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Evaluational adjectives

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Abstract

This paper demarcates a theoretically interesting class of evaluational adjectives. This class includes predicates expressing various kinds of normative and epistemic evaluation, such as predicates of personal taste, aesthetic adjectives, moral adjectives, and epistemic adjectives, among others. Evaluational adjectives are distinguished, empirically, in exhibiting phenomena such as discourse-oriented use, felicitous embedding under the attitude verb ‘find’, and sorites-susceptibility in the comparative form.

A unified degree-based semantics is developed: What distinguishes evaluational adjectives, semantically, is that they denote context-dependent measure functions (evaluational perspectives)—context-dependent mappings to degrees of taste, beauty, probability, etc., depending on the adjective. This perspective-sensitivity characterizing the class of evaluational adjectives cannot be assimilated to vagueness, sensitivity to an experiencer argument, or multidimensionality; and it cannot be demarcated in terms of pretheoretic notions of subjectivity, common in the literature. I propose that certain diagnostics for “subjective” expressions be analyzed instead in terms of a precisely specified kind of discourse-oriented use of context-sensitive language. I close by applying the account to ‘find x PRED’ ascriptions.
1 | INTRODUCTION

Literatures in descriptive linguistics highlight the richness of evaluativity in natural language and discourse (Hunston & Thompson 1999, Martin & White 2005, Hunston 2011). One class of expressions that has received much attention in theoretical work is “predicates of personal taste” (PPTs). In using (1) speakers may express their experiences and coordinate their sensibilities—sometimes in agreement, sometimes in disagreement, as in (2).

(1) This cake is tasty.

(2) A: This cake is tasty.

B: Yeah it is. Let’s get some more.

B’: No way. It’s too sweet.

The aim of this paper is to develop an improved linguistic account of the broader spectrum of predicates of normative and epistemic evaluation. The paper demarcates a semantically unified class of (what I call) evaluational predicates. This class includes predicates used in expressing various types of normative and epistemic attitudes—not only PPTs but also aesthetic predicates, moral predicates, and epistemic predicates, among others.

Despite early focus on ‘tasty’ and ‘fun’ (Lasersohn 2005, Glanzberg 2007, Stephenson 2007a), recent theoretical work has begun to investigate other types of evaluative predicates (Kennedy & Willer 2016, McNally & Stojanovic 2017, Coppock 2018; see also Köbel 2002). The predicates putatively of a piece with PPTs are commonly demarcated as “subjective” predicates—predicates expressing “subjective” judgments about “matters of opinion” rather than “matters of fact”\(^1\); predicates expressing “discretionary”\(^2\) claims, disagreement over which is (prima facie) “faultless”\(^3\) and “cannot be settled with the help of further empirical evidence […] or more careful reflection” (Coppock 2018: 127). We will see that the class of evaluational predicates cuts across the class of predicates that may be regarded as intuitively subjective (nonfactual, etc.).

An overview of the paper is as follows. Following the literature on PPTs I focus on predicates that are relative gradable adjectives (RGAs)—adjectives that can form comparatives (‘tastier’, ‘more beautiful’) and take degree modifiers (‘very tasty/beautiful’) (Kennedy & McNally 2005, Kennedy 2007). §2 diagnoses the class of evaluational adjectives. Evaluational adjectives are distinguished empirically from RGAs such as ‘tall’ in exhibiting certain distinctive discourse phenomena, embedding phenomena, and vagueness phenomena in the comparative form. Such phenomena, often associated with context-sensitivity, include (what I call) discourse-oriented use, felicitous embedding under the attitude verb ‘find’, and, surprisingly, sorites-susceptibility. While the former two data points have been observed in work on PPTs, the third has not. Extensions to other normative and epistemic adjectives haven’t been systematically investigated. I show that the context-sensitivity characterizing evaluational adjectives cannot be assimilated to vagueness, multidimensionality, or sensitivity to a thematic experiencer argument.

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\(^2\) E.g., Köbel 2003, Coppock 2018.

§3 develops a formal semantics that captures the linguistic commonalities among PPTs and other evaluative adjectives, and applies the semantics to basic cases of discourse dynamics. Informally put, evaluative adjectives are sensitive to a body of tastes, values, norms, etc. which evaluates how tasty, beautiful, likely, etc. things are. I implement this idea in a degree-based framework for gradation. What distinguishes evaluative adjectives semantically is that they denote context-dependent measure functions (evaluational perspectives)—context-dependent mappings from items to a degree of taste, beauty, probability, etc., depending on the adjective. Unlike RGAs like ‘tall’, the lexical item itself, not simply the positive (unmodified) form, is semantically context-sensitive. Distinctions in the formal semantics among perspective-sensitivity, multidimensionality, and experiencer arguments are briefly considered. These four loci of context-sensitivity—standard-sensitivity (associated with the positive form), perspective-sensitivity, dimension-sensitivity, and experiencer-sensitivity—haven’t been clearly delineated in previous formal accounts.

§4 shows how the formal semantics for evaluative adjectives from §3 can be neutral on philosophical issues about subjectivity. Contrary to common assumptions, giving PPTs and other evaluational adjectives a unified context-sensitive semantics needn’t imply that the corresponding subject matters are uniformly “subjective” or “matters of taste.” Speakers’ substantive normative assumptions about different domains of evaluation can lead to differences among evaluational adjectives in patterns of use. I consider four such differences, concerning first-person experience requirements, attitude-dependence, Yalcin-style “evaluative contradictions,” and discourse disagreements.

Reconceptualizing our domain of inquiry can bring into relief more adequate formalizations of common linguistic diagnostics. §6 more closely examines one such diagnostic: felicitous embedding in ‘find x PRED’ ascriptions. I propose that diagnostics such as embedding under ‘find’ be explained not in terms of some pretheoretic notion of subjectivity, but in terms of an independently attested kind of discourse-oriented use of context-sensitive language. This kind of use can be precisely characterized in light of the formal semantics and pragmatics from §3. The proposed felicity condition for ‘find’ yields a more adequate account of embedding data with the broader spectrum of adjectives and uses.

RGAs and PPTs have been central in literatures on faultless disagreement, contextualism vs. relativism, and degree-based vs. non-degree-based semantics for gradation. The aim of this paper isn’t to address these debates, at least not directly. To fix ideas the formal semantics in §§2, 5 uses a degree-based framework, and implements the notion of perspective-sensitivity along contextualist lines. These choice points are inessential. The proposed linguistic accounts can be adapted for non-degree-based and non-contextualist frameworks; and they are compatible with different views about faultless disagreement and the subjectivity/objectivity of different domains of evaluation.

