiting new flavors at every stage, as described by these *Wine Spectator* notes on another German Riesling: “Plenty of stone nuances introduce this lively, flavorful white, whose lime and peach notes take on a licorice aftertaste” (quoted RWS 2005).

One wine is not necessarily better than another if it takes longer to taper off, or exhibits more evolution within a mouthful. However, “length in the mouth” is a prized characteristic; reviews are more likely to complain that the finish was disappointingly short than unnecessarily long, that a wine goes nowhere than that it changes too much. It is not length itself, but the use a wine makes of its length that gives it its aesthetic quality. Length provides a wine with a stage, or a canvas, on which to display interest and complexity. Wine can be, in the phrase Kant uses to describe music, a “play of sensations in time” (§14, 5: 225).

A wine can even show “composition,” in the process by which a winemaker blends the finished product from the “proto-wine” (to invent a term) fermented from the grapes grown on a single lot. Say the proto-wine from Lot A gives a burst of fruit flavor that quickly fades; the proto-wine from Lot B has a persistent earthy, peppery flavor; and the proto-wine from Lot C is bland on the palate, but leaves an interesting smoky aftertaste. The wine that results from blending the proto-wines from lots A, B, and C in the right proportions will be “fruit-forward,” with notes of earth and spice that emerge in the middle palate and linger into a peppery, smoky finish. Thus a skilled winemaker can “compose” a multifaceted “play of sensations” out of relatively staid materials.

Now that the analogy with musical harmony is in play, we can describe how a wine’s “structure” counts as formal in Kant’s sense. “Structure” refers to the *balance* of certain contrasting elements that contribute to a wine’s flavor and texture: primarily, acids, glycerin, tannins, and sugars. Red wines with insufficient acid relative to other components are described as “flabby”;

they feel heavy or dull, and seem to lack a center or focus for their flavor (acid is sometimes described as the “core” or “backbone” of a wine). White wines with too much sugar relative to acid are syrupy and cloying, while those with too much glycerin relative to acid can seem slippery or oily, flat, even bitter. Conversely, wines with too much acid relative to tannins or glycerin seem *thin* as well as sour; they are said to lack “body”; they have focus, but no breadth.

Here, too, a musical analogy suggests itself: structure in wine can be compared to the balance among the voices making up a musical harmony. (Based on the talk of focus and breadth, one might compare the acid to the voice carrying the melody and the other components to the voices filling out the rest of the chord.) This kind of balance refers to relative amplitude, which Kant would describe as the *intensive magnitude* of a sound; he identifies this as the formal aspect of sensation (*KrV* A 168/B 210). Structure in wine is a ratio of the intensive magnitudes of our sensations of its various chemical components. Therefore, judgments about a wine’s excellence or deficiency in structure should count as pure judgments of taste.

4. Extending form?

This analogy between the formal features of wine and music has limits, however. Both involve timed shifts among sensations, but more of the components of music are clearly formal. Kant knew that intervals between pitches correspond to certain ratios in frequencies of vibrations in the air: “[I]f one considers...what can be said mathematically about the proportion of the oscillations in music... then one may see oneself as compelled to regard the sensations...as the effect of a judging of the form in the play of many sensations” (*KU* §51, 5: 325). Intervals can be mathematized, so the intervals between simultaneous and successive sounds—harmony, melody, harmonic progression—can be judged as beautiful forms. In wine, however, the sensations that play in time are aromas and flavors, which Kant views as mere unstructured matter striking the senses. Unlike the judging of intervals or “contrasts among colors”—which Kant says are

“appropriate” to regard “in analogy with” pitch intervals (§51, 5: 325)—distinguishing among flavors and aromas cannot, it seems, be regarded as a judgment of form.

