

Taste predicates and the acquaintance inference *

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Abstract Simple sentences containing predicates like *tasty* and *beautiful* typically suggest that the speaker has *first-hand knowledge* of the item being evaluated. I consider two explanations of this *acquaintance inference*: a presuppositional approach and a pragmatic-epistemic approach. The presuppositional approach has a number of virtues, but runs into trouble because the acquaintance inference has a very different projection pattern from that of standard presuppositions. The pragmatic-epistemic approach accounts for the main data discussed in the paper, but faces challenges of its own.

Keywords: taste predicates, contextualism, relativism, presupposition, implicature, epistemic modals, norm of assertion

1 Introduction

This paper concerns a puzzling feature of taste and aesthetic predicates, adjectives like *tasty*, *delicious*, and *beautiful*. Utterances of simple sentences containing such predicates typically suggest that the speaker has *first-hand knowledge* of the item being evaluated. Normally, an utterance of (1) would suggest that the speaker had actually tasted the lobster rolls in question, and the utterance would be odd if this were not so. Similarly, an utterance of (2) would usually suggest that the speaker had seen St. Mark's and would otherwise be odd.

- (1) The lobster rolls at *Neptune Oyster* are tasty.
- (2) St. Mark's Basilica is beautiful.

This point is brought out more clearly by contrasting (1) and (2) with their ‘hedged’ variants:

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- (3) **I've heard** the lobster rolls at *Neptune Oyster* are tasty.
- (4) **Apparently**, St. Mark's Basilica is beautiful.

When the speaker lacks the relevant first-hand knowledge, these hedged variants are more appropriate than their hedge-free counterparts.¹

Why should this be puzzling? After all, how *else* does one find out that something is tasty other than by tasting it? The puzzle is that one can ordinarily learn and report various kinds of facts without having had this sort of first-hand experience. For example, I can learn that the lobster rolls contain paprika via testimony from the waiter. Once he tells me this, I don't have to taste or even see the lobster rolls in order to turn around and tell you that they contain paprika. Similarly, I can learn that St. Mark's Basilica has multi-colored columns by reading about them on Wikipedia. Again, once I possess this knowledge, I don't have to see these columns for myself in order to tell you that St. Mark's has multi-colored columns.

What is the range of expressions for which this sort of requirement holds? Pearson (2013: 118) suggests that a similar requirement holds for the verb *seems*: "I can only say that John seemed tired yesterday if yesterday I had some contact with him that gave me this impression. If my information comes from Mary's description of an encounter with him, I should say, *Apparently John seemed tired yesterday*." Pearson goes on to suggest that the generalization applies to all predicates that take 'experiencer' arguments, conjecturing that both *seems* and taste predicates "take covert Experiencer arguments that in the unmarked case include the speaker" (Pearson 2013: 118). Perhaps it is not surprising then that certain uses of verbs of sensory perception (*looks*, *tastes*, *feels*) are similar in this respect. If I say that John's house looks like a Victorian manse, you will normally take me to have seen his house. If I say that cashmere feels soft, it would be odd for me to then admit that I'd never actually felt the stuff.

Note that I formulated the initial observation by saying that simple sentences containing taste and aesthetic predicates *typically* require the speaker to possess first-hand knowledge of the relevant sort. This suggests that the requirement is not always present. For example, suppose you ask me how Joe's trip to Chicago is going. I might reply by saying, "He's having a great time. He had a delicious meal at his favorite restaurant last night." Here my utterance doesn't seem to imply that I sampled Joe's meal, nor even that I've been to the restaurant in question. Of course, in this case, it seems natural to assume that the meal in question was one that *Joe* found delicious; perhaps in calling it "delicious", I am tying my judgment to Joe's tastes and sensibilities, not to my own. In the literature on predicates of personal

¹ This observation has appeared in both the aesthetics literature and in the literature on predicates of personal taste. See Mothersill 1984: 160; Pearson 2013: 117–118; Bylinina 2013; MacFarlane 2014: 3–4. The observation is related to one in Kant 1790/2000: §33.

taste, this is sometimes called an *exocentric* reading of a taste predicate (Lasersohn 2005: 670ff.). Exocentric uses contrast with the more usual *autocentric* uses, wherein the speaker judges the matter by employing her own tastes and sensibilities.²

There may be other sorts of cases in which the requirement of first-hand knowledge is suspended, but I put these aside here.³ In what follows, I mostly focus on the predicate *tasty*, and I will call the inference from an utterance of the form *o's are tasty* to the sentence *the speaker has tasted an o* an *acquaintance inference*. I will be organizing my discussion around a series of observations concerning such inferences. So let us set out our initial observation as follows:

Observation 1

Normally, utterances of the form *o's are tasty* suggest that the speaker has tasted an *o*. And such utterances are usually odd if this suggestion turns out to be false.

Although this focuses on simple sentences with plural subjects in the present tense, I intend the generalization to cover variations involving singular subjects and past tense.⁴

In what follows, I focus largely on two approaches to this phenomenon. According to the first account, the *presuppositional, judge-dependent account*, taste predicates carry a presupposition that gives rise to the acquaintance inference in normal contexts. While this approach predicts some of the behavior of the acquaintance inference, it faces some problems. In particular, the acquaintance inference has a rather different projection pattern from ordinary presuppositions. The second account, the *epistemic account*, consists of two main claims: (i) in order to know that something is tasty, one must have tasted it; and (ii) knowledge is the norm of assertion (cf. the Maxim of Quality). This account correctly predicts all the observations discussed in this paper, but faces challenges of its own. Thus, while I do believe that something like the epistemic account might be on the right track, the main aim of this paper is to demonstrate just how puzzling the acquaintance

2 I use the terms *exocentric* and *autocentric* merely to describe different readings/uses of the relevant predicates; I do not mean to be presupposing any particular explanation of the distinction.

