Wine Tasting, Blind and Otherwise: Blindness as a Perceptual Limitation

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Now — from which commune in Médoc does it come? That also, by elimination, should be not too difficult to decide. Margaux? No. It cannot be Margaux. It has not the violent bouquet of a Margaux. Pauillac? It cannot be Pauillac, either. It is too tender, too gentle and wistful for a Pauillac. The wine of Pauillac has a character that is almost imperious in its taste. And also, to me, a Pauillac contains just a little pith, a curious, dusty, pithy flavor that the grape acquires from the soil of the district. No, no. This — this is a very gentle wine, demure and bashful in the first taste, emerging shyly but quite graciously in the second. A little arch, perhaps, in the second taste, and a little naughty also, teasing the tongue with a trace, just a trace, of tannin. Then in the aftertaste, delightful — consoling and feminine, with a certain blithely generous quality that one associates only with the wines of the commune of St. Julien. Unmistakably this is a St. Julien.

— Roald Dahl, "Taste," *Ladies Home Journal*, March 1945.

1 Introduction

In the wine world, blind tasting — tasting without knowing the wine's producer, origin, or other details obtainable from the wine's label — is consistently vaunted as the gold standard for tasting.[1] It is held out as the best, most neutral, least biased, and most honest evaluative procedure, and one that should be employed to the exclusion of non-blind/sighted tasting (which, in turn, is typically disparaged as confused, biased, or dishonest).

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[1]Some writers use the more specific terms 'single-blind' and 'double-blind', though not with the usual meanings associated with these terms in describing experimental methodology. 'Double blind' describes tastings in which the evaluator is given no explicit information about the wine at all, and evaluates the wine only on the basis of properties she discerns by perceiving the wine in the glass. 'Single blind' generally describes tasting in which the evaluator carries out her evaluation perceptually after being told either (i) a general property about the whole class of wines being evaluated (say, their shared geographic region, or the grape from which they were made), or (ii) the list of producers of the wines to be tasted, but not which producer made each individual wine. I'll put these more specific terms aside for now, but will return to them in §5.

I think this is a mistake. Although I think blind tasting comes with some benefits, I will argue that it also carries significant disadvantages relative to sighted tasting, and that both blind and sighted tasting have different but valuable contributions to make to our overall experience of wine. My intended conclusion, therefore, is that we should abandon not blind tasting, but the exclusive preference for blind tasting. We *should* (sometimes) taste blind. And we should also taste sighted. But neither to the exclusion of the other.

Two preliminary points about the scope of the discussion that follows are in order.

First, I do not wish to restrict my discussion of wine tasting to formal events organized around wine, occasions of competitive wine judging, vertical tastings, and the like. It won't matter to the discussion that follows whether the taster consumes a small portion of the wine (say, the one ounce volume typical in formal tastings) or a larger one. Nor will it matter whether the taster spits out the wine rather than swallowing it after tasting. Instead, I intend my comments about wine tasting to apply to more or less any occasion on which a person perceives wine. I take wine tasting to be a perceptual process — usually the perceptual modalities include principally olfaction, gustation, oral somatic sensation, and vision — but one that interacts with post-perceptual (/cognitive) processes in interesting ways. But it is a process that occurs ubiquitously, and not only in rarefied settings. As such, I intend my considerations to have a reasonably wide range of application.

A second point is that, though I take the tasting of wine as my nominal topic, none of what I will say about experience, evaluation, and the limits of blind tasting is limited to the domain of wine. The focus on wine is convenient because the procedures for its sensory evaluation are much more codified and discussed, and because the results of those evaluations are far more carefully recorded and disseminated, than for other foods and drinks.[2] However, I believe that similar considerations apply just as well (or badly) to our experiences of (and our evaluations of our experiences of) beer, coffee, tomatoes, burritos, chocolate chip cookies, and so on. If so, then the scope of this essay is, in principle, quite wide indeed.

2 The Veneration of Blindness

The main purpose of this essay will be to argue that blind tasting is limited in important respects, and therefore that it doesn't deserve — or deserve to the exclusion of other ways of tasting — the venerated status it currently enjoys in

[2]The tasting of coffee, beer, barbecue, and even water has moved in these respects closer to the model of wine: there exist specific procedures for tasting (the procedure for coffee goes by the special name 'cupping'), guidelines for specific styles and geographic origin, and competitive judging of these foods/drinks. Needless to say, there are also competitive judgings for other foods as well (chili cookoffs, pie baking contests, etc.); but these tend to be more local affairs, and the guidelines governing them much more varied.

the wine world. Before I come to this argument, however, it is worth bringing out just how widespread is the preference for blind-tasting among those who write and talk about wine, and the reasons offered in support of this preference.

It is undeniable that this preference prevails throughout the wine world; I'll just mention a few indications of its prevalence, though these can be multiplied almost indefinitely. To begin, professional evaluators (e.g., the tasting panel of the *Wine Spectator*, the Grand Jury Européen) typically use blind tasting exclusively, and trumpet this fact as evidence of the quality of their assessments. Competitive wine judging is always carried out blind. In describing his tasting procedures, the redoubtable and influential wine critic, Robert Parker, claims that he tastes blind "when possible"; moreover, one (among many) public criticisms of his assessments (in his newsletter, "The Wine Advocate" and elsewhere) is that they are not *always* carried out blind. Famously, lore pinpoints the establishment of American success in the wine world to the 1976 Judgment of Paris, when a blind tasting of top American and French chardonnay and cabernet sauvignon wines ranked California wines first in both categories. On a much wider basis, as well, when the preference orderings obtained under conditions of blind tasting fail to single out traditionally favored wines, or the most expensive wines, this is often touted as revealing the fatuousness of the tradition or prevailing price structure (e.g., Goldstein and Herschkowitsch, 2008), rather than as supplying additional data about a different kind of preference. Finally, wine books and tasting manuals at all levels consistently emphasize the importance of blind tasting. Thus, Michael Broadbent, perhaps the most prolific author of tasting notes in history, writes that "It is my firm opinion . . . that to assess the qualities of a wine by tasting it completely blind, without any hint of what it might be, is the most useful and salutary discipline that any self-respecting taster can be given" (quoted in Peynaud and Blouin (1996, 156)). Or, again, Ronald Jackson, in his industry-standard textbook on wine tasting, asserts categorically that "Tastings should always be conducted blind, usually with only the names of the wine noted in advance" (Jackson, 2009, 334).

Moreover, there is a standard reason offered for this near-universal preference for blind tasting. Proponents urge that blind tasting should be employed because it controls for the undesirable distorting influence of preconceptions on our perception of the wine. Here are two clear but otherwise representative expressions of this idea — the first taken from an editors' note in *The Wine Spectator*, and the second taken from a popular wine web site:

> We believe that evaluating wines blind ensures that our tasters remain impartial and that our reviews are unbiased, with all wines presented on a level playing field. . . . Now, you may think that a conscientious taster should be able to ignore the influence of extraneous factors. But research has shown that it's not so easy. We are all very prone to a cognitive error called "confirmation bias," which pays a large, but largely unacknowledged, role in everyday judgment.

> The distorting effects of confirmation bias are easy to demonstrate when it comes to wine. . . .
>
> These kinds of experiments have been carried out many times, in many settings, but always with the same results: "Imaginary references" — especially producer names and price tags — significantly influence sensory evaluations. The only way for a scrupulous critic to guarantee unbiased judgments is to review wines in blind tastings (Marvin R. Shanken and Thomas Matthews, "Why We Taste Blind" *The Wine Spectator*, 30 April 2012, 7–8).