There is a further difficulty that plagues Kant’s theory in regard to color, sound, *and* flavor. Particular sensations, Kant insists, can only be judged agreeable or disagreeable, never beautiful or ugly. If this is the case, then colors, timbres, and flavors could be substituted for each other without changing an object’s aesthetic value. A colleague of mine raised the problem in this pointed manner: doesn’t Kant’s formalism commit him to saying that Beethoven’s Ninth would be just as beautiful played on kazoos? If so, Kant is similarly committed to saying that an abstract painting would be just as beautiful with its colors inverted, since what matters for beauty is the perceptual distances between colors, not their intrinsic qualities. This would not hold for mimetic paintings, though, because the kind of beauty they have, *adherent* beauty, is constrained by our concept of the represented object (§16, 5: 229-31).

Assuming that wine is a *free* beauty—an aesthetic object we come to with no concept of what it is for, or how it ought to be to fulfill that purpose (§16, 5: 229)—it should not matter *which* aromas and flavors are arranged to evolve at a certain pace across a span of time. If a wine has an aroma of wet dog, then tastes of rotten eggs with fishy notes and rubber tires on the finish, would it be just as beautiful as a wine that in the same timespan displays a floral aroma, a citrusy palate with mineral undertones, and an almond finish? Perhaps we can leave aside plainly disagreeable smells and flavors, which induce a displeasure that would mask any pleasure incurred by formal beauty. What about perfectly agreeable flavors that one would not expect to find in wine: salmon, spinach, peanuts?⁹ What makes a wine featuring those flavors less beautiful than a wine exhibiting more standard ones? Is there a way the quality of flavors can be judged as a component of form?

4.1 Pitch, color, and Euler’s theory of light

Kant offers a possible solution to the color problem in the following passage:

⁹ It was difficult to think of flavors one would not expect to find in wine, because people routinely find very odd ones: saddle leather, cheese, banana, artichoke, cat pee...

If one assumes, with Euler, that the colors are vibrations (*pulsus*) of the air immediately following one another, just as tones are vibrations of the air disturbed by sound, and, what is most important, that the mind does not merely perceive, by sense, their effect on the animation of the organ, but also, through reflection, perceives the regular play of the impressions (hence the form in the combination of different representations) (about which I have very little doubt), then colors and tones would not be mere sensations, but would already be a formal determination of the unity of a manifold of them, and in that case could also be counted as beauties in themselves. (§14, 5: 224)

Kant proposes that colors can be considered beautiful if what an observer responds to when making judgments about colors is the rapid regular intervals at which pulses of air strike the eye.

The form of a color would be its *rhythm*, the positioning of sensory elements within a span of time.

For Kant, form is what can be mathematized: expressed geometrically, for shapes in space, or arithmetically, for sequences and divisions of time.¹⁰ Color expressed as a *wave* has form in both space and time: a wavelength measured in nanometers, and a frequency in cycles per second.

But, importantly for my purposes, a person can correctly judge an object beautiful only if its form is what she is actually responding to. In the passage quoted above Kant deems it likely¹¹ that “the mind..., through reflection, perceives the regular play of the impressions” that make up a color, and judges it beautiful *on account of* its temporal form. Later in the *Critique*, however, Kant expresses doubt about this possibility:

¹⁰ An anonymous reviewer objected that if what is mathematizable in an object is the source of our aesthetic pleasure, then a mathematical description foregrounding those properties should be “more pleasing” than the obscure experience of them we have in contact with a beautiful object. Kant does seem committed to the view that a reproduction of the same mathematical structure (intensive as well as extensive), filled in by different sensory qualities, should be *equally* beautiful. But a sufficiently abstract mathematical description (e.g., a list matching intensities to coordinates in time and/or space) would not be beautiful, because it would reduce components of an *intuition* to *conceptual* representations, so the experience would cease to be aesthetic. In a concrete *object* (as opposed to the *a priori* representation a subject may construct in pure intuition), there must always be *some* sensory matter taking the beautiful form. Would it be more pleasing if the matter were somehow minimized, e.g., by converting an image to grayscale (which, as I note, may not even preserve all the formal aspects, such as the degree of *difference* between colors)? No: charms add to the total *pleasure* of the experience. But if such minimization or abstraction were possible while preserving all formal structure, it probably would be *easier to tell* that what one experiences truly is the pure, universalizable pleasure of *beauty*.