The principal aims of the paper are as follows:

• to demarcate a theoretically interesting class of evaluational adjectives
• to delineate the type of contextual dependence characteristic of evaluational adjectives (perspective-sensitivity), and to distinguish it from other attested sources of context-sensitivity in uses of adjectives (standard-sensitivity, dimension-sensitivity, experiencer-sensitivity)
• to develop a (degree-based) formal semantics for evaluational adjectives that captures their unity as a semantic class, and delineates certain parameters for linguistic differences among them
• to raise challenges for common explanatory appeals to “subjectivity” in linguistic theorizing
• to explore interactions among linguistic phenomena with evaluational adjectives and substantive philosophical issues across domains of normative and epistemic evaluation

Some of the data will be new, though in other cases the aim will be to provide a new take on old facts. Delineating (non-)conventional linguistic issues about evaluational adjectives and substantive
philosophical issues about subjectivity isn’t just of methodological interest for purposes of theoretical housekeeping. We will see how reconceptualizing our target linguistic domain can free up inquiry and motivate a theory with greater empirical coverage and explanatory power. The hope is that the discussion of evaluational adjectives in this paper may encourage more fruitful approaches to current debates and new avenues for research on evaluativity and attitude expression in natural language.

2 | DIAGNOSING EVALUATIONAL ADJECTIVES

I begin by examining three phenomena often associated with context-sensitivity in uses of adjectives: discourse-oriented use, felicitous embedding under ‘find’, and sorites-susceptibility. Predicates of personal taste (PPTs) (§2.1) and other evaluational adjectives (§§2.2–2.3) are distinguished from relative gradable adjectives like ‘tall’ in exhibiting these phenomena in the comparative form. While the first two data points below have been observed in work on PPTs, the third has not. Details of formal implementation (§3) and extensions to other adjectives of normative and epistemic evaluation haven’t been systematically investigated. Pretheoretic notions of subjectivity will play no role in characterizing the linguistic data (§§1, 4, 5).

2.1 | Perspective-sensitivity with PPTs

It is a commonplace that gradable adjectives are interpreted with respect to a contextually supplied comparison class (Klein 1980, von Stechow 1984, Kennedy 2007, Bylinina 2014). In one context (3) might say that Harry is bald for a Johnsen; in another context (3) might say that Harry is bald for a man.

(3) Harry is bald.

As many have argued, this needn’t exhaust the adjectives’ context-sensitivity (Fara 2000, Shapiro 2006, Kennedy 2007, Richard 2008, Alxatib & Pelletier 2011). Relative gradable adjectives (RGAs) are sensitive to a threshold or standard when used in the positive form (‘tall’, ‘rich’)4—informally, a standard for how ADJ something must be to count as ADJ. Even given a specific comparison class, say “bald for a man,” if Harry has only some small patches of hair, then (3) may seem acceptable under low standards but unacceptable if the standards are raised. What standard to accept can be the subject of agreement or disagreement (Barker 2002, Richard 2008, MacFarlane 2016, Silk 2016: ch. 6). In (4) we may agree in using ‘rich’ for “rich for an American,” and agree on the relevant socio-economic facts.

(4) Me: Rita is rich.
You: No way, Rita isn’t rich.

Our disagreement is about what it is to count as rich.

PPTs also exhibit such standard-sensitivity in the positive form (cf. Glanzberg 2007). Suppose we are sampling ice cream cakes for a friend’s birthday. Even if we settle that by ‘tasty’ we mean “tasty for an ice cream cake,” we have similar gustatory experiences, and we agree on the relevant circumstances, we may have different views on how tasty a cake needs to be to count as tasty. In (5) we may agree about how tasty the cake is.

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4I use single quotes for lexical items and for word forms; context should disambiguate.
(5) **Me:** This cake is tasty.

    **You:** No it isn’t. Let’s keep looking. We can find a better cake for Chip.

Our disagreement is about what “standard for tastiness” to accept for purposes of getting a cake for Chip. Perhaps more common, though, is to use ‘tasty’ in managing assumptions about how tasty things are (cf. Lasersohn 2008: 308). In (6) we may agree about how tasty something needs to be to count as tasty in the context.

(6) **Me:** This cake is tasty.

    **You:** No it isn’t. It’s gross. It’s way too sweet.

Our disagreement is about how tasty the cake is.

One way of bringing out the contrast between (4)/(5) and (6) is to consider comparatives (cf. Lasersohn 2008, Kennedy 2013, Bylinina 2016). The speakers in (7)–(8) may agree about the heights of everyone in their class—say, that Alice is 70”, Bert is 67”, Chip is 74”, etc. In (7) they use the positive form ‘tall’ in expressing their disagreement about how tall one must be to count as tall (for a boy in their class). Yet it is hard to imagine what could be at-issue in (8).

(7) **A:** Bert is tall. He shot up four inches over the summer.

    **B:** No way, he isn’t tall. 5’7” is nothing.

(8) **A:** Alice is taller than Bert.

    **B:** #No, Bert is taller than Alice.

By contrast, the basis for the comparative disagreement in (9) is intuitively the same as the basis for the disagreement in (6). Again, we may agree about the cakes’ physical properties and what one another’s gustatory experiences are like.

(9) **Me:** Alice’s cake is tastier than Bert’s cake.

    **You:** No way. Alice’s is too sweet. Bert’s cake is right on the money.

What is at-issue is how tasty the cakes are.

Call uses such as those in (4)–(6) *discourse-oriented* uses—pretheoretically, uses in which the speakers are (perhaps *inter alia*) managing their assumptions about what standards, tastes, etc. to accept in the discourse. (For now let’s use the label as a descriptive label in this way. A more formal characterization will follow in due course.) In (4)/(5)/(7), the speakers use ‘rich’/‘tasty’/‘tall’ to express their views on what standards of richness/tastiness/tallness to assume for purposes of conversation. Discourse-oriented uses don’t arise with RGAs such as ‘tall’ in the comparative form ((8)). The comparatives in (9) with ‘tasty’, in contrast, are used in the same sort of discourse-oriented way as the positive predications in (6).