> Tasting a wine blind is one of the best ways to formulate an unbiased opinion about the wine. Any knowledge that you have about a wine cloud your judgement or influence your assessment. Perhaps you don't like Merlot? Any Merlot you taste will already have one strike against it before it even hits your lips. Maybe the wine was ultra-expensive. You may be willing to give that wine a better report card simply because it cost you an arm and a leg. These factors and many more can sway your opinion, subconsciously or otherwise. The best way to make an honest assessment is to know nothing at all (Sunny Brown, "The Art of Blind Tasting" `http://www.winegeeks.com/articles/29`).[3]

The thought expressed in these passages is reasonable, as far as it goes. It is incontrovertible that preconceptions (in general, beliefs about what we are perceiving formed prior to the event of perception) can influence perception and perceptually-informed assessments of all kinds, and in all kinds of ways.[4] And it is true that we can often control for these effects on our assessments by removing the information source (say, the text on the bottle) that results in the distorting preconceptions/beliefs. Thus, taking only one salient example mentioned above, while beliefs about the perceived expense of a wine are correlated with subjects' ratings of their enjoyment of that wine (Plassmann *et al.*, 2008), some investigators have found that price and preference are *negatively* correlated(!), at least in non-experts, when preference is measured under conditions of blind tasting (viz., without price information) (Goldstein *et al.*, 2008; Goldstein and Herschkowitsch, 2008). It is hard to avoid concluding from this pair of results that information about the expense of a wine results in a preconception/belief that changes our assessments in the sense that it accounts for a significant amount of the variance in subjects' self-ratings

[3] In a similar vein, the Oxford Companion to Wine instructs its readers that, "Only by blind tasting can a true assessment of a wines style and quality be made, so powerful is subjectivism in the wine-tasting process" (Robinson, 1999, 83).

[4] As a general matter it seems clear that this kind of information can affect both the reactions of our perceptual systems and the beliefs formed on the basis of perception, though in particular cases it can be difficult to distinguish the two different kinds of influence. In what follows I won't worry about this distinction unless it matters.

of enjoyment in tasting wine.[5] In a related and much-discussed example, Brochet (2001); Morrot *et al.* (2001) found that tasters applied classic white wine descriptors (e.g., *golden, floral, fresh, pale, apricot, lemon, honey*) to a white wine presented under ordinary circumstances, but classic red wine descriptors (e.g., *plump, intense, deep, blackcurrant, cherry, raspberry*) to the very same wine after it had been surreptitiously dyed with tasteless and odorless red coloring (for discussion, see Spence, 2010a).

Collectively, these results (and others like them) suggest strongly that prior belief can significantly affect our perceptual responses to the wine (or whatever else) we perceive. Indeed, there are many different kinds of beliefs that can have such effects — probably as many as there are dimensions of variation over which we can form preferences about the perceived object.

Moreover, it is natural to think that these beliefs not only *affect*, but *distort* or *bias* our sensory experience (or our assessment of our sensory experience). This is because the kinds of beliefs in question are (on most accounts) not part of the content of perceptual experience. Indeed, in many cases the beliefs at issue are about features that are plausibly not in principle accessible to perception itself — plausibly the wine's price, or year and location of origin are not among its literally perceptible qualities.[6] Therefore, if such beliefs have a measurable effect on our perceptual interaction (as they do), then it is natural to say that their effect is one of steering us *away* from the qualities we perceive in the glass. Put another way, the concern is that effect of the beliefs we are considering is (not merely significant, but) lamentable not just because they reflect extra-perceptual information, but because they prevent us from heeding honestly what perception has to tell us.

It is a natural and relatively short step from the considerations adduced so far to the conclusion that blind tasting is the right prescription for the specific ills discussed. Specifically, we might hope to use blind tasting to block the unfortunate effects of prior belief on perception (be they positive, negative, or neutral) by blocking the prior beliefs. That is to say, by insisting on tasting blind, we can prevent the taster from holding beliefs about the wine's price or origin in the first place, and so control for any possibly distorting influence grounded in the taster's preferences for or against wines with a particular price or origin (etc.). And with these influences removed, the taster will be restored to a position from which she can respond honestly to the deliverances of her perceptual faculties.

Such, then, are the motivations offered on behalf of blind tasting.

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[5] Here I assume that individuals' preferences in this domain (as measured by self-reports by Goldstein et. al.) track ratings of the enjoyment (as measured by Plassman et. al. both by subject self-reports and by increases of neural activity in the orbitofrontal region of the cerebral cortex). I am also ignoring differences between the subject pools used in these two experiments. See Spence (2010b) for useful discussion.

[6] It is consistent with this claim that one may be able to taste or smell other things that lead one to hold beliefs about the price or origin of the wine; I'll return to this in §3.1.

3 The Limitations of Blindness: Factors Blindness Can't Screen Off

In what follows I will contend that there are a number of things wrong with the defense of blind tasting we have just outlined. Among other things, I want to question the assumption underlying the quotations above that "controlling for distorting influences" (removing factors that "bias your judgment," "cloud your judgment," "influence your assessment," "sway your opinion" or otherwise cause the taster to fall short of "honest assessment") is a desirable goal (§4). But in the present section, I want to raise a more internal criticism of the argument for blind tasting under consideration. Namely, I'll offer a pair of reasons for doubting that blind-tasting can succeed in controlling for the influences it aims to screen off (putting aside the question of whether this is desirable), as its proponents claim.[7]

3.1 Alternate Routes to Belief

We've seen that blind tasting is intended to control for assessment-distorting beliefs about the perceptual object. However, it is significant that the procedures of blind-tasting affect such beliefs only indirectly.

What distinguishes blind from sighted tasting is that the former prohibits the taster from employing *specific sources of information* about the perceptual object (say, from the shape of the bottle, the words on the label, testimony about the methods of production). But this leaves it open that the blind taster might come to hold the very same beliefs about the perceptual object by other means — specifically, as a result of perception and perceptually informed inference — and that those beliefs might subsequently affect her perceptual experience.

To see this point, recall that, in his defense of blind tasting quoted in §2, Brown worried that a hypothetical merlot-hating taster's perceptual encounters with a sample would be negatively affected by learning, by reading the wine's label, that that sample was made from merlot grapes. But now we can imagine a taster operating under blind tasting procedures who comes to form the very same sort of belief, and in whom this belief affects negatively subsequent perception. For example, suppose the taster begins by (blind) tasting the wine at t_1, and then forms the belief at t_2 that it was made from merlot grapes — perhaps she reaches this conclusion from its medium weight and body, plum and berry flavors, fleshy mouthfeel, low/medium levels of tannin, and other qualities she perceives in the wine at t_1. Suppose then that she goes on to taste the wine again at t_3, but now with the belief (formed at t_2) that the wine was made from merlot grapes, and with the standing dislike of wines of that varietal. The experience of this taster at t_3 is in relevant respects

[7] I do not claim that all sources of information are equal in importance or range of perceptual (or post-perceptual) effects; in particular, I do not hold (and nothing in what I say below turns on assuming) that the information blind tasting succeeds in screening off is more or less significant to perceivers than the information blind tasting doesn't succeed in screening off.

exactly like that of the taster who tastes the wine after reading its label: in both cases, prior belief can affect negatively the taster's perceptual experience of the wine. [8]

Blind tasting won't preclude this scenario, since the imagined taster forms the distorting belief at t_2 on the basis of the evidence that blind tasting allows (viz., from that supplied by her perception of the wine at t_1, plus standing background belief). To be sure, there's a sense in which the bias by belief imagined here is less adventitious (so, perhaps, less of a distortion of perception), since it is more directly the result of broadly gustatory/olfactory perception of the wine (as opposed to reading the wine's label). Nonetheless, the imagined scenario is one in which a taster's perception of a wine at t_3 is influenced by something other than that taster's perception of the wine at t_3 — viz., by a belief formed at a time earlier than t_3. Moreover, just as in the case of the label-produced prior belief, here what the taster comes to believe is plausibly not part of the content of perception itself (as I described the case, the belief that the wine was made from merlot grapes is somehow inferred at t_2 from what is perceived at t_1; the origin-property that belief attributes to the wine is not itself perceived). And, again, it is plausible that that origin-property is not even in principle accessible to perception itself.