As to the possibility of a mathematical representation in one sense modality of an experience in another—e.g., a visual graph of a gustatory experience (or an auditory “graph,” which would preserve *time*, rather than space, as the relevant dimension)—I am not sure how, or whether, they could be compared.

¹¹ In the third edition of the *Critique*. The parenthetical that in the third edition reads “about which I have very little doubt,” as quoted above, in the first and second editions says “which I very much doubt” (Guyer 2000: 109 n. b). I take it he changed his mind, and honor his final opinion.

If one considers the rapidity of the vibrations of the light, or, in [the case of sound], of the air, which probably far exceeds all our capacity for judging immediately in perception the proportion of the division of time, then one would have to believe that it is only the **effect** of these vibrations on the elastic parts of our body that is sensed, but that the **division of time** by means of them is not noticed and drawn into the judging, hence that in the case of colors and tones there is associated only agreeableness, not the beauty of their composition. (§51, 5: 324-5)

How conscious does our sensitivity to the form have to be in order for our representation to be eligible for judgments of beauty? When I identify an interval as a perfect fifth, I do not count the pulses of air hitting my ear from each source, then calculate a ratio of two to three. Yet Kant admits that *some* judging of form must go on, not only because pitch involves mathematical relations, but also, as he remarks, because distinguishing pitches and colors is a skill not everyone has (§51, 5: 325). Not only are there tone-deaf and colorblind people who cannot tell pitches and colors apart at all, but there are otherwise perceptually normal people who cannot identify intervals or discriminate among similar shades.¹² Another consideration Kant adduces is that even for skilled judges, the number of “positions on the scale of colors or tones is determinate for **comprehensible** distinctions” (§51, 5: 325): there is a minimal detectable distance within the “space” of possible colors or pitches.

Oddly, another point Kant raises *in favor* of regarding discrimination among colors and pitches as a judging of form is, “for those who can do this, the perception of an altered *quality* (not merely of the degree of the sensation) in various positions on the scale of colors or tones” (§51, 5: 325, emphasis added). One would think the fact that the difference is qualitative, not quantitative, would count *against* the formal status of color and tone. But Kant’s point is that people can make cognitive judgments not only about intensive magnitudes, but also about relative positions in the space of possible colors and pitches. One might think that only the *distance* between pitches

¹² A reviewer wondered why the involvement of skill in judging, which appears to abrogate the universality of the judgments, should be a mark of form. Kant does not explain the connection; my interpretation is that only judgments about form admit of *standards of correctness*—not for judgments of beauty themselves, but for descriptive judgments about features relevant to judgments of beauty—that can be agreed upon by a community of experts and mastered only with study and practice. Since judgments about the effect of sensory matter on one’s organs are incommunicable, no one’s judgments can be deemed better or worse than anyone else’s. I should also note that the requirement of skill need not threaten the universal validity of a judgment: the conclusions of mathematical proofs understood only by a few experts are still universally valid.

matters: the aesthetic qualities of a piece should stay the same if transposed to any key. Yet to people with perfect pitch, a piece composed in one key sounds *wrong* in any other. They are not calculating frequencies, yet there is something about each pitch that enables them to distinguish it from any other: they can judge not only *distances* in the space of pitches, but *locations*.

Kant may also be hinting at the fact that differences in perceptible quality correspond closely with differences in mathematical properties, which suggests that we are, to some extent, aware of the formal properties of colors and pitches, and responding to them accordingly. Alter the frequency of light or sound only slightly, and the perceived color or pitch changes only slightly. Pitches whose frequencies stand in simple ratios also sound similar. Simply doubling a frequency yields the pitch an octave above, which *sounds* like the same note, only higher. Pitches a fifth apart, whose frequencies have the ratio 3:2, sound similar enough that when played together, there is no perceptible tension. Thus it is called a “consonant” interval, whereas intervals with more complex frequency ratios (sixths, sevenths, ninths) become increasingly dissonant and feel more unstable, more in need of resolution to a consonant harmony. Does this sense of being at rest reflect a dim *awareness* of a simple ratio? Do the mathematical properties of sensible phenomena come through in the quality of sensation? If so, the “form” of experience may be broader than Kant thought.