3 Pearson (2013: 118) discusses a couple of other examples.

4 I have been speaking rather loosely of *first-hand knowledge*. In simple cases, it is relatively clear what this means: for predicates of gustatory taste, tasting is required; for aesthetic judgments concerning how something looks, seeing is required; and so on and so forth. But there are some difficult questions lurking in this vicinity. If I merely see a *photograph* of St. Mark's Basilica, does that put me in a position to declare it beautiful? (And what if the photograph is blurry?) If a musician reads the score of a sonata and 'hears' the music in her head, does that put her in a position to make aesthetic assertions concerning it? These are interesting and difficult questions, but not ones that we need answer here.

phenomenon is.⁵

2 The presuppositional, judge-dependent account

It is natural (if not wholly uncontroversial) to think that taste and aesthetic matters are in some sense subjective or relative. Tastiness, one might think, is not a property that things have in and of themselves; something counts as tasty (or not tasty) only relative to some subject or group of subjects. How exactly we ought to understand these claims is not entirely clear, as the recent debate between contextualism and relativism about taste predicates demonstrates.⁶ But one might nevertheless suspect that the acquaintance phenomenon is in some way linked to the subjectivity of matters of taste.

This broad idea is plausible; but how exactly do we get an explanation of the acquaintance inference out of this thought? Suppose we start out with a semantics on which predicates like *tasty* are given *judge-dependent* lexical entries, in roughly the manner of [Lasersohn 2005](#) and [Stephenson 2007](#).⁷ Then the truth-at-a-point conditions of sentence (1) might look roughly like this:

- (5) $\llbracket \text{the lobster rolls are tasty} \rrbracket^{c,(w,t,j)} = 1$ iff the lobster rolls are tasty relative to j at t in w

Here c is a context, something that determines a possible world w_c , a time t_c , a speaker s_c , and a ‘judge’ j_c ; (w, t, j) is a triple consisting of a possible world w , a time t , and a judge j . Suppose now that it is normally appropriate to assert a sentence ϕ only if ϕ is true relative to one’s context, where truth-at-a-context is defined in the usual way ([Kaplan 1989](#)):

- (6) Sentence ϕ is true at context c iff $\llbracket \phi \rrbracket^{c,(w_c,t_c,j_c)} = 1$

Further, suppose that for most normal contexts c , the judge determined by c is simply the speaker of c ($j_c = s_c$). In that case, it will normally be appropriate for you to assert (1) only if the lobster rolls in question are tasty relative to you. But

⁵ The restriction that taste predicates place on the source(s) of evidence for taste claims is obviously reminiscent of evidential expressions that appear in certain natural languages. But that observation doesn’t by itself offer obvious guidance on how the present phenomenon is to be explained. Of course, it may be useful to examine how taste predicates interact with evidentials in languages that contain them; see [Bylinina 2013](#) for some relevant discussion.

⁶ See, for example, [Egan, Hawthorne & Weatherson 2005](#); [Lasersohn 2005](#); [Stephenson 2007](#); [Schaffer 2011](#); [Sundell 2011](#); [MacFarlane 2014](#).

⁷ I don’t think it would make much of a difference at this point if we instead took *tasty* to combine with a covert ‘experiencer’ argument, as Pearson suggests in the passage quoted earlier. In general, I suspect that less hangs on the distinction between positing a variable in the syntax and positing a ‘judge’ parameter in the evaluation indices than is often thought. See [Ninan 2010](#) for some relevant discussion.

we allow—as our exocentric example above suggests—that sometimes the judge determined by the context will be someone other than the speaker.

So far we have a bare-bones judge-dependent proposal, one which is (I believe) neutral between contextualism and relativism.⁸ Even though a full-dress account would require us to fill in more semantic and pragmatic details, we can already begin to ask how a proposal of this sort might help to explain the acquaintance inference. Focus on the relation of *o*'s *being tasty relative to x in w*, the relation in terms of which our truth conditions for (1) are stated. Although this relation – or something like it – plays an important role in the literature on taste predicates, not all that much has been said about how exactly one ought to understand it.⁹ But it is usually assumed that whether something is tasty relative to me depends in some way on my gustatory preferences, sensibilities, and dispositions. But the crucial question for us is: Can something be tasty relative to someone even if she hasn't tasted it before?

The observation that *tasty* gives rise to an acquaintance inference might be taken to motivate a negative answer to this question: in order for something to be tasty relative to someone, she must have tasted it. In that case, a sentence like (1) will be true at a context *c* only if the judge of *c* has tasted the lobster rolls in question. Since in standard contexts, the judge of the context will typically be the speaker, utterances of (1) will normally be true at a context only if the speaker has tasted the lobster rolls in question. That seems like a simple and well-motivated explanation of

Observation 1.

But, as it stands, this proposal is *too* simple. Given a classical semantics in which sentences are either true or false (at a point), this will mean that if I were to utter (1) in a context in which I am the judge, then my utterance would be *false* if I hadn't tasted the lobster rolls in question. Worse, given the standard semantics for negation, (7) will be *true* in a context in which I am the judge if I haven't tasted the lobster rolls in question:

(7) The lobster rolls at *Neptune Oyster* are not tasty.

But my not having tasted something isn't sufficient to render it bland. *The lobster rolls aren't tasty because I've never tasted them* is absurd, not a near-tautology.

A more promising proposal, however, is suggested by reflecting on a feature of (7), namely that it too seems to give rise to an acquaintance inference. In other words:

Observation 2

8 See MacFarlane 2014: §5 for a thorough discussion of how to draw the distinction between contextualism and relativism.

9 Though see MacFarlane 2014: 143–144 for some discussion of the notion of a ‘standard of taste’, which is sometimes used in place of a judge parameter.

The acquaintance inference projects over negation.

If ϕ is a simple sentence and O an operator, then a property of ϕ *projects over* O iff the complex sentence $O(\phi)$ also has the property. Sentence (1) has the following property: utterances of this sentence in normal contexts suggest that the speaker has tasted the lobster rolls in question, and is odd if this suggestion is false. And (1)'s negation—sentence (7)—also has this property. So we can say that this property projects over negation.

Observation 2 suggests that the acquaintance requirement is a *presupposition*. This is because a characteristic—some would say *defining*—feature of presuppositions is that they project over negation.¹⁰ To see this point, first consider these two sentences, both of which are standardly assumed to carry presuppositions:

- (8) The prime minister of Egypt is bald.
- (9) John stopped smoking.