In sum, it would seem that all the reasons for wanting to prevent influence on perception by prior beliefs formed in sighted tastings are also reasons for wanting to prevent influence by (at least some) prior beliefs that can be formed under conditions of blind tasting. What all this seems to suggest, then, is that blind tasting can't control for the effects of prior belief after all. And since controlling for those effects is the stated reason for (exclusive) reliance on blind tasting, this should make us doubt that blind tasting can do what its supporters want it to do.

[8] One's view of the importance of this case will depend (at least in part) on one's view of its typicality. I expect that the phenomenon is extremely frequent/central for tasters whose extensive past experience and knowledge about wine allows them to infer easily and naturally from their current perceptual experience to conclusions about what they are drinking. For these tasters, hiding the label is particularly ineffective as a way of bracketing the influence of extrinsic information, since they are so good at recovering the information on the label from perceptual cues.

However, there is reason to believe that the kind of influence on perception from earlier perceptually informed inference is typical for less expert tasters as well. For one thing, Brochet's demonstration of the effects of color on taste descriptors appears to involve just this sort of case: presumably his experimental subjects acquired their pre-tasting information about the color of the samples by visually perceiving them (rather than by reading the writing on the bottles), and this information, arrived at by perceptually-informed inference, was found to have a significant affect on tasters' subsequent perceptual reactions to the wine. Needless to say, it is entirely typical that tasters see the colors of wines before experiencing them by gustation or olfaction, so this case seems hardly unusual. Finally, I can report that the pattern of perceiving, then reflecting in light of what I think I have discerned, then repeating is typical of what I think I am doing when I taste wine attentively.

3.2 Perceptual Contrast

Whatever one makes of the problem just described, there's a related, and much more significant, concern about whether blind tasting can do the things its proponents claim as advantages — a concern connected with the effects of perceptual contrast.

Though the term covers a vast amount of ground, the phenomenon of perceptual contrast can be roughly described by saying that our perceptual responses to a stimulus are affected by (not only intrinsic features of that stimulus, but) contrasts with what is perceived in the spatiotemporal vicinity of that stimulus.

Perceptual contrast is ubiquitous and much-studied (though much more widely discussed in relation to vision than other modalities). Just to give the flavor, figure 1 illustrates an instance of simultaneous lightness contrast: although the two central patches depicted here are qualitatively intrinsically identical, the perceptual system represents them as different in color because of the different ways in which they contrast in lightness with surrounding items.[9] Similarly, in audition, we find that it is much easier to detect variations in pitch (say, while tuning a guitar string) by contrasting the target against other (simultaneously or successively perceived) tones.

In each of these cases, the perceptual system reacts differently to objects depending on how they contrast with other perceived items. Specifically, the perceptual system reacts in a way that emphasizes contrasts between a target and other items perceived. This means that our perceptual representation of a target is variable as a function of other perceived items: o will be perceptually represented one way when perceived with o_1 (viz., in a way that emphasizes the contrast between o and o_1) and perceptually represented in a different way when perceived with o_2 (viz., in a way that emphasizes the contrast between o and o_2.[10]

[9]Simultaneous lightness contrast plays a role in many classic visual illusions, such as the appearance of grey dots at the intersections of an achromatic grid (the Hermann grid illusion), the interpretation of a pair of opposed lightness gradients as two constant lightness regions separated by an edge (the Cornsweet illusion), and the appearance of light or dark bands next to the boundary between two different lightness gradients, even when the lightness on both sides of the boundary is the same (Mach bands). Perceptual contrast is by no means restricted to the perception of lightness/brightness; within vision there are also simultaneous contrast effects for chromatic color, size, spatial frequency, orientation, motion, and speed, *inter alia*. Moreover, in addition to *simultaneous* contrast — contrast between simultaneously perceived items, there are also ubiquitous instances of *successive* contrast — effects of contrast between successively perceived items for each of these dimensions.

[10]Perceptual contrast occurs because perceptual systems tend to be responsive to magnitude differences, as opposed to magnitudes themselves. The standard physiological explanation of this generalization turns on lateral inhibition between neurons carrying perceptual information (e.g., retinal ganglion cells, in the case of lightness perception). Lateral inhibition results in the suppression of all but the most stimulated/least inhibited neurons; consequently, the overall firing pattern is highest in cells corresponding to parts of the stimulus where there is a steep spatial/temporal gradient — where a small population of most active cells is left relatively uninhibited by the firing of their neighbors.

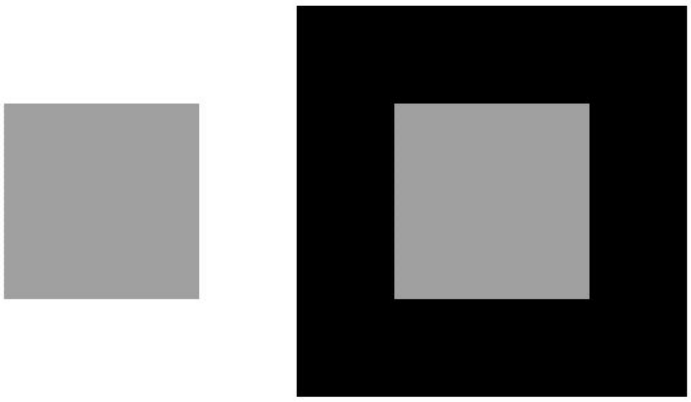

Figure 1: An instance of simultaneous lightness contrast: the central patches are qualitatively identical, but perception represents them differently because of the contrast with surrounding items.

Unsurprisingly, there is evidence of perceptual contrast in the gustatory and olfactory systems brought to bear in wine tasting (Reilly and Pritchard, 1997; Welge-Lüssen *et al.*, 2009), just as there is in our other perceptual systems. Moreover, and also unsurprisingly, these effects show up prominently in the specific context of wine tasting. This is why, for example, sweet wines strike us as less sweet when consumed with dessert foods (which contain much more sugar than the wines) than on their own; presumably this is also why we consume these wines with dessert rather than with the entree (where they would seem so sweet that we would fail to notice much else about them). Similarly, the reason tasters progress from lighter and less rich samples when tasting a group of different wines is (I presume) to lessen (to some extent) the known effects of perceptual contrast.

Perceptual contrast is relevant to our assessment of the alleged benefits of blind tasting because it shows another way in which our perceptual reactions to a sample can be influenced significantly by features of things *other* than that sample. Or, rather, since features of things other than the sample can always be redescribed as extrinsic, or relational, features of the sample, the phenomenon of perceptual contrast shows that our perceptual reactions to a sample are deeply influenced by something other than the intrinsic features of that sample.