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5I will use ‘comparative’ specifically for comparatives using the comparative form.
Second, many researchers have observed that attitude ascriptions of the form ‘S find(s) x PRED’ are felicitous only with complements exhibiting certain kinds of context-sensitivity.\(^6\) Embedding the context-insensitive complement in (10) or the context-sensitive complement in (11) under ‘find’ is anomalous.

\[(10) \quad \#\text{Fritz finds 7 prime.}\]

\[(11) \quad \#\text{Fritz finds the number prime.}\]

Although certain positive-form uses of ‘tall’ are felicitous under ‘find’, as in (12), comparative uses such as (13) are infelicitous.

\[(12) \quad [\text{Context: Some adolescents are talking about who has had a growth spurt. They mention Bert, who shot up four inches over the summer. Chip, trying to play like it’s nothing, says that Bert “isn’t tall” (for a boy in their grade)—he’s “only” 5’7″. Height is quite the point of pride, and Bert isn’t cool enough to be in their group. Most of the kids go along with Chip, but Sam won’t have it. Sam says:}]

\[\text{You might not find Bert tall. But I find him tall.}\]

\[(13) \quad \#I \text{ find Bert taller than Ed.}\]

By contrast, positive and comparative uses of PPTs are equally felicitous under ‘find’ (cf. Kennedy 2013):

\[(14) \quad \text{Fritz finds the cake tasty.}\]

\[(15) \quad \text{Fritz finds Alice’s cake tastier than Bert’s cake.}\]

The felicity of PPTs under ‘find’ isn’t simply due to some feature of the positive form.

A third motivation for distinguishing the context-sensitivity of PPTs from the general standard-sensitivity associated with positive-form RGAs comes from linguistic vagueness. Context-sensitivity isn’t sufficient for vagueness;\(^7\) speakers could intend to settle on specific standards, maximally discriminating tastes, etc. Yet speakers’ failing to do so can lead to phenomena characteristically associated with vagueness (the sorites paradox, “tolerance,” apparent borderline cases). Positive-form RGAs provide the paradigm of sorites-susceptibility, as reflected in (16)–(17), where \(x_n\) is an individual with \(n\) cents.

\[(16) \quad (P1) \quad \text{Someone with one cent isn’t rich.}\]
\[(P2) \quad \text{If you give one cent to someone who isn’t rich, she still won’t be rich.}\]
\[\therefore \quad \text{No one is rich.}\]


\[(i) \quad \text{After closely examining the contents of my dish, I found my trippa alla romana to be vegetarian, and so not actually trippa alla romana at all.} \quad \text{(Kennedy 2013: 261n.6)}\]

\[(ii) \quad \text{A research team based at Princeton University found that physical activity reorganizes the brain so that its response to stress is reduced and anxiety is less likely to interfere with normal brain function.} \quad \text{(lifescience.net/news/60/exercise-reorganizes-the-brain-to-be-more-resilient)}\]

(17) (P1) \( x_1 \) isn’t rich.
(P2) For all \( n \), if \( x_n \) isn’t rich, then \( x_{n+1} \) isn’t rich.
(C) ∴ For all \( n \), \( x_n \) isn’t rich.

The premises seem true, and the argument seems valid (Hyde & Raffman 2018). But the conclusion is false. Bill Gates is rich. The task for theories of vagueness is to explain where the argument goes wrong and why it seems so compelling.

In light of “prototypical relative adjectives” such as ‘tall’ (McNally 2011: 163), it is often assumed in linguistics circles that the comparative form is not vague. Yet comparatives with PPTs can give rise to vagueness phenomena (Silk 2016, 2017a). Suppose you like sugar in your coffee. But it’s not as if you care exactly how sweet it is. As far as your preferences go, one day’s sweetness is as good as any other’s (okay, at least up to a point, say \( K \); there is, perhaps, such a thing as too sweet). Now consider (18), where \( x_s \) is an ordinary cup of coffee, and \( x_1 \ldots x_n \ldots x_K \) is a series of otherwise identical cups differing only in quantity of sugar, with \( x_n \) a (pre-\( K \)) cup with \( n \) micrograms of sugar (cf. Luce 1956).

(18) (P1) \( x_s \) is more preferable than \( x_1 \).
(P2') For all \( n < K \), \( x_n \) is as preferable as \( x_{n+1} \).
(P3) For all \( a, b, c \), if \( a \) is more preferable than \( b \), and \( b \) is as preferable as \( c \), then \( a \) is more preferable than \( c \). (PI-transitivity)
(C) ∴ For all \( n < K \), \( x_s \) is more preferable than \( x_n \).

Or in a perhaps more familiar form:

(19) (P1) \( x_1 \) is not more preferable than \( x_s \).
(P2) For all \( n \), if \( x_n \) is not more preferable than \( x_s \), then \( x_{n+1} \) is not more preferable than \( x_s \).
(C) ∴ For all \( n \), \( x_n \) is not more preferable than \( x_s \).

The premises seem true given the nature of one’s preferences. Indeed even a supertaster could accept the inductive premises; one simply doesn’t care exactly how sweet the coffee is. The arguments seem valid. Yet the conclusion is false. Not just any cuppa can be the best. There may be something wrong with sugar in one’s coffee, but not that thinking otherwise leads to (prima facie) paradox.

It is important to be clear about the force of comparative sorites cases such as (18)–(19). (18)–(19) needn’t turn on limitations in powers of discrimination or unsettledness about relevant dimensions or measurement procedures. Only a maximally opinionated supertaster could deny (P2') in (18). Discriminable though the adjacent cups might be, one cup is as good as the next given one’s preferences. Linguistic vagueness with PPTs can be associated not only with a standard for tastiness (how tasty something needs to be to be tasty), but with how tasty things are.

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9 See Silk 2016: chs. 6–7, 2017a for extensive discussion in the context of traditional degree-based and delineation-based semantics for gradation.
10 Contrast the examples of borderline cases with comparatives in Williamson 1994: 156, Endicott 2000: 43–45, 149–153, Keefe 2000: 13–14, Sassoon 2013b: 76. It isn’t said how, if at all, the alleged borderline cases might give rise to comparative sorites arguments. (As Wright (1987: 239–243) shows, indiscriminability between adjacent items is also insufficient to generate the paradox. Certain of the comparative sorites examples which I used in earlier work failed to appreciate this point (Silk 2016: 198–199, 206). Thanks to Gunnar Björnsson for discussion.)
This section has examined three phenomena often associated with context-sensitivity in adjectives: discourse-oriented use, felicitous embedding under ‘find’, and apparent sorites-susceptibility. Unlike RGAs such as ‘tall’, PPTs exhibit these phenomena in comparatives as well as in positive-form predications. The upshot is that the context-sensitivity of PPTs cannot be wholly traceable to a feature of the positive form. Informally put, PPTs are sensitive not only to a threshold or standard when used in the positive form, a standard for how tasty something needs to be to count as tasty; they are sensitive to a body of tastes that evaluates how tasty things are. This sensitivity to a body of tastes—call it a taste perspective—is associated with the lexical item itself and hence can be observed with both positive and comparative forms.