Utterances of (8) typically presuppose that Egypt has a unique prime minister, and utterances of (9) typically presuppose that John used to smoke. Moreover, these presuppositions are preserved when these sentences are negated:

- (10) The prime minister of Egypt is not bald.
- (11) John hasn't stopped smoking.

This similarity suggests that we might attempt to build the acquaintance requirement into the lexical meaning of tasty predicates, by encoding it as a presupposition. A familiar idea is that presuppositions are conditions on definedness, so that a sentence with a false presupposition lacks a truth value. I take this not as a definition of presupposition, but as a substantive theory for handling the relevant empirical phenomena. I adopt this approach here mostly for the sake of familiarity and concreteness; my discussion of the presuppositional hypothesis won't depend too much on this choice. Within a trivalent framework of this sort, we might propose the following semantics for (1):

- (12) $\llbracket \text{the lobster rolls are tasty} \rrbracket^{c,(w,t,j)}$ is defined only if j has tasted the lobster rolls prior to t in w
Where defined, $\llbracket \text{the lobster rolls are tasty} \rrbracket^{c,(w,t,j)} = 1$ iff the lobster rolls are tasty relative to j at t in w

Our semantic theory also needs to include an appropriate semantics for negation:

- (13) $\llbracket \text{not } \phi \rrbracket^{c,(w,t,j)}$ is defined only if $\llbracket \phi \rrbracket^{c,(w,t,j)}$ is defined
Where defined, $\llbracket \text{not } \phi \rrbracket^{c,(w,t,j)} = 1$ iff $\llbracket \phi \rrbracket^{c,(w,t,j)} = 0$

¹⁰ I assume a basic familiarity with the relevant notion of presupposition. Beaver & Geurts 2013 is a useful introduction to the topic.

And we adjust our definition of truth-at-a-context accordingly:

- (14) Sentence ϕ is defined at a context c iff $\llbracket \phi \rrbracket^{c, (w_c, t_c, j_c)}$ is defined
 Where defined, ϕ is true at c iff $\llbracket \phi \rrbracket^{c, (w_c, t_c, j_c)} = 1$

Thus, in an *autocentric context* (a context in which the judge j_c is identical to the speaker s_c) a sentence like (1) will be undefined—and so infelicitous—if the speaker hasn’t tasted the lobster rolls before. And, given our semantics for negation, the same goes for (7). Thus, this proposal predicts **Observations 1** and **2**. But note that in an *exocentric context* (a context in which $j_c \neq s_c$) utterances of (1) will not require that the *speaker* has tasted the lobster rolls before, but only that the *judge*, j_c , has. If, as we conjectured earlier, exocentric uses of taste predicates do not give rise to *speaker acquaintance* inferences, this would seem to be a welcome prediction of the present account.

It is worth mentioning another piece of evidence in favor of the presuppositional, judge-dependent approach:

Observation 3

If *tasty* occurs in a positive environment (i.e. simple sentence, conjunction), its acquaintance inference typically resists cancelation.

As a number of theorists have noted, it is difficult to make a simple taste claim and then go on to explicitly deny its associated acquaintance inference:

- (15) ?? These cookies are tasty, but I’ve never tried one. ([Klecha forthcoming](#))
 (16) ?? It’s such a wonderful novel; insightful and moving, with the most beautiful and bewitching language. It’s such a shame I’ve never read it.
 ([Robson 2012: 4](#))

In this respect, the acquaintance inference again behaves like a presuppositional inference:

- (17) ?? The prime minister of Egypt is bald, but there is no prime minister of Egypt.
 (18) ?? John stopped smoking, but he never smoked in the past.

Given a trivalent theory of presupposition, (17) and (18) will presumably be odd because there will be no context at which they are true: any context in which the second conjunct of, e.g., (17) is true is one in which the first conjunct is undefined. And if the first conjunct of a conjunction is undefined, the sentence itself is presumably not true. The situation with (15) and (16) will be slightly different on the present approach. The theory predicts that there will be contexts in which (15), for example, is true. But any such context will have to be an exocentric context,

a context in which the judge is not the speaker. For if c is an autocentric context, then if the second conjunct of (15) is true at c , the first conjunct will be undefined at c , and so (15) will not be true at c . Presumably, (15) and (16) seem bad ‘out of the blue’ because the autocentric reading of taste predicates tends to be the default reading.

Note that **Observation 3** seems to provide evidence against a hypothesis often mentioned in the philosophical aesthetics literature: that the acquaintance inference is a standard conversational implicature in the sense of Grice 1989.¹¹ **Observation 3** tells against this hypothesis because it is a characteristic—some would say *defining*—feature of conversational implicatures that they are cancelable. The fact that the acquaintance inference resists cancellation would suggest that it is not a standard conversational implicature.¹²

There is much to like about this presuppositional, judge-dependent approach to the acquaintance inference.¹³ But it also faces some problems. The first worry also concerns cancelability, albeit of a different variety:

Observation 4

Sometimes negation can ‘cancel’ a presupposition, but presupposition-canceling negations cannot target the acquaintance inference.

This requires some unpacking. I said above that standard presuppositions are difficult to cancel in *positive* environments. But things are different when we place a presupposition trigger in the scope of a negation operator. In the right sort of context—and with the right intonation—a negation can be used to cancel a presupposition:

- (19) John didn’t *stop* smoking – he’s never smoked a cigarette in his life!
- (20) The prime minister of Egypt didn’t give you that ring, for Egypt *has no prime minister*.

In contexts in which (19) is acceptable, it would obviously not be taken to presuppose that John used to smoke, and the same goes, *mutatis mutandis*, for (20).

But attempting to cancel the acquaintance inference in this way produces bizarre results:

11 See, for example, Mothersill 1984: 159–160; Hopkins 2000, 2011; Meskin 2004: 76. These authors discuss the acquaintance inference in the course of addressing the issue of whether it is possible to gain aesthetic knowledge via aesthetic testimony. That issue is relevant to the proposal I examine in the next section, though I will not have space to examine that literature in any detail.