It is worth emphasizing once again that kind of influence under discussion is not merely hypothetical. For example, when, because of perceptual contrast, idiosyncratic features in particular samples are magnified when tasted in large groups of similar category, this will often make the idiosyncratic instances seem unbalanced or out of proportion. It is partly for this reason that, as Kramer (2010, 41) notes, chablis typically shows poorly when tasted in the

context of other chardonnay-based wines: chablis, with its modest levels of oak and accessible fruit, will inevitably seem idiosyncratically thin and over-acidic when perceived in that context.[11] When this happens, the taster's perception of the chablis is significantly, negatively affected by a completely extrinsic feature of that wine — viz., its having been tasted by this particular taster after her having tasted something else with more available fruit.

Of course, all the reasons for wanting to screen off the influence of belief on my occurrent perception of a target o are equally reasons for wanting to screen off the influence of features extrinsic to the occurrent perception of o on my occurrent perception of o. Again, if my perception of a foil object o' at t' affects my perceptual reaction to o at t, this is just to say that perceiving o' at t' prevents me from taking in what perception tells me at t about o itself: it will then "bias," "cloud my judgment," "influence my assessment," "sway my opinion," and prevent "honest assessment." Therefore, one who favors blind tasting because it offers hope of screening off such distorting influence of belief on occurrent perception will also want to screen off the effects of perceptual contrast on occurrent perception.

Alas, blind tasting is manifestly not up to the job of screening off the effects of perceptual contrast. What distinguishes blind from sighted tasting is that the conditions of the former block some sources of information about the sample tasted (e.g., the writing on the label), and thereby block any influences on the taster's reaction to the sample that follow a causal pathway through those blocked sources. But the influence on a taster's perceptual reaction to a target sample o from perceptual contrast to other perceived samples is causally independent of the informational sources that blind tasting blocks. Perceptual contrast doesn't depend on reading a label or hearing testimony about a wine's provenance; therefore, blind tasting won't prevent the influence of perceptual contrast on our perceptual reactions to a sample.

This is not to say that there are no methods for controlling for the influence of perceptual contrast. The standard method, familiar to psychophysicists (who face this problem routinely), involves neutral adaptation. Neutral adaptation involves the thought that, if our perceptual reaction to o is influenced by whatever else we perceive in the spatiotemporal vicinity, then the best way to control for this influence would be to perceive nothing other than o (or as close to nothing as possible) in the spatiotemporal vicinity. Thus, in experiments on visual perception, psychophysicists often require subjects to adapt to darkness for a period preceding the presentation of crucial stimuli; in work on auditory perception, subjects are adapted to silence; etc.[12] There are two (compatible) ways to think about how adaptation controls for perceptual contrast. On the first, what is important is not so much that adaptation fully obliterates

[11] Another likely element in the story is that the large tasting format is more conducive to the appreciation of typical non-chablis chardonnay features (e.g., big fruit, oak) than it is to the more subtle features of typical chablis (e.g., minerality).

[12] Obviously the length of the required adaptation is a crucial experimental variable; typically one wants the shortest interval such that, after adaptation of that length, contrast effects become statistically indiscernible.

all effects of contrast, but that every distinct target item is presented in the context of (hence, reacted to in contrast against) the very same comparison. Consequently, even if there is some residual contrast effect on our perceptual reactions to target items, it will be a residual effect of contrast with the very same context. The second way to think about the use of adaptation involves the idea that the adapting stimulus is chosen to be as neutral as possible along as many dimensions as possible — darkness in visual experiments, silence in auditory experiments. Presumably the motivation is that we want our perceptual reactions to o to reflect (as much as possible) just the influence o itself has on our perceptual systems: we want the reaction to reflect the contrast with the perception of *nothing* (to the extent that that is possible).

Could analogous methods could be extended to the wine tasting setting to control for effects of perceptual contrast on our perceptual reactions to wines? I don't see why not. The obvious suggestion, by straightforward analogy from what we have said about controlling for perceptual contrast in vision and audition, is that tasters should adapt over a measured temporal interval to a neutral flavor (e.g., plain water) between samples. The implementation of this procedure does not seem to me to be especially onerous (especially in light of the considerable resources devoted to wine tasting as it is now carried out).[13] I see no reason to doubt that this procedure would be helpful in controlling for the influence of perceptual contrast in wine tasting.[14] [15]

[13]Indeed, the proposed procedure may carry an additional side benefit: because it would slow down the taster's consumption of wine, it might be expected to lessen or at least slow down her loss of perceptual acuity due either to overstimulation ("palate fatigue") or inebriation.

[14]Two caveats are in order.

First, I don't know what temporal interval would be required to control for the kind of perceptual contrast under discussion; although I suspect the relevant effects are sufficiently short-lived that they could be controlled for practically (unlike, say, the effects of perceptual contrast caused by eating large amounts of garlic, which can persist in some individuals for days). This is, of course, an empirical question.

Second, it is worth bearing in mind that perceptual contrast is not the only source of extrinsic influence on our perceptual reactions, and that, in particular, it won't help in controlling entirely for the effects of perceptual memory. Thus, a taster who perceives sample o_1 at t_1, who adapts to plain water between t_1 and t_2, and then perceives sample o_2 at t_2 may have laid down perceptual memories of o_1 that affect her tasting of o_2 at t_2. Neutral adaptation between the samples may weaken the effect of perceptual memory by making it more difficult for the taster to access memorial information about the initial sample, but plausibly won't eliminate it altogether. (A better strategy for controlling for the effects of memory — also one that is used routinely in psychophysical contexts — is to present the samples multiple times to each perceiver, always randomizing the order, and to average out differences between trials.)

[15]In my experience, and as far as I can tell, adaptation to plain tap water is *not* part of the standard practice for tasting wine, even in very formal, competitive judging scenarios, even though blind tasting most assuredly is.

I find myself oscillating between two reactions to this state of affairs. On the one hand, I am mildly scandalized that tasters do not even try to use a simple, low-cost procedure that there is reason to think would significantly enhance their chances at achieving the goals they claim to have, and that motivates their insistence on blind tasting. On the other, perhaps the lesson of the non-use of neutral adaptation is that tasters (even in formal, competitive settings) do not really have the stated goal of controlling for the influence of extrinsic factors on their perception, and are only indulging in blind tasting out of deference to tradition.

Be that as it may, here I want to emphasize two points. First, perceptual contrast is — like the influence of beliefs derived from slightly earlier perceptual encounters with the same sample discussed in §3.1 — a genuine, confirmed way in which our perceptual response to a wine is significantly affected by factors extrinsic to the sample we taste. And second, blind tasting is incapable of controlling for either of these kinds of influence.

Therefore, if the point of blind tasting is, as claimed, to control for influence on our perception of a target o by factors extrinsic to o, then blind tasting cannot be expected to do the job that it is advertised to do.

4 Whence Control?: Blindness and The Aims of Tasting

In §3 I argued that, advertising to the contrary notwithstanding, blind tasting is incapable of controlling for the influence of belief or extrinsic factors on our perceptual reaction to the wine we taste. But this invites a prior question: why should we hope to control for such factors in the first place?

I can't see how to answer that question in the absence of a larger conception of the ends one is attempting to achieve by tasting. Unfortunately, there are many, diverse ends that tasters might have in mind, and I cannot hope to consider all of these. Instead, I'll consider two broad classes of ends that, it seems to me, have different lessons to offer about the role of belief or extrinsic features in our assessments.