The goal thus far has been to delineate two potential sources of context-sensitivity in uses of adjectives ‘ADJ’: standard-sensitivity (sensitivity to a standard determining how ADJ something needs to be to count as ADJ), and perspective-sensitivity (sensitivity to a perspective of evaluation determining how ADJ things are). For the moment what is important are the empirical contrasts between ordinary RGAs like ‘tall’ and PPTs like ‘tasty’. The discussion has been neutral on how the discourse dynamics, embedding behavior, and sorites arguments are to be captured, and how standard-sensitivity and perspective-sensitivity may be implemented in the formal semantics. First, it is common to characterize discourse disagreements with PPTs as in some sense “faultless,” and to treat examples of discourse disagreement and felicitous embedding under ‘find’ as diagnostic of a kind of “subjectivity” (discretionariness, nonfactualism) in natural language (§1, nn. 1–3). No such characterizations are built into the data itself. Indeed we will see reasons to avoid understanding the phenomena in terms of a pretheoretic notion of subjectivity (§§4–5). Likewise we needn’t take a stand on the coherence of the notion of “faultless disagreement” (Wright 2001, MacFarlane 2014) or on how it might apply to different types of evaluative discourse.

Second, I introduced the label ‘discourse-oriented use’ as a descriptive label for uses of RGAs and PPTs managing speakers’ assumptions about what standards, tastes, etc. to accept for purposes of the conversation. I have left open at what level the phenomenon is to be explained. As noted in §1, our discussion is neutral on various “contextualism/relativism” debates—e.g., whether the standards, tastes, etc. with respect to which the adjective is interpreted are determined by a syntactically realized argument; whether particular (contextually supplied) standards, tastes, etc. are given in the compositional semantic value; and whether they are supplied by the context of utterance. For all I have said, the apparent “context-sensitivity” could be pre-semantic (determining what language, in the sense of Lewis 1975, is being spoken), semantic (determining a value for a contextual parameter in the derivation of semantic content), or post-semantic (determining a value for a contextual parameter in the evaluation of truth-in-a-context).

Likewise, in saying that comparatives with PPTs can be sorites-susceptible I am not suggesting that the (prima facie) paradox is irresolvable or that there aren’t moves in response. What is relevant for our purposes is the empirical observation that PPTs may exhibit apparent tolerance-like effects (Wright 1975) in the comparative form. These effects aren’t wholly traceable to limitations in powers of discrimination or fuzziness in relevant standards or measurement procedures. The claim that vagueness phenomena with PPTs can be associated with the relevant tastes, preferences, etc. (“perspective”) doesn’t presuppose that the sorites paradox is to be resolved in a contextualist theory of vagueness, or even that linguistic vagueness is fundamentally semantic (cf. Lewis 1975, Silk 2016).

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11 Compare Barker 2002, 2013, Sundell 2011, Plunkett & Sundell 2013, Umbach 2015, Kennedy & Willer 2016 on “metalinguistic” uses of different types of predicates. I avoid this label since the relevant uses needn’t be fundamentally about linguistic objects; what is generally at-issue is what standards, norms, etc. to accept, or what it is to be rich, tasty, beautiful, etc. (cf. Richard 2008, Silk 2016, 2017c, 2019b; more on this in §§3.4, 4). For contextualist approaches, see Glanzberg 2007, Sundell 2011, Silk 2016, 2017c; for alternative non-contextualist (relativist, expressivist, dynamic) frameworks, see Barker 2002, Kölbl 2002, Lasersohn 2005, Stephenson 2007a, Richard 2008, Egan 2010, Lassiter 2011, Silk 2013, MacFarlane 2014, 2016, Brogaard 2017, Coppock 2018. We will return to the discourse dynamics in §3.4, and to the relation between perspectives and experiencer arguments in §§2.3, 3.3.
2.2 | Adjectives of normative and epistemic evaluation

It is common to treat the category of “predicates of personal taste” on an intuitive level. One might wonder what relevantly distinguishes PPTs from expressions of aesthetics (‘beautiful’), desirability (‘wonderful’), morality (‘wrong’), or credence (‘likely’), and whether PPTs constitute an interesting lexical class (compare the categories of evaluation in Hunston & Thompson 1999, Martin & White 2005). This section shows that the §2.1-phenomena with PPTs also arise with aesthetic, moral, and epistemic adjectives, among others. The linguistic features of PPTs that distinguish them from RGAs like ‘tall’ are shared among adjectives of normative and epistemic evaluation.

Consider ‘beautiful’. Like other RGAs, ‘beautiful’ can be interpreted with respect to a contextually supplied standard/threshold when used in the positive form—a standard for how beautiful something needs to be for it to count as beautiful. In (20), however, our disagreement needn’t be about whether painting is sufficiently beautiful given our purposes; it is about how beautiful the painting is. This disagreement can lead to comparative disagreements such as (21) (cf. Kennedy 2013).

(20)  Me: This painting is beautiful.
        You: No it isn’t. My dog could have painted that.

(21)  Me: This painting is more beautiful than that one.
        You: No way. The balance in this one is all off. That one is more beautiful.

Likewise for adjectives of epistemic evaluation such as ‘likely’. Our disagreement in (22) needn’t target how likely Raphaella’s (or Thom’s) winning would need to be to count as likely; it can concern how likely her winning is—hence our disagreement over the comparative in (23).

(22)  Me: It’s likely that Raphaella will win.
        You: No way. Thom is the real frontrunner.

(23)  Me: It’s more likely that Raphaella will win than that Thom will.
        You: No way. Thom is the real frontrunner. He’s more likely to win than she is.

In using ‘beautiful’/‘likely’ we can manage our assumptions about how beautiful/likely things are and what aesthetic values/epistemic norms to accept in the conversation.

Second, like PPTs, the normative and epistemic adjectives in (24)–(26) can felicitously embed under ‘find’ in both positive and comparative forms (n. 6).12

(24)  [Context: discussing Tolstoy’s Family Happiness:]
    a. “I find it charming and delicately wrought.”13
    a’. “I find it beautiful.”14
    b. I find it more charming/beautiful than The Kreutzer Sonata.

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12 Cf. Sæbø 2009, Bouchard 2012, Bylinina 2016, Kennedy & Willer 2016, McNally & Stojanovic 2017, Coppock 2018 on examples with certain non-PPT evaluative adjectives. Examples with epistemic adjectives haven’t been previously considered. We will return to the import of examples such as (24)–(26) for previous accounts of ‘find’ in §6.