12 It might still be another kind of pragmatic meaning, as the proposal discussed in the next section suggests. (On the possibility of analyzing the acquaintance inference as a *conventional* implicature, see footnote 17.)

13 Readers familiar with the “Hey, wait a minute!” test for presuppositions (Shanon 1976; von Fintel 2004) can confirm that this diagnostic also suggests that the acquaintance inference is a presupposition.

- (21) ?? The lobster rolls at *Neptune Oyster* aren't *tasty* – I haven't even tasted them!
- (22) ?? St. Mark's Basilica isn't *beautiful* – I've never seen it!

These are odd: (22), for example, seems to suggest that something cannot be beautiful unless the speaker has seen it—a rather perverse interpretation of the dictum that ‘beauty is in the eye of the beholder.’ But if the acquaintance inference is a matter of presupposition, it is difficult to see why it can't be canceled via this mechanism.

Let's be clear about why this is a problem, rather than merely a difference between standard presuppositions and the acquaintance inference. The problem is that the explanation of (19) and (20) is presumably purely general. Where ϕ is a simple sentence with presupposition p , then there is presumably some general explanation for why *Not* ϕ can sometimes be used to deny p . For example, perhaps the right explanation is that *not* is ambiguous between the presupposition-preserving (*aka choice*) negation of (13) and the following presupposition-denying (*aka exclusion*) negation (cf. Horn 1985, 1989; Beaver & Geurts 2013):

$$(23) \quad [\![\text{not}_e \phi]\!]^{c,(w,t,j)} = 1 \text{ iff } [\![\phi]\!]^{c,(w,t,j)} \neq 1$$

If it's possible to interpret English negation as *not_e*, then, given our semantics for (1), (21) ought to have a true reading. But this prediction seems false.^{14,15}

A second—and perhaps more serious—problem also concerns the differences between the embedding behavior of standard presupposition triggers on the one hand, and taste predicates on the other:

Observation 5

While the acquaintance inference projects over negation (**Observation 2**), it fails to project over other standard “presupposition holes”.

It is well-known that presuppositions generally project out of the antecedents of indicative conditionals, over epistemic modals, and out of question environments (so-called “presupposition holes”). That is, if a simple sentence ϕ presupposes p , then utterances of the following sentences will also usually presuppose p : *If* ϕ , χ ; *It might be/must be/is probably the case that* ϕ ; *Is it the case that* ϕ ?

¹⁴ I am not advocating the idea that English negation is ambiguous. The point is simply that any satisfactory story that explains examples like (19) and (20) will likely be purely general, and so will make false predictions with respect to (21) and (22) if the presuppositional account of the acquaintance inference is correct.

¹⁵ One might reply to this objection by saying that not all presuppositions are the same with respect to cancelability under negation (e.g., perhaps those generated by *too* are different in this respect). But even if this correct, the present objection still stands as an objection to the specific semantic proposal being made in this section. And in any case, I place more weight on the next objection to be discussed in the text, the one based on **Observation 5**.

For example, sentence (9), *John stopped smoking*, presupposes that John used to smoke. And utterances of the following sentences that embed (9) also typically presuppose this:

- (24) a. If John stopped smoking, his doctor will be happy.
- b. John might stop smoking.
- c. John probably stopped smoking.
- d. John must have stopped smoking.
- e. Did John stop smoking?

But if we embed a simple taste claim in similar contexts, the acquaintance inference vanishes. For example, while *The lobster rolls are tasty* suggests that the speaker has tasted the lobster rolls in question, none of the following sentences do:

- (25) a. If the lobster rolls are tasty, I'll have two.
- b. The lobster rolls might be tasty.
- c. The lobster rolls are probably tasty.
- d. The lobster rolls must be tasty.¹⁶
- e. Are the lobster rolls tasty?

(Note that while this last sentence doesn't presuppose that the speaker has tasted the lobster rolls in question, it does suggest that the *hearer* has.) Again, the problem here is that any account of how presupposition projection works is likely to be purely general, and so won't distinguish between the projection behavior of ordinary triggers like *stops* and that of taste predicates like *tasty*. This will lead to false predictions concerning the interpretation of sentences like (25a–25e).¹⁷

There are at least two potential responses to this last problem that we can make on behalf of the presuppositional approach. First, we might try to appeal to *local accommodation*. As we have seen, if ϕ presupposes p , p will normally project out of certain environments in which ϕ is embedded. Normally, but not always. For example:

- (26) I don't know if John was ever a smoker. But if he quit smoking recently, he can join the Cambridge Ex-Smokers' Alliance.

¹⁶ Pearson (2013: 118) also observes that the acquaintance inference doesn't project over epistemic *must*.

¹⁷ Given the account of conventional implicature in Potts 2005, the projection behavior of the acquaintance inference makes it unlikely that it is a conventional implicature. I say that because, on Potts's account, conventional implicatures project out of more environments than presuppositions do, whereas the acquaintance inference projects out of fewer.

Here the speaker is clearly not taking it for granted that John used to smoke, even though *He quit smoking* presupposes that John used to smoke and even though presuppositions normally project out of conditional antecedents.

Arguably, what's happening in (26) is that the presupposition associated with *He quit smoking* does not simply *disappear*, but is instead somehow interpreted inside the scope of the conditional; it is *locally accommodated*. That is, the conditional in (26) is treated as equivalent to (27):

- (27) If John used to smoke and does not now smoke, he can join the Cambridge Ex-Smokers' Alliance.

But the mechanism of local accommodation will not rescue the presuppositional approach. Suppose the acquaintance inference were a presupposition that tended to be locally accommodated for some reason. Then (25d), for example, would typically be heard as equivalent to:

- (28) It must be the case that: I've tasted the lobster rolls and they are tasty.

But this is not what (25d) means. For I can say that the lobster rolls must be tasty even if I know full well that I haven't tasted them. *Those lobster rolls must be tasty, but I haven't tried them yet* is felicitous. Similar remarks apply to the other sentences mentioned above, (25a–25c) and (25e). Unlike presuppositions, the acquaintance inference just *disappears* when simple taste claims are embedded under most presupposition holes. The inference is not globally accommodated (projected), and it is not locally accommodated either.