4.1 Projective Tasting

There are some very prominent (and disproportionately and unreasonably influential) conceptions of the purpose of tasting that make controlling for extrinsic factors a reasonable goal. One is judging wines for the purpose of bestowing competitive awards. The other is judging wines for the purpose of recommending them to other consumers — say, by the writers of tasting notes in wine periodicals, by sommeliers, and even by ordinary consumers who make recommendations about wine to their friends. In these settings, I suggest that there are related reasons concerning the elimination of idiosyncrasy/the need for stability that make it reasonable to want to control for extrinsic factors in one's perceptual reactions.

Both the competitive wine judge and the recommender of wines to other consumers must (like all other tasters) evaluate based on their own perceptual experience. Crucially, however, it is central to the purposes of these tasters that their evaluations predict something about the experiences other tasters will have, in other conditions, when they taste the same wine. These tasters, in particular, are engaging in what we might call *projective* tasting: they aim to project from the experience the wine causes in them to the experience the wine will cause in others. To see why this is so, suppose a taster's

recommendation for purchase reflects only idiosyncratic dimensions of the perceptual reactions of this single taster in this single perceptual condition. In this case, it is hard to see why a different taster, who will taste in different conditions, would recognize any force in the recommendation.[16] The putative recommendation loses its value as a recommendation if the recipient expects that the recommender's perceptual reaction (presumably what made her recommend the wine) is not predictive of the recipient's perceptual reaction. Similarly, if the judge in a wine competition awards on the basis of idiosyncratic features of his perceptual reaction, it's hard to see why that assignment of merit should be worth attending to at all. Again, the judge's assignment of merit to some wine loses its force as a mark of quality if it is connected only to the idiosyncratic response of *that* judge in *that* perceptual condition, and is not at all predictive of the response by other tasters, in other perceptual conditions.[17]

These considerations suggest that a competitive wine judge or a taster who recommends wines to other consumers might want to set aside what is idiosyncratic about her perceptual reactions to wines.[18] And if that is her goal, then it makes sense that this kind of taster might want to control for the extrinsic. For idiosyncratic aspects of a reaction to the wine by a particular taster under a particular condition are, more or less by definition, extrinsic to the wine. Therefore, controlling for extrinsic factors is one (perhaps overbroad, but effective) way of screening off a kind of influence that projective tasters will want to screen off. Hence blind tasting may serve effectively at least one important goal of projective tasting.[19]

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[16]Here I am thinking of both what we might call interpersonal idiosyncrasies (the general, standing distaste for merlots that I harbor but that you do not) and intrapersonal idiosyncrasies about the perceptual conditions (that the tasting occurs in an unusually warm room, of after having eaten very sweet food, or very acidic food, etc.).

[17]What I say here is confirmed by the further thought that projection is not an all or nothing affair, and that we plausibly care more about setting aside idiosyncrasies of our reactions as we attempt to project to wider ranges of different tasters. Thus, for example, the taster who projects about only her own future experience from a current tasting (say, in a decision about what to serve for herself next week, or about what to buy more of) will want to set aside temporary idiosyncrasies, but will care much less about setting aside any permanent personal idiosyncrasies than the taster who projects to the wide readership of her wine newsletter or the judge at an international wine competition.

[18]In this connection, sommeliers, wine retailers, and wine judges will often describe recommending wines that they themselves dislike. This makes sense if, as I am suggesting, their recommendations amount to positive evaluations of a projection to the experience of other tasters, rather than their own experience.

[19]Dwight Furrow (p. c.) suggests a further reason that might motivate blind tasting in projective settings. Because projective tasting is often the basis for a purchasing recommendation for its audiences, wine producers not infrequently lavish gifts (samples, trips, etc.) on, and develop personal relationships with, influential projective tasters. Those tasters may reasonably wish to avoid the impression of having favored wines on the basis of such gifts or special relationships, and so may use blind tasting to screen off (at least one route to) information about the connection between these goodies and the wines they taste.

One concern at work here is that, unless we screen off such information, tasters might dishonestly inflate their evaluations of weaker wines or deflate their evaluations of stronger wines to satisfy commercial interests. Beyond issues of dishonesty, the instance at hand strikes me as a

4.2 Non-Projective Tasting

However, the number of occasions on which people taste to serve the ends described in §4.1 is pretty obviously dwarfed by the number of occasions on which people taste for other reasons. Most of us will never serve as judges in official (or unofficial) wine competitions, and I conjecture that even those tasters who do serve as judges end up tasting much more frequently in non-competitive settings. Some of us may sometimes make suggestions about preferred wines to other consumers (perhaps most significantly when the other consumers in question are later time-slices of ourselves); but I take it that this is not the main purpose almost anyone has in mind in tasting, and it is not the most significant element in shaping the way we perceptually interact with wine. On the contrary, I take it that we taste mainly because doing so confers some complex mix of sensory and intellectual pleasures. Given that this is so, it is not vital that we taste in a way that facilitates projection to the experiences of other tasters in other perceptual conditions. Therefore, the motivations offered for controlling for extrinsic factors in cases of projective tasting are inapplicable to the kinds of non-projective tasting almost all of us do, almost all of the time we encounter wine.

This, by itself, doesn't quite show that blind tasting is unmotivated for non-projective tasting, for it leaves open the possibility that there is some other reason for controlling for the influence of extrinsic features on our perceptual appreciation of wine and that apply to non-projective cases. However, while I can imagine some such initially plausible additional reasons, I do not believe that they withstand scrutiny.

The most powerful such motivation I can imagine comes from the thought that only by setting aside what is extrinsic will be able to assign credit or blame for whatever enjoyment or lack of it that we get from the tasting experience to the *wine*, rather than anything else. Here's an analogy designed to demonstrate the plausibility of the proposed motivation. Socrates's wife Xanthippe may be very beautiful indeed; but we wouldn't on that basis want to credit *Socrates* with beauty: on the contrary, the beauty of Xanthippe counts as, at best, an extrinsic feature of Socrates — the kind of feature of Socrates we would do well to ignore when assessing the visual appearance of Socrates. Similarly, then, when perceptually assessing a wine, we might strive to employ a procedure that assigns credit or blame for the enjoyment (/non-enjoyment) of the tasting experience to the wine itself. That is, we might favor an evaluation procedure that ignores extrinsic features of the wine, lest we credit or blame the wrong party.

But, on reconsideration, this proposed motivation is unpersuasive. To begin, while it is true that we wouldn't regard Socrates as beautiful on the

special case of the worry about idiosyncracy and projection. The thought is that I should set aside the evaluative boost a wine gets from being associated in my mind with the kickback I received from Commercial Wine Production, Inc. because that boost is idiosyncratic to me: I can't project a similar experiential boost to other tasters who experience the wine without having received the kickback. As I say, these sorts of considerations strike me as reasonable motivations for blind tasting in projective cases.

strength of his wife's appearance, this shows only (what should have been obvious anyway) that not just any extrinsic features of Socrates counts toward his beauty. And, of course, that falls short of showing that our evaluation procedures should ignore extrinsic factors. Indeed, reflection on the example suggests just the opposite. For when we attribute beauty to Xanthippe (/ugliness to Socrates), it appears that our assessments depend crucially on extrinsic features of Xanthippe (/Socrates): we call Xanthippe beautiful and Socrates ugly because of our reactions to their visages — reactions that are surely not intrinsic features of Xanthippe and Socrates.[20] Nor is this an isolated case. There are many other properties — e.g., *embarrassing, humorous, enjoyable* — that we attribute in a way that crucially depends on, and so does not control for, extrinsic features of their bearers.