13 H. McLean, In Quest of Tolstoy, 9.

14 1859 letter from literary critic Vasily Botkin to Tolstoy; in H. McLean, The Quest for Tolstoy, 8.
(25) [Context: A and B are both monists about well-being: they take how well off one is to be determined, fundamentally, by a single property—quantity of pleasure, according to A; desire satisfaction, according to B. They consider Pat, who is very happy and thinks his family loves him, though they in fact hate him, and Sal, who is less happy but not so deluded. B appeals to Pat as a problem case for A’s theory. A disagrees and says:]

a. I find Pat well-off.
b. I find Pat more well-off than Sal.

(26) [Context: We are discussing what is likely to result from recent political protests.]

a. I find peace likely.
b. I find peace more likely than war.

Finally, consider vagueness phenomena. Suppose you are forced to decide between saving your dearest friend and saving some number of (otherwise morally indistinguishable) strangers. Plausibly we have some special obligations to those close to us, so that it is morally better for you to save your dear friend than to save two strangers. But there doesn’t seem to be any precise number of strangers that would tip the balance. Alas:

(27) (P1) Your saving 2 strangers is not morally better than your saving your dear friend.

(P2) For all \( n \), if your saving \( n \) strangers is not morally better than your saving your dear friend, then your saving \( n+1 \) strangers is not morally better than your saving your dear friend.

(C) \( \therefore \) For all \( n > 2 \), your saving \( n \) strangers is not morally better than your saving your dear friend.

No one’s friends are that important.\(^{15}\)

So, various normative and epistemic adjectives pattern with PPTs in exhibiting linguistic phenomena such as discourse-oriented use, felicitous embedding under ‘find’, and apparent sorites-susceptibility in both positive and comparative forms. It will be useful to have a label for the class of adjectives that pattern together empirically in these ways: call them *evaluational adjectives*.\(^{16}\) Informally put, positive/comparative uses of ‘tasty’ can depend on a body of tastes evaluating how tasty things are; positive/comparative uses of ‘beautiful’ can depend on a body of aesthetic values evaluating how beautiful things are; positive/comparative uses of ‘likely’ can depend on a body of epistemic norms evaluating how likely things are; and so on. Evaluational adjectives are in general sensitive to (what we can call) a *perspective of evaluation*—a body of tastes, values, norms, etc. This *perspective-sensitivity* is associated with the adjective itself, not simply the positive form.

### 2.3 Four sources of context-sensitivity

The next section examines how to implement perspective-sensitivity in the formal semantics. But first it is important to distinguish perspective-sensitivity from several other properties often discussed in

\(^{15}\) As with (18)–(19), the force of (27) needn’t turn on indiscriminability or unsettledness about relevant dimensions or measurement procedures. Many a monistic indirect consequentialist have countenanced (non-maximally-)special obligations.

\(^{16}\) I introduce the label ‘evaluational’ rather than ‘evaluative’ since the latter is often used for subclasses excluding PPTs or epistemic adjectives.
litteratures on adjectives. Even at the present informal level of discussion, the perspective-sensitivity which demarcates the class of evaluational adjectives can be seen to be distinct from properties such as vagueness, standard-sensitivity, experiencer-sensitivity, and multidimensionality. These properties are often not clearly delineated in existing accounts.

First, some authors have suggested assimilating PPTs’ sensitivity to relevant tastes to vagueness.17 However, as suggested in §2.1, although perspective-sensitivity can give rise to vagueness phenomena, perspective-sensitivity isn’t sufficient (or necessary) for vagueness. Imagine a species of maximally opinionated and discriminating supertasters. The premises (P2)/(P2’) in (18)–(19) would have no force; every comparative ‘xi is more preferable than xj’, even for adjacent cups (where j = i ± 1), is independently accepted or rejected. Yet the comparatives could still be used in a discourse-oriented way and felicitously embed under ‘find’:

\[(28) \quad \text{[Context: A and B are maximally discriminating and opinionated supertasters. They both take sweetness to be the only factor determining preferability for coffee, but they disagree about how sweet is too sweet. Alice’s cup has one more microgram of sugar than Bert’s.]}\]

A: Alice’s cup is more preferable than Bert’s.

B: No way. It’s sweeter, but Bert’s is better.

(29) A finds Alice’s cup more preferable than Bert’s.

A second approach has been to assimilate the context-sensitivity of PPTs or evaluative adjectives to multidimensionality.18 Many adjectives can be used to order items along various dimensions (‘clever’, ‘large’, ‘skillful’) (Sassoon 2013a). For instance, how large something is might depend on its height (‘large in height’), or volume (‘large in volume’), or some combination thereof. It is important not to conflate the informal point that a judgment may depend on multiple factors (dimensions, criteria) with the specific linguistic phenomenon of multidimensionality. The fact that a medical diagnosis “is associated with a number of criteria” (Klein 1980: 7) and that “a plurality of aspects of [the patient] are taken into account” (Crespo 2015: 19; cf. McNally & Stojanovic 2017: 21, 31) doesn’t make ‘diabetic’ in (30) multidimensional.

(30) The patient is diabetic (#with respect to A1c/fasting glucose, #in some respects)

Call a use of an adjective phrase ‘α dimension-sensitive if how α something is is taken to depend on multiple properties which might be quantified over or specified via a ‘with respect to’-type phrase. The use of ‘large’ in (31a) is dimension-sensitive; the use of ‘tall’ in (32a) is not. (So, not all uses of multidimensional adjectives, qua lexical items, need be dimension-sensitive. Specifying a dimension may render the use dimension-insensitive, as in (31c).)

(31)  
   a. The box is large.
   
   b. The box is large in some respects.
   
   c. The box is large in (/with respect to/except for) height.

---


a. Robb is tall.

b. #Robb is tall in some respects.

c. #Robb is tall in (/with respect to/except for) height.

In dimension-sensitive uses, what factors are relevant and how they compare can become at-issue, as in (33) with ‘healthy’. A’s comparative judgment can be felicitously reported with ‘find’ in (34).

(33) [Context: A and B agree that how healthy someone is depends on their cholesterol and blood pressure, among other things. Robb has high blood pressure but normal cholesterol. Sam has normal blood pressure but high cholesterol.]

A: Robb is healthier than Sam.

B: No, Sam is healthier. You give cholesterol too much weight. Blood pressure is more important.

(34) A finds Robb healthier than Sam.

Some uses of evaluational adjectives are also dimension-sensitive (cf. (35)). The speakers in (36) disagree about how tasty the cake is on the basis of disagreeing about the relative importance of different dimensions of taste (sweetness, richness, texture, etc.).

(35) This cake is tasty in some/all respects.