4.2 Molecular geometry and taste

There is a mathematizable property associated with flavor and aroma: the geometry of the molecules that bind to receptors in the nose or on the tongue. It is reasonable to suppose that the shapes of different molecules correspond to different perceived flavors. But it seems far-fetched to think that tasters are picking up on the geometry of the molecule that produces a given flavor.

Research on the chemical basis of wine flavor shows that families of molecules with similar structures produce similar flavors. For example, methoxypyrazines produce a “vegetative, herbaceous, bell pepper or earthy aroma” that is “important to [some] regional style[s] of Sauvignon blanc,” including the grassy or “green” ones from New Zealand. At low concentrations,

methoxypyrazines help to distinguish Sauvignon blanc and Cabernet Sauvignon from other wines, but high concentrations produce an “unpleasant and overwhelming” vegetal flavor (Allen & Lacey 1998: 31-2). Different combinations of esters with alcohols and acids produce various fruit flavors (Coombs 2008: 2). A study on volatile compounds in the juice and skins of Merlot and Cabernet Sauvignon grapes found that the norisoprenoid class of molecules was associated with a honey flavor, while flavors of chocolate and dried figs corresponded to a high concentration of certain benzene derivatives (Francis et al. 1998: 25; 20, Fig. 2; 24, Fig. 3).

There is a case to be made here for the formal nature of flavor, similar to Kant’s argument for the formalism of pitch and color: it requires skill and attention to detect the flavors produced by these chemicals in wine. They do not leap to the senses to be received passively, the way Kant portrays our perception of the matter of experience. And insofar as similar flavors correspond to similar molecular structures, the formal basis of flavor reveals itself to *some* extent in perceptual experience—much as the formal bases of color and pitch come through when light and sound waves of similar frequency are perceived as similar colors and nearby pitches.

To what extent, though, does the structure of the molecule itself enter perceptual experience? We can perceive higher and lower acid content in wine: very low-acid Viogniers can feel oily, whereas high-acid wines like Chablis and Chianti are perceived as having a light, clean texture. This may reflect the greater water-solubility of acidic compounds, hence their tendency to “go down” cleanly rather than coat the mouth. Beyond that, it is hard to see an intuitive connection between molecule shape and flavor quality. Do round molecules produce “rounded” flavors, while jagged molecules produce piquant flavors? Maybe, if you would describe the flavors of chocolate and bell peppers (produced by benzenoids and methoxypyrazines, whose identifying components are ring-shaped) as “round.” Acids, which contribute the sharp flavors in wine, usually have hydrogen atoms hanging off an oxygen-based group, making the molecule “jagged” in a sense. But even if this is the case, the shape resemblances are irrelevant. What produces different flavor

qualities is which taste and smell receptors the molecules react with—a minute, complex process which, to borrow Kant’s words, “far exceeds all our capacity for judging immediately in perception” (*KU* §51, 5: 324-5). There doesn’t seem to be any reason that, e.g., we perceive acids as having a sour quality; those are just the receptors they happen to stimulate.

4.3 Closing the gap: adherent beauty

Do we have enough to defend the formal status of flavor? At best, we can claim that similarities and contrasts count as formal. But then, just as Kant’s theory appears to imply that an abstract painting would be just as beautiful with its colors inverted, it also seems to imply that a wine would retain all its aesthetic virtues if its flavor qualities were altered while the perceptual distances remained constant. So we are back to the question why a wine with flavors of cherry, oak, and chocolate is more beautiful than a wine tasting of mustard, pickles, and sausage.