Moreover, in none of these cases is there a worry that the things to which we attribute such properties on the basis of their extrinsic features target the wrong bits of the world. The reactions in me make it true that *Xanthippe* is beautiful, the *situation* is embarrassing, and the *joke* is humorous; they don't make it true that *I* am beautiful, embarrassing, or humorous. And my reactions do this even though they are clearly extrinsic to Xanthippe, the situation, and the joke.

Perhaps the proponent of setting aside the extrinsic will accept the apparent lesson of these considerations that it would be inappropriate to set aside from consideration *all* of the extrinsic properties of our evaluative targets. However, she might point out, the examples of appropriately considered extrinsic properties given above are drawn from a narrow class of extrinsic properties — viz., those that (as per note 20) are plausibly constituted in terms of our perceptual reactions (call these *reactive extrinsic properties*). And she might think that, even if the considerations adduced make it plausible that evaluators should not set aside reactive extrinsic properties in particular, the worry about misplaced credit and blame gives us reason to set aside (and to favor tasting procedures that screen off) *other* (viz., non-reactive) extrinsic properties of our evaluative targets.[21]

But this suggestion is unpersuasive as well. For, while the examples considered above are limited to reactive extrinsic properties, the lesson they teach appears to extend to extrinsic properties more generally speaking. Namely, these examples show that when an object o_1 bears an extrinsic property by being related somehow to another entity o_2, this in no way undermines o_1's possession of the property or shows that o_2 rather than o_1 is the true property-bearer. Since, crucially, none of this hangs on whether the extra relatum o_2 is a perceiving subject, the lesson here appears to

[20] One plausible explanation for this dependence on our own reactions is that the properties *beauty* and *ugliness* are relational (not intrinsic) properties of Socrates and Xanthippe, constituted at least partly in terms of our perceptual reactions to their bearers. Suppose, for example, that *beauty* just is a disposition to elicit certain kinds of admiring perceptual reactions in appropriate observers. If so, then someone who recognized in herself the right kind of admiring perceptual reaction to Xanthippe, and who also recognized that reaction as the manifestation of the disposition to elicit such reactions in observers such as herself would know that, exactly because Xanthippe elicited that reaction in her, Xanthippe exemplifies *beauty*.

[21] Thanks to Aaron Meskin for raising this concern.

hold for both reactive and non-reactive extrinsic properties. Consequently, this lesson undercuts (in a general way) the motivation for screening off extrinsic properties under consideration, which involved the desire to prevent misattribution of features to other relata and therefore crediting or blaming the wrong objects. Once that point has been made, I don't see any motivation for screening off non-reactive extrinsic properties in forming our evaluations.[22]

I conclude, then, that the need for accurate assignment of credit and blame in our assessments gives no reason for demanding, or even favoring, an evaluation procedure that controls for extrinsic factors. Thus, pending some further and more convincing reasons for controlling for extrinsic factors in non-projective tasting, it is hard to avoid the conclusion that blind tasting (which is designed to supply that kind of control) is, after all, unmotivated with respect to the vast majority of circumstances in which we taste.

5 What Blindness Doesn't See

I have argued (§3) that blind tasting can't effectively control for the types of influence on our perceptual reactions that it is enlisted to prevent — roughly, that blind tasting is ineffective with respect to its own aims. Moreover, I have argued (§4) that attempting to control for those influences is generally unmotivated, given the purposes almost all of us bring to almost all of our encounters with wine (and other food and drink) — roughly, that the aims of blind tasting are aims we should not have given what we hope to achieve by tasting. In the present section, however, I want to argue that the blind tasting is in some respects worse than even all that makes out. This is because, in several kinds of cases that I'll describe below, blind tasting not only fails to do what it is advertised to do, but positively prevents us from perceiving things we want to perceive in tasting wine.

In each of the different cases I have in mind, perception has something to tell us about its object, but this perceptual message gets lost among the other perceptual information we get from the wine unless we specifically direct our perceptual attention in the right ways. Of course, the trouble is that directing attention in this way requires knowing in advance something about where to look — and this is exactly the kind of knowledge that blind tasting (when it works) puts beyond our reach. The moral of these considerations is that, because it prevents this sort of top-down modulation of perceptual attention, blind tasting, like other forms of blindness, is an obstacle to perceptual apprehension of the world.[23]

[22] I would add that it's not immediately obvious that blind tasting does successfully screen off non-reactive extrinsic properties; thus, even granting that that end could be motivated, it would remain to be seen whether blind tasting would bring us any closer to its achievement.

[23] Caveat: I believe that blind tasting can and often does impede our perceptual apprehension of the world in these ways, not that it must (and certainly not that it must in every case). Specifically, it might fail to have the negative effects discussed below because of a limitation that came up in §3: conditions of blind tasting needn't always prevent the taster from arriving at beliefs about the wine's origin, composition, etc. by perceptually-informed inference subsequent to her first taste.

5.1 Blindness to Neglected Dimensions

A first way in which blind tasting can prevent us from perceiving, and one that has already come up in the discussion of chablis in §3.2, concerns the comparison between this and other chardonnays. As noted, it is entirely typical that chablis stand out, and stand out in an unflattering way, when tasted blindly with other chardonnay-based wines. This is largely because the particular rewards of chablis are more subtle to the kinds of perceptual systems we happen to have than those of otherwise similar chardonnay based-wines from warmer climates: the latter tend to emphasize more prominent fruit and oak flavors, which are more easily discriminable by us. But it is not only true that chablis comes off poorly by comparison with those other wines, whose features swamp our responses to the relatively subtle features of chablis. It is also true that, even when tasted on its own, the specific features that make chablis rewarding are less obvious than the corresponding features that make other wines rewarding.

And now the point is that if a chablis is tasted under conditions in which the information needed to direct awareness onto those relatively subtle chablis-specific dimensions is unavailable, then those dimensions are likely to be ignored. It seems clear that the needed information will be obscured under so-called double-blind tasting — tasting in which the taster has no explicit information about the wine at all over and above that which she can obtain from perceptually interacting with the wine in the glass. But the needed information can also be obscured under conditions of single-blind tasting — in which the taster is told some general property of the class of wines being evaluated (or else is given an unordered list of producers of the wine) before carrying out the tasting, unless it so happens that the additional information provided manages to direct attention on the relevant chablis-specific features. After all, adding the information that the wines are all made from predominantly chardonnay grapes, or that they are all from the northern hemisphere, will ordinarily be insufficient, by itself, to direct attention on the relevant and relatively subtle dimensions on which chablis stands out.[24] Thus, both double-blind tasting and much single-blind tasting (unless set up correctly in advance) will impede our appreciation of a wine, like chablis, that excels along dimensions that are relatively subtle to the particular kinds of perceptual systems we happen to have.

Such beliefs, formed on the taster's first perceptual contact, may serve to modulate her perceptual attention on further sips in ways that make salient/available the information that, I worry in what follows, blind tasting can render unavailable. (Whether such inferences occur will presumably depend on the experience of the taster, the subtlety of the relevant cues, and the conditions of the perceptual situation generally speaking.) What I should say, therefore, is that blind tasting is likely to have the negative effects discussed below, except possibly when it is ineffective in screening off the beliefs it is intended to screen off. (Thanks to Bence Nanay and Aaron Meskin for pushing me on this point.)

[24] Indeed, to the extent that single-blind tasting does fare better than double-blind tasting with respect to the problems discussed here and elsewhere in this section, it does so because it puts limits on blindness (viz., it allows the taster access to more information).