(36) A: Alice’s cake is tastier than Bert’s. It’s nice and sweet.

B: No, Bert’s cake is tastier. You’re a sugar fiend. Sweetness counts for something, but texture is more important. Bert’s cake hits it right on the money.

However, multidimensionality and dimension-sensitivity aren’t necessary for the perspective-sensitivity characteristic of evaluational adjectives.

For instance, the phenomena from §§2.1–2.2 with evaluational adjectives ‘E’ persist in uses where it is assumed that measures of E-ness are determined by a single dimension. This is manifest for unidimensional epistemic adjectives, such as ‘likely’ in (23) and (26), where the single dimension is probability.

(37) #Raphaella’s winning is likely except for probability.

In (39)–(40) a particular dimension is linguistically specified (cf. (6)/(9), (14)/(15)).

(38) [Context: same as (25)]

A: ??Pat is well off in some respect.

A: ??Pat is well off with respect to happiness.

A: ??Pat is more well off with respect to happiness than Sal.

In (39)–(40) a particular dimension is linguistically specified (cf. (6)/(9), (14)/(15)).

19 Cf. “All our cakes are stunning in appearance but tasty in texture, fillings and flavouring” (2chefspassion.co.uk/cake-makers/birthday-and-wedding-cakes-horwich); “These berries are so much smaller than the ones bought at the grocery store, however much tastier in sweetness” (kyrotime.blogspot.com/2012/06).
A: Alice’s cake is tastier in sweetness than Bert’s cake.
B: No way. Alice’s is too sweet.

A finds Alice’s cake tastier in sweetness than Bert’s cake.

Likewise, assuming that preferability is to be measured in terms of sweetness has no bearing on the comparative sorites arguments in (18)–(19). Re (27), many a monistic indirect consequentialist have countenanced special obligations.

Lastly, a prominent debate in work on PPTs has concerned whether PPTs take a syntactically realized experiencer argument. In (41a)/(41b) the subject/object argument (Timmy) is the experiencer of the fear. With PPTs the putative experiencer argument would be what is specified in ‘to’/‘for’ phrases, as in (42) where Timmy is the experiencer of the excitement and gustatory enjoyment.

(41) a. Timmy is afraid.
a’. Timmy fears Fido.
b. Fido frightens Timmy.

(42) a. The roller coaster is fun for Timmy.
b. The cake tastes good to Timmy.

It is controversial how to test for the syntactic presence of an experiencer argument (cf. Belletti & Rizzi 1988, Pesetsky 1995, Landau 2010). Regardless, it isn’t obvious what experiences need be conventionally associated with (e.g.) moral or epistemic adjectives. Contrast (41)–(42) with (43)–(44).

(43) God: Coveting thy neighbor’s wife is morally wrong/tolerable.

(44) Inconceivable bliss is 50% likely.

While it is contentious whether PPTs take an experiencer argument, it is evident that at least some evaluative adjectives do not (see also Bylinina 2016, McNally & Stojanovic 2017). Moreover the distinction between perspective-sensitivity and dependence on an experiencer, in the sense of theories of thematic roles, can be observed even with PPTs. The “perspective” which determines things’ levels of tastiness cannot be assimilated to the tastes of a thematic experiencer of the sort specified by ‘to’/‘for’ phrases (cf. (42)).

First, the phenomena from §2.1 associated with context-sensitivity may still arise with PPTs when a relevant experiencer is linguistically specified or salient in the extra-linguistic context. Suppose A and B are discussing the quality of the new brand of cat food, Brand X, as compared to the existing brand, Brand Y. Most of the cats devour X, but the “highbrow” Persian and Siamese cats push it aside, going for Y instead. A, being a person of refined sensibilities herself, thinks that it’s the latter cats’ tastes that really matter, whereas B is more egalitarian. A and B’s disagreement in (45)–(46) might be reported as in (47).

20 See Glanzberg 2007, Stephenson 2007b, Lasersohn 2008, Sæbø 2009, Sassoon 2010, Schaffer 2011, Collins 2013, Pearson 2013, Bylinina 2014, 2016, McNally & Stojanovic 2017. Bylinina (2014, 2016) and McNally & Stojanovic (2017) provide a helpful corrective to much previous literature by distinguishing experiencer dependence from the evaluativity associated with certain evaluative adjectives (e.g., aesthetic adjectives); they argue that the latter adjectives lack a syntactic experiencer argument, unlike PPTs. However, these authors still treat the adjectives as essentially multidimensional and diagnose their context-sensitivity (at least partly) in these terms.

21 Cf. “Many liquid dewormers claim to be very tasty to cats. Unfortunately, many cats would vigorously disagree with that assessment” (J. Owenby, Cat Behavior: Little Known Tips That You Need to Know About Cats).
A and B’s disagreement isn’t a descriptive disagreement about the cats’ gustatory experiences; they agree about the various cats’ likes and dislikes. And A and B aren’t conveying their attitudes about what tastes good to them; neither A nor B like cat food. A and B’s disagreement is an evaluative disagreement about what counts as tasty and determines tastiness for cats: the responses of the feline majority, or of the cat elite. The discourses in (45)/(46) are analogous in this respect to the discourses with ‘tasty’ in (6)/(9). A and B disagree about what “tastiness-for-cats perspective” to accept. (I leave it to the reader to adapt the sorites series from §2.1 for the above case.)

Second, experiencers and perspectives can be differently bound. Suppose Company C makes ice cream for humans as well as pet food for different kinds of animals. You love their ice cream, and you think their dog food tastes good to dogs, their cat food tastes good to cats, and so on. You say:

(48) Everything C makes is tasty.

The experiencer in (48) varies as a function of the argument of the predicate, as reflected in the informal interpretation in (49), where $K_x$ is the kind of creature that $x$ is made for.

(49) for every $x$ that C makes, $x$ is tasty-to-$K_x$

Yet the taste perspective—what determines how tasty-to-dogs the dog food is, how tasty-to-cats the cat food is, etc.—isn’t bound, but contextually supplied; it can be targeted in discourse (dis)agreements, as in (50).

(50) $B$: Everything C makes is tasty.
$A$: No way. Their cat food falls short.
$B$: Stop being such a snob. Most cats love it.