Another possible response on behalf of a presuppositional approach can be found in Pearson 2013. Pearson's semantics differs somewhat from the simple judge-dependent approach we've been discussing. On her approach, simple sentences containing *tasty* are generics of a certain kind: they say that people meeting certain conditions generally find such-and-such tasty. Simplifying somewhat, here are the truth-at-a-context conditions that Pearson's account assigns to (1) (cf. Pearson 2013: 136):

- (29) $\llbracket \text{GEN } \text{the lobster rolls are tasty} \rrbracket^{c,w_c}$ is defined only if every c -accessible world-individual pair (w, x) is such that x has tasted the lobster rolls in w
 Where defined, $\llbracket \text{GEN } \text{the lobster rolls are tasty} \rrbracket^{c,w_c} = 1$ iff every c -accessible pair (w, x) is such that the lobster rolls are tasty to x in w

Pearson analyzes the notion of c -accessibility into a number of components, but those details are not relevant here (or so it seems to me). The crucial issue concerns when the pair (w_c, s_c) consisting of the world and speaker of the context are included in the set of contextually-accessible pairs. Pearson's view is that this pair is included in this set by default, but that this default can be overridden in certain situations. Thus,

in contexts in which this default is in place, a sentence like (1) will be undefined if the speaker hasn't tasted the relevant lobster rolls in the world of the context. This predicts **Observation 1**.

Pearson (2013: 142–143) observes that this presupposition does not project over epistemic *must*, and seeks to explain this fact as follows. A familiar observation is that an utterance of *must* ϕ signals that the speaker's evidence for ϕ is indirect (see e.g., von Fintel & Gillies 2010). Pearson assumes that this means that an utterance of (25d), *The lobster rolls must be tasty*, will typically signal that the speaker hasn't tasted the lobster rolls before. She then reasons that if the speaker hasn't tasted the item under evaluation, the speaker's actual tastes will be irrelevant to the interpretation of the taste predicate, which means that (w_c, s_c) will be excluded from the set of c -accessible pairs. But in a context in which (w_c, s_c) is not included in the set of c -accessible pairs, a sentence like (25d) will not presuppose that the speaker has tasted the lobster rolls in question. This is how the account predicts the disappearance of the acquaintance presupposition under *must*.

The trouble with this proposal is that it doesn't seem to predict **Observation 3**, the fact that the acquaintance inference is difficult to cancel. For on Pearson's account, *must* serves to override the inclusion of (w_c, s_c) by signaling the fact that the speaker hasn't tasted them item under evaluation before. But the speaker can communicate this fact more directly: by simply telling her audience that she hasn't tasted the item in question before. So I suppose I tell you that the lobster rolls are tasty, but then immediately add that I haven't tasted them before. According to Pearson's reasoning, this should be felicitous: by making it explicit that I haven't tasted the lobster rolls before, I will thereby exclude myself and the actual world from the set of c -accessible pairs, and so the presupposition associated with my utterance need not fail. But as we saw in our discussion of (15)—*These cookies are tasty, but I haven't tried them*—such utterances are not generally felicitous.¹⁸

3 The epistemic account

I don't claim to have shown that no version of the presuppositional approach can be made to work. Perhaps there is a version of that approach that avoids the problems discussed above. Nevertheless, those problems at least warrant us in looking elsewhere for an account of the acquaintance inference. To that end, I want to consider an account that does seem to predict all of the preceding **Observations**.

Before I state the account, a few preliminaries are in order. For the remainder of

¹⁸ Pearson (2013: 143) does argue that there are contexts in which sentences like (15) are fine. And of course any account that predicts exocentric readings for *tasty* will allow that, as we noted. But that observation isn't sufficient for answering the challenge here. For it is still true that, in standard contexts, there is something odd about (15).

the paper, I will be assuming very little about the semantics of taste predicates. In particular, I don't assume that the semantics of *tasty* involves a judge parameter (nor do I assume the opposite). But I will assume that a sentence like (1) has autocentric and exocentric uses, and that the proposition I express with such a sentence when I use it autocentrically differs from the propositions I express with it when I use it exocentrically. An *autocentric context* is now simply a context in which a taste predicate is being used autocentrically, and an *exocentric context* is simply a context in which a taste predicate is being used exocentrically. For simplicity, I will for the most part restrict the discussion that follows to autocentric contexts. So when I say that x asserts or knows that o 's are tasty, I mean that x knows the proposition that x would express by using o 's are *tasty* autocentrically.

The *epistemic account* is a broadly pragmatic account that consists of two claims (letting s_c be the speaker of c , and $\llbracket \phi \rrbracket^c$ the proposition expressed by sentence ϕ in c):

Acquaintance Principle (AP)

Normally, in an autocentric context c , s_c knows (at t_c in w_c) whether $\llbracket o \text{ is tasty} \rrbracket^c$ is true only if s_c has tasted o prior to t_c in w_c .

Knowledge Norm

For all contexts c , s_c must assert p only if s_c knows p at t_c in w_c .

Together, these two claims predict that, in autocentric contexts, one can assert that something is tasty only if one has tasted it. The name “Acquaintance Principle” and the idea behind it come from [Wollheim \(1980\)](#) who wrote:

“...judgments of aesthetic value... must be based on first-hand experience of their objects and are not, except within very narrow limits, transmissible from one person to another.” ([Wollheim 1980: 233](#))

The **Knowledge Norm** of assertion is perhaps one way of interpreting Grice's Maxim of Quality; it has been defended by, among others, [Williamson \(1996, 2000\)](#). So, on the epistemic account, the acquaintance inference is a type of pragmatic meaning—a Quality implicature of sorts. But it is not a *standard* conversational implicature, at least not if cancelability is taken to be a hallmark feature of standard conversational implicatures.¹⁹

19 While I have formulated the two claims of the epistemic account in terms of *knowledge*, the account wouldn't be all that different if we instead formulated them using another epistemic/psychological notion like justified belief or even mere belief. What matters is the following idea: there is a propositional attitude A such that one must bear A to p in order to assert p , and one can only bear A to o 's are (not) *tasty* if one has tasted an o . Any account that has this structure will be able to offer an explanation of our **Observations** similar to the one offered here.