Apparently I must bite a bullet and say it is not necessarily more beautiful, as long as both wines show engaging evolution throughout their length, and the degrees of similarity and difference among their component flavors are such that they balance and harmonize well, even in unexpected ways. But this admission is not so painful if it gains me the possibility of pure aesthetic judgments about well-crafted food as well as wine. Yes, the flavors of sausage, mustard, and pickles can be artfully, intriguingly combined: there can be a beautiful hamburger.

The notion of adherent beauty could set limits on the flavors admissible in a beautiful wine. *Free* beauty, Kant says, “presupposes no concept of what the object ought to be,” while *adherent* beauty “does presuppose such a concept and the perfection of the object in accordance with it” (§16, 5: 229). Most tasters come to wine with *some* concept of what it should be; educated tasters come with a concept of the qualities each varietal should have. For example, a writer for *Wine Review Online* complains that California Pinot noir is “too big, too ripe, and too high in alcohol”—too much, say, like Syrah or Cabernet. This judge thinks Pinot noir should be “light-colored, elegant [with] great acidity...delicate in structure—[like] the best Burgundies” (McCarthy 2012). But

preexisting concepts of what a wine ought to be like should not set too-severe limits on the flavors it can display while still being considered beautiful. The wines that set *my* faculties into the liveliest play are the ones that surprise me. Merlot can taste like grilled meat in barbecue sauce; Traminer can taste uncannily like roses; Pinot noir can smell like a redwood forest by the ocean. Who knew?

Kant notes that judgments of adherent beauty are not pure judgments of taste:

To be sure, taste gains by this combination of aesthetic satisfaction with the intellectual in that it...can have rules prescribed to it... But in this case these are also not rules of taste, but merely rules for the unification of taste with reason, i.e., of the beautiful with the good... Strictly speaking, however, perfection does not gain by beauty, nor does beauty gain by perfection...

(*KU* §16, 5: 230-31)

Something is gained and something lost if we judge wines as adherent rather than free beauties.

We gain opportunities to apply knowledge, clearer standards for judging, and diverse standards for different types. But we lose opportunities to be pleasantly surprised at the beauty of a wine that tastes like barbecue.

5. Conclusion

I have argued that many judgments about wine fit the template for judgments of beauty that Kant lays out in the *Analytic of the Beautiful*. I have also argued that the experience of wine has at least one dimension that is formal in Kant's sense: its temporal structure, the evolution of aromas and flavors across the time it takes to finish a mouthful or a glass. An interesting wine is a multilayered "play of sensations in time," much like a short piece of music. Lastly, I considered how to accommodate flavor quality to Kant's notion of form, by first looking at Kant's own arguments why color and tone might have formal structure, then noting parallels among the ways perceptual experience registers the mathematizable formal structures of color, pitch, and flavor (frequencies and ratios of light and sound waves; the geometry of aromatic molecules). Judgments about the specific quality of aromas and flavors probably cannot be considered formal. But perhaps the

relations of similarity and difference we perceive between flavors, and their tendency to blend or clash—like the same relations among colors and pitches—can be.

The upshot is that Kant's theory of taste is not so restrictive that it has no way to accommodate the genuinely aesthetic value of wine—and food. In fact, as we learn more about the structure of our own perceptual mechanisms and the world we perceive, more of our sensory experience may come to seem formal even in Kant's narrow spatiotemporal sense; and so his aesthetics will be able to make sense of our tendency to judge as *beautiful* things like aroma and flavor that Kant thought could only be judged agreeable.