Comparative examples such as (51)–(52) illustrate the distinction as well:

(51) C’s dog food is tastier than C’s cat food.
   a. $\approx$ C’s dog food is more tasty to dogs than C’s cat food is tasty to cats.
   b. $\approx$ C’s-dog-food$_x$ is more tasty-to-$K_x$ than C’s-cat-food$_y$ is tasty-to-$K_y$

(52) [Context: The bourgeois cats in the majority devour C’s cat food, but the highbrow cats ignore it. The highbrow dogs (gracefully) devour C’s dog food, but the bourgeois dogs in the majority ignore it.]
$A$: C’s dog food is tastier than C’s cat food.
$B$: No, stop being such a snob. Their cat food falls short, but their dog food tastes great.
Even if PPTs take a thematic experiencer argument—an argument of the sort overtly specified by ‘to’/‘for’ phrases—this argument must be distinguished from the taste perspective in the sense of what determines things’ levels of tastiness.

This section has delineated four loci of context-sensitivity: standard-sensitivity, i.e. sensitivity to a threshold or standard, associated with positive-form RGAs; perspective-sensitivity, i.e. sensitivity to a body of tastes, norms, probabilities, etc., associated with evaluational adjectives; dimension-sensitivity, i.e. sensitivity to a set of dimensions, associated with certain uses of multidimensional adjectives; and experiencer-sensitivity, i.e. sensitivity to an experiencer, associated with predicates taking a thematic experiencer argument. While the informal point that PPTs are associated with a “perspective” on taste isn’t uncommon, previous formal implementations often fail to distinguish (what I am calling) perspective-sensitivity from other such sources of context-sensitivity, and fail to generalize across the range of adjectives patterning in the ways observed in §§2.1–2.2. The following sections develop a semantics and pragmatics for evaluational adjectives that improves in these respects.

3 | EVALUATIONAL ADJECTIVES IN A DEGREE SEMANTICS

This section develops a formal semantics for evaluational adjectives. The primary focus is on capturing the perspective-sensitivity common to evaluational adjectives, and distinguishing perspective-sensitivity from the standard-sensitivity associated with the positive form. Multidimensionality and experiencer arguments are briefly considered. To fix ideas I assume a contextualist version of a Kennedy-style degree semantics. The following implementation can serve as a model which may be adapted in light of one’s broader views on context-sensitivity and adjective semantics (§§1, 2.1). §§4–5 examine potential linguistic and philosophical implications of unifying evaluational adjectives’ semantics in the proposed way.

3.1 | Background: Degree semantics and standards

A prominent approach is to treat gradable adjectives as associating things with degrees, conceived as points on a scale. I will assume specifically that gradable adjectives denote functions from items to degrees on a scale—so-called measure functions (Bartsch & Vennemann 1973, Kennedy 1999, 2007). For instance, ‘tall’ denotes a function from individuals to (positive) degrees of height, i.e. the individual’s maximal height; ‘hot’ denotes a function from individuals to (positive) degrees of temperature, i.e. the individual’s maximal temperature; and so on. Roughly put, the comparative in (53) says that the degree to which Alice is tall is greater than the degree to which Bert is tall, where tall is a function that maps each individual to their height, a degree in the height scale.

(53) ‘Alice is taller than Bert’ is true in c iff tall(Alice) > tall(Bert)

The positive form is treated as relating a degree to a threshold, or degree standard. Following Kennedy 2007 I treat the standard as determined by a variable s; to a first approximation, the value of s in a context c, sc, is a function that maps adjective denotations (measure functions) to a degree standard associated with the adjective in c. For instance, sc(tall) is the degree standard for tallness in c, i.e. the

22See nn. 17, 18, 20, also §6. The present notion of “perspective” is also distinct from the notions in literatures on linguistic expressives (Potts 2007) and perspectival expressions (Mitchell 1986).
least height that something can have for it to count as tall. The positive predication in (54) is true in $c$ iff the degree to which Alice is tall is at least $s_c(tall)$.

(54) ‘Alice is tall-s’ is true in $c$ iff $tall(Alice) \geq s_c(tall)$

So far, so familiar. Before turning to evaluational adjectives, several remarks on interpreting the formalism are in order. It is important not to read too much into the ‘measure’ in ‘measure function’ or the appeal to degrees. I use ‘measure function’ broadly, not only for adjectives associated with measurement procedures or numerical units of measurement (e.g. height in inches, for ‘tall’), but for any mapping which would determine an order on objects. The domain of degrees needn’t be isomorphic to the real numbers, yet for simplicity I assume that the domain of degrees is totally ordered. The talk of evaluational adjectives’ “measure functions” doesn’t presuppose that tastiness, beauty, etc. are quantifiable.

Implementing the account with a semantic type for degrees is also inessential. There are well-established logical correspondences between degree-based and non-degree-based (“delineation-based,” “supervaluationist,” “partial predicate”) frameworks. Degree-based and non-degree-based approaches differ on issues regarding the morphosyntax of positive and comparative forms, the basic vs. derived status of degrees, and the role of degrees in object language and metalanguage (nn. 23, 24). These issues are orthogonal to the issues in this paper. What is important about degrees for our purposes is simply that they represent how tasty, beautiful, likely, etc. (tall, rich, etc.) things are, and thus that they can be associated with qualitative orderings on the items in the adjectives’ domains. The semantics could be implemented in a (logically equivalent) delineation-based framework, or in a derived-degree framework that derives degrees from more basic orderings on individuals (n. 24). Nothing of metaphysical significance is presupposed in our talk of things having “degrees” of tastiness, beauty, etc.

3.2 Perspective-sensitivity

Let’s turn to evaluational adjectives, starting with PPTs. Like other relative gradable adjectives, PPTs in the positive form are interpreted with respect to the standards variable $s$.

\[ s_i \langle \text{ed}, d \rangle a \text{ typed syntactic index and } d \text{ the type of degrees.} \]

\[(i) \quad \| \text{pos} \| s_i = \lambda x_{(ed, d)} \cdot \lambda m_{(ed, d)} \cdot \lambda x_r \cdot m(x) \geq s(m) \]

\[(b) \quad \| \text{tall} [\text{pos} s_i] \| \langle s_i \rangle = \lambda x_{(ed, d)} \cdot \lambda x_r \cdot \lambda m_{(ed, d)} \cdot tall(x) \geq g_i(tall) \]

I continue to abstract away from context-sensitivity due to comparison classes, and I ignore intensionality from world-indexing measure functions and standards. I use ‘standard’ sometimes in referring to $s$, sometimes to the degree standard for a given adjective determined by $s$; context should disambiguate.

\[ \text{For instance, the degree theorist’s basic notions of degrees and scales can instead be derived from qualitative orderings } \succeq^1 \text{ (“at least as ADJ as”)} \text{ over the set of individuals in the adjectives’ domains: the set of degrees } D \text{ is the set of equivalence classes under } \succeq^1, \text{ and the order } \succeq^1 \text{ on } D \text{ is defined such that } [x]_a \succeq^1 [y]_b, \text{ where } [a]_1 \text{ is an equivalence class } \{ b: a \succeq^1 a \wedge a \succeq^1 b \} \text{ (Cresswell 1977, van Benthem 1982, Klein 1991, Bale 2011, van Rooij 2011).} \]

\[ \text{I continue to focus on evaluational adjectives that are RGAs (§2.1).} \]
it to count as tasty. The nature of the standard is what is at-issue in (5): we agree about how tasty things are, but we disagree about how tasty a cake needs to be to count as tasty. In (6), by contrast, we disagree about how tasty the cake is. Our disagreement targets not the value of \( [s] \) given \( [\text{tasty}] \) (the degree standard for tastiness), but the value of \( [\text{tasty}] \) given \( [\text{the cake}] \) (the cake’s degree of tastiness). The basis of our disagreement is what tastes to assume in the conversation. We disagree about what measure function to associate with ‘tasty’.