Reflection on this example suggests that when we taste blind, we (understandably) react most to those dimensions (and to variations along those dimensions) that are most easily discriminable by us — for example, depth of color, intensity, oakiness, sweetness, and density.[25] This will reward wines that are appealing along those dimensions, and will count against wines that are not. But, of course, wines that are not appealing along those dimensions can have much to offer on other dimensions — other dimensions that, under conditions of sighted tasting, we can know to attend to. If our goals in tasting, then, include exploration of the diverse wines in the world, and what they have to offer on their own terms, then we serve those goals poorly by relying exclusively on blind tasting.

5.2 Blindness to Grouping

A second, and related, way in which blindness can impede rather than aid our aims in tasting wine is by preventing us from isolating particular dimensions of similarity or difference. I've already pointed out that tasting blind makes us blind to the sometimes relatively subtle dimensions along which particular wines excel (or otherwise). But sometimes part of what makes a wine interesting is the comparison it bears to a group of other wines chosen for some specific purpose — a specific purpose that will be hidden if we insist on blind tasting.

For example, knowing the sample before me is a New Zealand pinot noir makes me want to find the commonalities and differences between what is in this glass and wines from Oregon or Burgundy made from the same grape; but I can't search for those commonalities and differences without first having the information about the origins of these wines that blind tasting makes unavailable. Significantly, the additional information about origin is helpful not because it adds to the array of perceptually available features of the sample. Rather, it is helpful because it directs attention to particular components of that array. But because perception is such a rich source of information about its objects, components of its contents are easily lost among the shuffle if they are not singled out by attention. The point now before us is that blind tasting prevents us from directing attention to (as it might be, geographically rooted) dimensions on which a pair of samples might be expected to be interestingly similar or different, and therefore prevents us from appreciating this potentially perceptually available information. And, again, this is not only true of double-blind tasting, but also of single-blind tasting except in those instances where the extra information made available to tasters before their perceiving the wine happens to single out the interesting groupings at issue.

Here is a similar example, mentioned by Kramer, where blind tasting conditions prevent a potentially interesting dimension of similarity from being

[25]Interestingly, value on these and other dimensions highly salient to the blind taster tends to correlate with level of alcohol. This explains why blind tasting tends to favor wines that are higher in alcohol over wines that are lower in alcohol.

picked out for special attention among the mass of information supplied by perception:

> . . . within the vast area of Chianti Classico, there's a little nook that cradles three superbly distinctive Chianti Classico estates that all share a strong taste similarity: Castello della Paneretta, Fattoria Monsanto, and Isole e Olena. In a blind tasting, you may like one or another of this trio. But I doubt that even the most acute taster would spot the commonality among them in a large lineup. It's readily seen, though, when you knowingly serve them together (Kramer, 2010, 26).

Once again, it is important to see from this example that the interesting within-group comparison at issue will be lost not only under conditions of double blind tasting, but also under many single-blind conditions — namely, all those single-blind conditions in which tasters' attention is not specifically focused on the shared features of this particular subgroup. Thus, for example, adding the information that all the wines in a large group are from the Chianti Classico, as might be done in a large single-blind tasting, won't single out the particular subgroup of three that Kramer mentions.[26] Consequently, tasting these wines single-blind with only the addition of this general geographic information about the larger group (or, for that matter, with the addition of any other piece of information that fails to single out the subgroup of three) will allow tasters to miss out on a potentially useful comparison.

Similarly, much of what is interesting about a vertical tasting is the opportunity to locate what the wines have in common and what distinguishes one from another. The vertical tasting is an opportunity to factor apart the components in our perceptual reactions against a known backdrop of what unites and what separates the different wines. Suppose we know that the wines are alike in varietal composition but not geographical origin, or in origin but not year. Then when we taste them we direct our attention to aspects of similarity in our perceptual reactions to them (which we then conclude are due substantially to their common origin, as it may be) and aspects of difference in our perceptual reactions to them (which we then conclude are due substantially to the differences in weather conditions in the years in which they were produced).

Of course, this sort of factorization doesn't work except by reference to knowledge of what is held constant and not constant in the group. But condi-

[26]Objection: While what Kramer says might be right for ordinary tasters, he is wrong to doubt that "the most acute taster" would miss the commonality. On the contrary, the specific expertise of the Chianti expert gives her a better chance of noticing the subgroup under conditions of (single- or double-) blind tasting. Therefore, at least for this kind of taster, blind tasting might not be such a bad thing.

Reply: First, even if the objection is correct in what it says about expert tasters, the point stands with respect to everyone else — and I take it there are very few experts in the relevant sense (and that even such experts are unlikely to have similar expertise with respect to wines from outside Chianti). Second, because framing effects due to grouping and perceptual contrast are remarkably persistent under education/experience, I am inclined to agree with Kramer's prediction even as it applies to tasters extremely familiar with the wines of Chianti.

tions of double-blind (and much single-blind) tasting are designed specifically to deprive the taster of such a backdrop of knowledge; indeed, blind tasting prevents the taster from even appreciating the group *as* a group for which there is a backdrop worth having to structure perceptual attention. For this reason, the exclusive blind taster loses the ability to benefit from such comparisons as fully as tasters who employ a wider range of strategies.

5.3 Blindness to Category

There is another (related) way in which blind tasting, by removing information about the categories in which the wines we taste fall, can fail to serve our ends in tasting. This is because whether and how the features of a wine affect our overall appreciation depend crucially on the category against which we carry out our evaluation. Double-blind tasting prescinds from all such category information, and single-blind tasting prescinds from much of it. Consequently, blind tasting of both kinds compromises our ability to assess the features that we do succeed in noticing in our perceptual encounter with the wine.

In saying that the role of particular perceived features in our overall assessment of a wine depends on the category against which we evaluate it, I am following analogous claims by Walton (1970) about the aesthetic appreciation of works of art. Walton makes this point regarding art by inviting us to

> 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 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.... Picasso's "Guernica" would be counted as a *guernica* in this society — a perfectly flat one – rather than as a painting .... 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.... We do not pay attention to or take not 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, "Guernicas" 's color patches, which we find noteworthy and expressive, are insignificant to them (Walton, 1970, 347).

I want to urge that, just as the question whether the three-dimensional flatness of a putative art object figures centrally in our aesthetic evaluation depends on the category against which we evaluate that object, so, too, the question whether specific features in a wine figure in our perceptual evaluation depends on the category against which evaluate that wine. Specifically, the

assessment of particular features in a wine often depends on particular geographical and varietal categories. Thus, the presence of petrol notes and acidity are standard (and, indeed, plausibly a virtue) in a mature Alsatian riesling, but non-standard (and, indeed, plausibly a flaw) in, say, a young California zinfandel. This is because the categories under consideration (mature Alsatian riesling, young California zinfandel) come with quite different contingent, historically conditioned norms that govern local winemaking practices and the profiles of the resulting wines. Given the different norms at work, the absence of petrol notes and acidity counts as a norm-violation for an instance of the one category but not the other.[27]

However, once again, blind tasting is designed to make unavailable information about the categories against which to evaluate particular wines — double-blind tasting is designed to make all such information unavailable, and single-blind tasting is designed to make much of it unavailable — and encourages us instead to assess those wines based wholly on what is in the glass. Consequently, if I am right that this sort of categorical information is crucial to assessing the features we perceive when we taste, then the exclusive blind taster won't be in a position to carry out those assessments.

5.4 Blindness to Relevant Absences

A special case of the problem about blindness to category discussed in §5.3 involves the perception of absences in particular.