The epistemic account obviously predicts **Observations 1** and **2** in a straightforward manner. If I am in an autocentric context, then by the **Knowledge Norm**, I can assert that the lobster rolls are tasty only if I know this. By **AP**, I can only know this if I have tasted them. Thus, I can only assert that they are tasty if I have tasted them. The account of **Observation 2** is entirely parallel, since **AP** also implies that I cannot know that the lobster rolls are *not* tasty if I have not tasted them.

To understand the explanation of **Observations 3** and **4**, it will help to define the notion of an *epistemic implication*. Suppose that **Knowledge Norm** holds and that competent hearers are generally aware of this. Now suppose that, for some p and q , competent hearers generally know that: if a particular speaker knows p , then q is also true. In that case, an assertion of p by that speaker will typically convey q . This is because the hearer will assume that the speaker is intending to conform to the norm of assertion, and if the speaker *is* so conforming, then she *will* know p , in which case q will also be true. In such cases, we say that an assertion of p *epistemically implies* q . A simple example of an epistemic implication is the inference from a speaker's assertion of p to the proposition that the speaker knows p (here $q = \text{the speaker knows } p$).

Observation 3 was that the acquaintance inference resists easy cancellation, as evidenced by (15), *These cookies are tasty, but I've never tried one*. Note that epistemic implications cannot in general be canceled, as the Moore-paradoxical (30) demonstrates:

- (30) ?? It's raining, but I don't know that it's raining.

In this respect, epistemic implications differ from standard conversational implicatures.

The epistemic account offers a simple explanation of why (15) is bad in autocentric contexts.²⁰ Suppose (for *reductio*) that a speaker in an autocentric context was in a position to assert the proposition expressed by (15), i.e. $q = (\text{that the cookies in question are tasty, but the speaker has never tried one})$. If she was in a position to assert this, then she would have to know it, given the **Knowledge Norm**. But if she knows q , she knows that the cookies are tasty. If **AP** holds and her case is a normal one, then she must have tried one of the cookies in question. But if she's tried one of the cookies, q is false, and hence not known by the speaker. But that contradicts the assumption that the speaker was in a position to assert q .

Observation 4 was that the acquaintance inference could not be targeted by presupposition-canceling negations, as illustrated by the contrast between the following pair:

- (19) John didn't *stop* smoking—he's never smoked a cigarette in his life!

20 This explanation parallels standard explanations for why (30) is bad (see e.g., Williamson 1996: 506).

- (21) ?? The lobster rolls at *Neptune Oyster* aren't *tasty*—I haven't even tasted them!

This is not surprising if the acquaintance inference is an epistemic implication, since epistemic implications cannot generally be targeted by presupposition-canceling negations:

- (31) ?? It's not *raining* because I don't *know* that it's raining.

This at least gives us a partial explanation of the oddness of (21), since we can subsume (21) under a larger empirical generalization. But explaining that generalization itself would require us to have in place a general story about how such ‘meta-linguistic’ negations work, and why they can be used to target some inferences (presuppositions, scalar implicatures), but not others. I leave this as a task for future inquiry.

What about **Observation 5**, the fact that the acquaintance inference fails to project over most presupposition holes? The epistemic account faces no problem here. For AP only makes a claim about what it takes to know *whether* something is tasty, i.e. what it takes to know that something is tasty and what it takes to know that something is not tasty. It simply doesn't say anything about, for example, what it takes to know whether something *might* be tasty or whether something is *probably* tasty. So it doesn't lead us to expect the acquaintance inference to project over *might* or *probably* or any of the other operators/environments discussed above.²¹

Sentence (25d) raises some interesting issues. Why does (25d) lack the acquaintance inference? On the epistemic account, this would presumably be because one can know that something *must* be tasty even if one hasn't tasted it. This has an interesting consequence: it would seem to force us to deny either the claim that *must* ϕ entails ϕ or the claim that knowledge is closed under competent deduction (*epistemic closure*).²² Otherwise, whenever one was in a position to assert that the lobster rolls *must* be tasty, one could easily deduce, and so come to know, that they *are* tasty. Given the **Knowledge Norm**, one would then be in a position to assert this, even if one hadn't tasted the lobster rolls in question. But one cannot get into a position to assert that something is tasty so easily.

I won't attempt to resolve this puzzle here. But it's worth nothing that, assuming **Knowledge Norm**, we can generate the conflict between epistemic closure and the claim that *must* ϕ entails ϕ independently of anything to do with taste predicates

21 If the ‘at-issue’ content of a hedged claim (e.g., *Apparently* ϕ , *I've heard* ϕ) is roughly equivalent to an epistemically modalized claim (cf. Murray 2013), then we might have the beginnings of an explanation of why hedging a taste claim removes its associated acquaintance inference (recall (3) and (4)).

22 For discussion of the claim that *must* ϕ entails ϕ , see von Fintel & Gillies 2010 and the references therein.

and the acquaintance inference. All we need is to find a case in which a speaker appears to know *must* ϕ , but is not warranted in asserting ϕ . Here is one attempt to construct such a case. Suppose A and B are friends with a couple, Carl and Diane, who have been dating for a long time and are likely to get married at some point in the future. Suppose that, prior to the following dialogue, B has not heard any recent news concerning Carl and Diane's relationship. Now consider:

- (32) A: Carl proposed to Diane yesterday!
B: At last! She must have said "yes".
B: ?? At last! She said "yes".

Assuming, as we are, that B has not heard any news of the proposal prior to A's utterance, it seems that the bare assertion of *She said "yes"* is dispreferred to its *must*-ified variant. Intuitively, it seems like the evidence B has (her general knowledge of Carl and Diane's past history, her knowledge of what Diane is like, etc.) doesn't license the bare assertion.²³ And yet that evidence does seem to license an assertion of *She must have said 'yes'*.