References

- Allen, M.S. and M.J. Lacey (1998). "Methoxyypyrazines of Grapes and Wines." In A. Waterhouse and S. Ebler (eds.), *Chemistry of Wine Flavor: American Chemical Society Symposium 714* (New York: Oxford University Press), 31-38.
- Allhoff, Fritz, ed. (2008). *Wine & Philosophy: A Symposium on Thinking and Drinking*. Malden, MA: Blackwell Publishing.
- Allison, Henry E. (2001). *Kant's Theory of Taste: A Reading of the Critique of Aesthetic Judgment*. New York: Cambridge University Press.
- Bach, Kent (2007). "Knowledge, Wine and Taste: What good is knowledge (in enjoying wine)?" In Barry C. Smith (ed.), *Questions of Taste: The Philosophy of Wine* (New York: Oxford University Press), 21-40.
- Charters, Steve and Simone Pettigrew (2005). "Is wine consumption an aesthetic experience?" *Journal of Wine Research* 16.2, 121-136.
- Coombs, Amy (2008). "Scientia Vitis: Decanting the Science of Wine Flavor." *Chemical Heritage Magazine* 26.4 (Winter 2008/9).
<<http://www.chemheritage.org/discover/media/magazine/articles/26-4-scientia-vitis.aspx?page=1>>
- Crane, Tim (2007). "Wine as an Aesthetic Object." In Barry C. Smith (ed.), *Questions of Taste: The Philosophy of Wine* (New York: Oxford University Press), 141-155.
- Francis, I. Leigh, Stella Kassara, Ann C. Noble, and Patrick J. Williams (1998). "The Contribution of Glycoside Precursors to Cabernet Sauvignon and Merlot Aroma: Sensory and Compositional Studies." In A. Waterhouse and S. Ebler (eds.), *Chemistry of Wine Flavor: American Chemical Society Symposium 714* (New York: Oxford University Press), 13-30.
- Goldstein, Robin, Johan Almenberg, Anna Dreber, John W. Emerson, Alexis Herschkowitsch, and Jacob Katz (2008). "Do More Expensive Wines Taste Better? Evidence from a Large Sample of Blind Tastings." *Journal of Wine Economics* 3.1, 1-9.
- Gray, W. Blake (2011). "Robert Parker's Tasting Notes." Blog entry on *The Gray Report*, 21 March 2011. <<http://blog.wblakegray.com/2011/03/robert-parkers-tasting-notes.html>>
- Guyer, Paul (1979). *Kant and the Claims of Taste*. Cambridge, MA: Harvard University Press.
- (1977). "Formalism and the Theory of Expression in Kant's Aesthetics." *Kant-Studien* 68.1, 46-70.
- Kant, Immanuel (2000 [1790, 1793]). *Critique of the Power of Judgment*, trans. and ed. Paul Guyer. New York: Cambridge University Press. (Cited as *KU*, by section number and the volume and page number of the Academy Edition of Kant's collected works.)

- (1998 [1781, 1787]). *Critique of Pure Reason*, trans. and ed. Paul Guyer and Allen W. Wood. New York: Cambridge University Press. (Cited as *KrV*, with page numbers from the first and second editions in A/B format.)
- Johnson, Mark L. (1979). "Kant's Unified Theory of Beauty." *The Journal of Aesthetics and Art Criticism* 38.2, 167-178.
- Lukacs, Paul and Marguerite Thomas (2010). "Wine With... Grilled Bison Steak." *Wine Review Online*, 20 July 2010. <http://www.winereviewonline.com/WW_Grilled_Bison_Steak.cfm>
- McCarthy, Ed (2012). "Cobb Wines: California's Greatest Pinot Noirs?" *Wine Review Online*, 22 May 2012. <http://www.winereviewonline.com/Ed_McCarthy_on_Cobb_Pinots.cfm>
- Nehamas, Alexander (2007). *Only a Promise of Happiness: The Place of Beauty in a World of Art*. Princeton, NJ: Princeton University Press.
- Rudi Wiest Selections (2005) (cited as RWS). "Wine Spectator—1999 Vintage." <<http://www.germanwine.net/tastingnotes/WineSpectator1999.htm>>
- Smith, Barry C., ed. (2007). *Questions of Taste: The Philosophy of Wine*. New York: Oxford University Press.
- Taylor, Charles Senn (1988). "Prolegomena to an Aesthetics of Wine." *The Journal of Speculative Philosophy*, New Series, 2.2, 120-139.
- Zangwill, Nick (1999). "Feasible Aesthetic Formalism." *Noûs* 33.4, 610-629.