An absence, like a present feature, can be positive relative to one category but negative relative to another: returning to an example discussed above, an absence of petrol notes and acidity is presumably a positive feature relative to the category of young California zinfandel, but is a negative feature relative to the category of mature Alsatian rieslings. As in the case of present features, then, the inaccessibility of category assignments to the blind taster will prevent her from making informed assessments that turn on absences that are standard or contrastandard for the category.

But the situation is in one way worse for absent features than it is for present features: it is in the nature of an absence that it is not ordinarily salient unless the perceiver is looking for it. If I don't know to look for the petrol notes and acidity in the sample I taste, then I ordinarily won't conclude from my perception of the wine I taste that those particular features are absent.

Once again, knowing the (geographical, varietal) category of the wine will often direct the taster's perceptual attention on the relevant dimensions, so the taster with this information will be in a position to respond to relevant

[27] What makes the worry about blindness to geographic and varietal categories considered here more than merely a special case of the worry about grouping considered in §5.2 is the way in which the different groups are unified. Where the more freely constructed groups discussed in §5.2 are unified merely by clusters of similar/dissimilar features, geographic/varietal categories of wine are typically tied together by norms of winemaking sometimes passed down over time in a single place (in the case of geography), and sometimes imposed by the agricultural requirements of particular types of grapes (in the case of varietals).

absences. But because blind tasting is aimed at removing exactly the prior knowledge that would be helpful in directing attention in this way, it will prevent perception from delivering information about potentially relevant absences.

5.5 Blindness to Temporal Stage

A final way in which over-reliance on blind tasting may prevent us from appreciating what there is to be enjoyed in wine has to do with wine's temporal evolution. Because wines evolve in the bottle, there are better and worse (i.e., more flattering and less flattering) times to taste particular wines. Needless to say, we want to know something about a bottle's stage in its evolution in deciding when to open it. And, though this sort of timing is famously difficult, there are at least useful broad guidelines: some wines are expected to improve by more aging (canonically, classified growth Bordeaux), and others are not (say, Marlborough sauvignon blanc, much of whose enjoyment comes from the impression of ripe freshness it conveys when young, but which fades over time).

This can also matter to us in the context of synchronic tasting. If we know the current stage of an expected evolution of a wine, this can change our evaluation of it when we taste on a specific occasion. For example, we would reasonably be more forgiving of a wine that strikes us as objectionably tannic if we thought its tannins would eventually soften (we might also regret having opened the wine too early).

But, crucially, because different wines evolve differently, it wouldn't make sense to react this way to just any wine. The propriety of our forgiveness for a feature depends on what kind of wine we are considering, on the trajectory we expect it to trace out over time, and on its stage along that expected trajectory. Of course, these pieces of knowledge are available when we taste sighted, but certainly not when we taste double-blind, and also not when we taste single-blind (unless, by chance, the particular bits of knowledge we are allowed happen to give the clues we need). And once again, having clues about the stage of a wine's temporal evolution will (reasonably) make salient certain dimensions for perceptual evaluation — signs of successful or unsuccessful aging — that we might have otherwise ignored.

Once again, the conclusion suggested by these considerations is that, if we insist on exclusively blind tasting, then we lose access to things we want to gain from our perceptual encounters with wine.

6 Conclusion

I have argued that, despite its status within the wine world as the one and only serious method for perceiving wine, blind tasting falls short in several ways. It cannot genuinely screen off extrinsic influences on perception, and so doesn't do what it is vaunted for doing (§3), and in any case it is unobvious

why screening off those influences is important, given the reasons most of us have most of the time in consuming wine (§4). Moreover, I have argued that there are things we should want to get from our perceptual encounters with wine that blind tastings make inaccessible (§5).

Having said all this, I still want to allow that blind tasting has a positive role to play in our enjoyment of wine. I do not claim that the considerations above establish that blind tasting has nothing to contribute to our perception of wine, but only that we should not rely on blind tasting unduly or exclusively.

As I noted in §2, our perceptual reactions to a given wine under conditions of blind tasting are indeed different from our perceptual reactions to the same wine under conditions of sighted tasting. And, just as I have emphasized throughout the foregoing that the latter type of reactions are in no way second-class or erroneous, I see no reason that the former set of reactions should be disregarded. Instead, I suggest that blind reactions and sighted reactions can reveal different things about their objects that can be useful and interesting in different ways. In particular, and among other things, blind reactions to a wine can (sometimes) help us in isolating certain of its intrinsic features, and in making projectible predictions about the reactions of other perceivers (including different time-slices of ourselves), while sighted reactions can reveal interesting relational features of the wine that we might not otherwise appreciate.

The right reaction to this situation, it seems to me, is not to rely exclusively on any one set of experiences of a wine, but instead to gather a range of different perceptual reactions, exploiting each for the purposes it serves best.

The collection of perceptual reactions to a given wine that are available to a single taster is large and heterogeneous. Because there is potentially interest, and therefore value, in all of the members of this collection, we would do well to adopt a pluralist attitude toward wine tasting. So as to derive as much as possible from a wine, we should taste it blind (and neutrally adapted), and we should taste it sighted.[28] We should taste the wine by itself, and with many different foods. We should taste it with other wines of like and unlike types. We should taste early, and taste often.[29]

References

Brochet, F. (2001). Tasting: Chemical object representation in the field of consciousness. Ms., General Oenology Laboratory, Talence, France.

[28] And in that order, since one can't return to the conditions of blindness after the information from sighted tasting is made available.

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Goldstein, R. and Herschkowitsch, A. (2008). *The Wine Trials: 100 Everyday Wines Under $15 that Beat $50 to $150 Wines in Brown-Bag Blind Tastings*. Fearless Critic Media.

Goldstein, R., Almenberg, J., Dreber, A., Emerson, J., Herschkowitsch, A., and Katz, J. (2008). Do more expensive wines taste better? *Journal of Wine Economics*, **3**(1).

Jackson, R. (2009). *Wine Tasting: A Professional Handbook*. Academic Press, New York.

Kramer, M. (2010). *Matt Kramer on Wine: A Matchless Collection of Columns, Essays, and Observations by America's Most Original and Lucid Wine Writer*. Sterling Epicure, New York.

Morrot, G., Brochet, F., and Dubourdieu, D. (2001). The color of odors. *Brain and Language*, **79**, 309–320.

Peynaud, E. and Blouin, J. (1996). *The taste of wine: the art and science of wine appreciation*. Wiley, 2nd edition.

Plassmann, H., O'Doherty, J., Shiv, B., and Rangel, A. (2008). Marketing actions can modulate neural representations of experienced pleasantness. *Proceedings of the National Academy of Sciences*, **105**(3), 1050–1054.

Reilly, S. and Pritchard, T. C. (1997). Gustatory thalamus lesions in the rat: Iii. simultaneous contrast and autoshaping. *Physiology & Behavior*, **62**(6), 1355–1363.

Robinson, J., editor (1999). *The Oxford Companion to Wine*. Oxford University Press, New York, 2nd edition.

Spence, C. (2010a). The color of wine: Part I. *The World of Fine Wine*, **28**, 122–129.

Spence, C. (2010b). The price of everything: The value of nothing? *The World of Fine Wine*, **30**, 114–121.

Walton, K. (1970). Categories of art. *The Philosophical Review*, **79**(3), 334–367.

Welge-Lüssen, A., Husner, A., Wolfensberger, M., and Hummel, T. (2009). Influence of simultaneous gustatory stimuli on orthonasal and retronasal olfaction. *Neuroscience Letters*, **454**(2), 124 – 128.