Just how this general puzzle concerning closure and *must* ought to be resolved is a question that I leave for future research. The point here is simply that the epistemic account of the acquaintance inference doesn't seem to raise a problem about epistemic *must* that we could otherwise avoid.

An apparently related issue is raised by sentences in which a taste predicate is embedded under a future operator such as *going to* or *will*. For as Klecha (forthcoming) points out, such sentences don't seem to give rise to an acquaintance inference. To see this, suppose I say, *These lobster rolls are going to be delicious* as I walk into a restaurant. This doesn't seem to suggest that I've tasted the lobster rolls at the restaurant before; perhaps I've just heard about them from others. Furthermore, the use of *will* or *going to* doesn't even require that the speaker *will* taste the item under evaluation at some point in the future, as (33) demonstrates:

- (33) The cookies in the oven will be tasty when they're done. It's a shame that they contain arsenic and so will have to be destroyed.

That the acquaintance inference disappears under future operators would seem to add to the woes of the presuppositional approach. But it might also seem to raise a problem for the epistemic account. For the fact that the acquaintance inference disappears under future operators might seem to suggest that the inference is a somewhat idiosyncratic feature of the lexical semantics of taste predicates, not something that falls out of general principles concerning the epistemology of taste.

²³ To bolster this judgment, imagine A and B are on the phone, and that their phone call gets cut-off after A's utterance. Is B now in a position to turn around and start telling other people that Carl and Diane are getting married? It seems not.

But in fact this is not so clear. I say this because there is independent evidence that one can often assert *FUT* ϕ on the basis of indirect evidence even when relatively more direct evidence is needed to assert ϕ itself.

Here is an example of what I'm talking about. Suppose I am a personal chef to a wealthy entrepreneur, Ellen. I'm making a new dish for her. Based on my knowledge of the sorts of foods that she usually likes, I say to my friend Fatima, *Ellen is going to love this*. I finish preparing the dish, and head home for the night, before Ellen gets back from work to eat dinner. Suppose I find out the next day that Ellen ate the dish I had prepared (maybe the housekeeper tells me this), but I don't hear specifically whether she liked it. Now suppose another friend, George, asks me, *Did Ellen enjoy the dish you made yesterday?* I think it would seem odd here for me to flat-out assert that she did, i.e. to say, *Oh, yes, she loved it*. In order to make that claim, I would need to be more directly connected to the fact (assuming it is a fact) that Ellen enjoyed the dish in question. For example, I would need to have been told by Ellen or someone else that she enjoyed the dish. Absent evidence of that sort, it would be better for me to make a modalized claim: *She probably loved it* or *She must have loved it – it had all her favorite ingredients*.

Note that I assert *Ellen is going to love this* on the basis of indirect evidence: my claim is based on general considerations about the sorts of things she usually likes and the nature of the dish I've prepared. But in order to later assert *She loved it*, my evidence needs to be more directly connected to the fact being reported. Given this more general phenomenon, it seems unsurprising that placing a taste predicate under a future operator obviates the acquaintance requirement, even though that requirement is usually in place for simple taste sentences. Again, I haven't attempted to explain these facts about the usage of future operators; I'm merely observing that they don't appear to pose a threat to the epistemic account of the acquaintance inference.²⁴

We have now seen the virtues of the epistemic account, and defended it from some potential objections. But the main challenge for the epistemic account is much simpler. It concerns **AP**. If that principle is true, why is it true? Why can't I know the 'autocentric proposition' associated with *The lobster rolls are tasty* without having tasted the lobster rolls at issue?²⁵ And why *can* I know an 'exocentric proposition' associated with that sentence even if I haven't tasted the relevant lobster rolls? Presumably, this difference has something to do with the fact that when I believe an

24 It is worth noting that *will* can be used in a purely epistemic, non-temporal way, as when I say, "It's 4:30pm, so Bill will be in Paris now" (cf. Palmer 1986: 25).

25 Talk of "autocentric/exocentric propositions" is a bit sloppy, since it might be that one and the same proposition is autocentric relative to me, exocentric relative to you. What I mean is: "Why can't I know the proposition that I would express were I to use *The lobster rolls are tasty* autocentrically?" And so on.

Taste predicates

autocentric proposition, the truth of my belief depends on my tastes and sensibilities, whereas the truth of an exocentric belief depends on the tastes and sensibilities of someone else. But what exactly is the connection here?

Suppose that for me to believe the autocentric proposition expressed by *The lobster rolls are tasty* is for me to believe that the lobster rolls are tasty relative to me. But what is it for something to be tasty *relative to me*? Perhaps this should be understood in terms of dispositions: something is tasty relative to me iff it is disposed to cause pleasant gustatory experiences in me if I were to taste it. But then the question arises: why can't I know that something is disposed to cause pleasant gustatory experiences in me unless I actually taste it? In general, one doesn't need to realize a disposition of something in order to know that it has the disposition in question. For example, I can know that this vase is fragile without striking it to see if it breaks.

Much more could be said about the dispositional analysis of taste claims and the epistemology of dispositions. But the preceding remarks should give the reader a sense of the general challenge facing the advocate of **AP**. The defender of **AP** needs to come up with a plausible account of the meaning of taste predicates which helps to explain why autocentric taste propositions cannot be known unless the agent has the relevant kind of first-hand experience (and why exocentric knowledge is not subject to this requirement). This is, to my mind, a difficult challenge, and I presently know of no satisfactory way to meet it.²⁶ If this challenge cannot be met, we might wish to re-visit the idea that the acquaintance requirement is somehow hard-wired into the lexical entries of taste predicates, as on the presuppositional, judge-dependent semantics discussed earlier. But any such attempt will of course need to circumvent the problems that dogged that approach (i.e. **Observations 4** and **5**), while also accounting for the other **Observations** discussed above.

References

- Beaver, David I. & Bart Geurts. 2013. Presupposition. In Edward N. Zalta (ed.), *The Stanford Encyclopedia of Philosophy*, Fall 2013 edn.
- Budd, Malcolm. 2003. The acquaintance principle. *British Journal of Aesthetics* 43(4). 386–392. doi:[10.1093/bjaesthetics/43.4.386](https://doi.org/10.1093/bjaesthetics/43.4.386).
- Bylinina, Lisa. 2013. Judge-dependence in degree constructions. Unpublished manuscript, Meertens Institute, Amsterdam.
- Egan, Andy, John Hawthorne & Brian Weatherson. 2005. Epistemic modals in

²⁶ Principles like **AP** have received some discussion in the aesthetics literature, though I myself don't find in this literature a clear explanation of why **AP** is true (if it is true—see Budd 2003 (among others) for some doubts). Robson 2012 provides an overview of relevant issues.

- context. In Gerhard Preyer & Georg Peter (eds.), *Contextualism in Philosophy*, 131–168. Oxford: Oxford University Press.
- von Fintel, Kai. 2004. Would you believe it? The King of France is back! In Anne Bezuidenhout & Marga Reimer (eds.), *Descriptions and Beyond*, 315–341. Oxford: Oxford University Press.
- von Fintel, Kai & Anthony Gillies. 2010. Must... stay... strong! *Natural Language Semantics* 18(4). 351–383. doi:[10.1007/s11050-010-9058-2](https://doi.org/10.1007/s11050-010-9058-2).
- Grice, H. P. 1989. *Studies in the Way of Words*. Cambridge, MA: Harvard University Press.
- Hopkins, Robert. 2000. Beauty and testimony. In Anthony O’Hear (ed.), *Philosophy, the Good, the True, and the Beautiful*, 209–236. Cambridge, UK: Cambridge University Press.
- Hopkins, Robert. 2011. How to be a pessimist about aesthetic testimony. *Journal of Philosophy* 108(3). 138–157. http://www.pdcnet.org/collection/show?id=jphil_2011_0108_0003_0138_0157&file_type=pdf.
- Horn, Laurence. 1985. Metalinguistic negation and pragmatic ambiguity. *Language* 61. 121–174. doi:[10.2307/413423](https://doi.org/10.2307/413423).
- Horn, Laurence. 1989. *A Natural History of Negation*. Chicago: University of Chicago Press.
- Kant, Immanuel. 1790/2000. *Critique of the Power of Judgment*. Cambridge: Cambridge University Press. Edited by Paul Guyer. Translated by Paul Guyer and Eric Matthews.
- Kaplan, David. 1989. Demonstratives. In Joseph Almog, John Perry & Howard Wettstein (eds.), *Themes from Kaplan*, 481–563. New York: Oxford University Press.
- Klecha, Peter. forthcoming. Diagnosing modality in predictive expressions. *Journal of Semantics*. doi:[10.1093/jos/fft011](https://doi.org/10.1093/jos/fft011).
- Lasersohn, Peter. 2005. Context dependence, disagreement, and predicates of personal taste. *Linguistics and Philosophy* 28(6). 643–686. doi:[10.1007/s10988-005-0596-x](https://doi.org/10.1007/s10988-005-0596-x).
- MacFarlane, John. 2014. *Assessment-Sensitivity: Relative Truth and its Applications*. Oxford: Oxford University Press.
- Meskin, Aaron. 2004. Aesthetic testimony: What can we learn from others about beauty and art? *Philosophy and Phenomenological Research* 69(1). 65–78. doi:[10.1111/j.1933-1592.2004.tb00384.x](https://doi.org/10.1111/j.1933-1592.2004.tb00384.x).
- Mothersill, Mary. 1984. *Beauty Restored*. Oxford: Oxford University Press.
- Murray, Sarah. 2013. Varieties of update. *Semantics and Pragmatics* 7(2). 1–53. doi:[10.3765/sp.7.2](https://doi.org/10.3765/sp.7.2).
- Ninan, Dilip. 2010. Semantics and the objects of assertion. *Linguistics and Philosophy* 33(5). 355–380. doi:[10.1007/s10988-011-9084-7](https://doi.org/10.1007/s10988-011-9084-7).

Taste predicates

- Palmer, F.R. 1986. *Mood and Modality*. Cambridge, UK: Cambridge University Press.
- Pearson, Hazel. 2013. A judge-free semantics for predicates of personal taste. *Journal of Semantics* 30(3). 103–154. doi:[10.1093/jos/ffs001](https://doi.org/10.1093/jos/ffs001).
- Potts, Christopher. 2005. *The Logic of Conventional Implicatures*. Oxford: Oxford University Press. doi:[10.1093/acprof:oso/9780199273829.001.0001](https://doi.org/10.1093/acprof:oso/9780199273829.001.0001).
- Robson, Jon. 2012. Aesthetic testimony. *Philosophy Compass* 7(1). 1–10. doi:[10.1111/j.1747-9991.2011.00455.x](https://doi.org/10.1111/j.1747-9991.2011.00455.x).
- Schaffer, Jonathan. 2011. Perspective in taste predicates and epistemic modals. In Andy Egan & Brian Weatherson (eds.), *Epistemic Modality*, 179–226. Oxford: Oxford University Press.
- Shanon, Benny. 1976. On the two kinds of presupposition in natural language. *Foundations of Language* 14(2). 247–249.
- Stephenson, Tamina. 2007. Judge dependence, epistemic modals, and predicates of personal taste. *Linguistics and Philosophy* 30. 487 – 525. doi:[10.1007/s10988-008-9023-4](https://doi.org/10.1007/s10988-008-9023-4).
- Sundell, Timothy. 2011. Disagreements about taste. *Philosophical Studies* 155(2). 267–288. doi:[10.1007/s11098-010-9572-6](https://doi.org/10.1007/s11098-010-9572-6).
- Williamson, Timothy. 1996. Knowing and asserting. *Philosophical Review* 105(4). 489–523. doi:[10.2307/2998423](https://doi.org/10.2307/2998423).
- Williamson, Timothy. 2000. *Knowledge and Its Limits*. Oxford: Oxford University Press. doi:[10.1093/019925656X.001.0001](https://doi.org/10.1093/019925656X.001.0001).
- Wollheim, Richard. 1980. *Art and Its Objects*. Cambridge: Cambridge University Press.

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