I propose that what distinguishes PPTs and other evaluational adjectives is that they denote context-dependent measure functions. Semantic competence with ‘tasty’ requires a capacity to map objects to their degree of tastiness given a body of tastes. No particular mapping from objects to their degree of tastiness—no particular view on how tasty things are—is built into the conventional meaning of ‘tasty’.

Call a function from objects to their degree of tastiness a taste perspective.\(^{26}\) One way of implementing the proposal is to treat ‘tasty’ as a variable for a taste perspective; a preliminary lexical entry is in (55), for contextually determined assignment \( g_e \) and typed syntactic index \( i_e \) (Heim & Kratzer 1998).\(^{27}\)

\[
(55) \quad ||\text{tasty}_{i(e,d)}||^e = g_e(i_{(e,d)}) \text{ if } g_e(i_{(e,d)}) \text{ represents a body of tastes, undefined otherwise}
\]

Let’s continue to focus on uses where the relevant perspective represents tastes (values, probabilities, etc.) endorsed for purposes of the conversation, i.e., on contexts \( e \) determining assignments such that \( g_e(i) \) represents tastes (values, probabilities, etc.) endorsed in \( e \). For expository purposes let’s use \( 'T_e' \) for a perspective variable that represents tastes endorsed for purposes of the conversation, with the subscript ‘e’ to indicate the intended index/assignment and interpretation of the variable; and let’s use \( 'T_e' \) for the measure function assigned to \( T_e \) by the assignment determined in such contexts—i.e., so that \( ||\text{tasty}_{i(e,d)}||^e = g_e(i_{(e,d)}) = ||T_e||^e = T_e \) where \( T_e \) maps objects to their (maximal) degree of tastiness according to the tastes endorsed in \( e \). (Likewise for the variable \( s_{j(e,d)} \) associated with the positive form and its intended interpretation, where \( ||s_{j(e,d)}||^e = g_e(j_{(e,d)}) = ||s_e||^e = s_e \).) Uttering (56a) assumes values for \( T_e \) and \( s_e \)—tastes \( T_e \) and standards \( s_e \) endorsed for purposes of the conversation—and asserts that the cake’s degree of tastiness according to \( T_e \) is at least the standard for tastiness given by \( s_e \), as reflected in (56b) where \( k \) is the object denoted by ‘this cake’ in \( e \). Uttering (57a) assumes a value for \( T_e \), \( T_e \), and asserts that \( T_e \) maps Alice’s cake to a greater degree of tastiness than it maps Bert’s cake, as reflected in (57b) where \( A \) is Alice’s cake and \( B \) is Bert’s cake (n. 23).\(^{28}\) (To improve readability I will often omit the type information on indices.)

\[
(56) \quad \begin{align*}
&\text{a. } \text{This cake is tasty in } c \iff T_e(k) \geq s_e(T_e) \\
&\text{b. } (56a) \text{ is true in } c \text { iff } T_e(k) \geq s_e(T_e)
\end{align*}
\]

\(^{26}\)Hereafter I typically use ‘perspective’ in this technical sense for a contextually supplied measure function—a function from items to degrees of E-ness (tastiness, beauty, probability, etc.), for evaluational adjective ‘‘E’’—representing a body of tastes, norms, etc. In delineation-semantic terms, one could think of a perspective as something that determines the qualitative ordering \( \geq_e \) on items with respect to E-ness.

\(^{27}\)For simplicity I assume that the measure function for ‘tasty’ takes an individual; in what follows I assume that the measure function for ‘beautiful’ is also type \( (e,d) \), and that the measure function for ‘likely’ is type \( (s,t,d) \). I leave open whether the adjectives are themselves variables or place constraints on a measure-function variable argument, as in the type-(\(ed,ed\)) entry in (i).

\[
(i) \quad \begin{align*}
&\text{a. } ||\text{tasty}||^e = \lambda m_{(e,d)}.m \text{ represents a body of tastes } \mathcal{M} \\
&\text{b. } ||\text{tasty} m_{(e,d)}||^e = (55)
\end{align*}
\]

\(^{28}\)Again, the ‘e’ subscripts are simply to indicate the intended index/assignment and interpretation of the variable; they have no theoretical status.
(57) a. Alice’s cake is tastier than Bert’s cake
   b. (57a) is true in c iff $T_e(A) > T_e(B)$

The positive predication and the comparative both assume a body of endorsed tastes (represented by $T_e = \llbracket T_e \rrbracket$), and assert something about things’ tastiness according to $T_e$.

The above semantics can be extended to other evaluational adjectives. Denotations for (say) ‘beautiful’ and ‘likely’ are as follows (see n. 27).

(58) \[ \llbracket \text{beautiful}_{i_{(e,d)}} \rrbracket^c = g_e(i_{(e,d)}) \text{ if } g_c(i_{(e,d)}) \text{ represents a body of aesthetic values, undefined otherwise} \]

(59) \[ \llbracket \text{likely}_{i_{(st,d)}} \rrbracket^c = g_e(i_{(st,d)}) \text{ if } g_c(i_{(st,d)}) \text{ represents a probability measure, undefined otherwise} \]

As above, let’s use ‘$B_e$’ for a perspective variable the value of which in context, $B_e$, is a measure function that represents the aesthetic values endorsed for purposes of the conversation. The positive-form predication in (60a) says that the given aesthetic perspective $B_e$ maps the designated painting $P$ to a degree of beauty at least as great as the degree standard for beauty operative in the context. The comparative in (61a) says that $B_e$ maps $P$ to a degree of beauty greater than it maps the non-proximal painting $Q$.

(60) a. This painting is beautiful$_i$s_{j}.
   b. (60a) is true in c iff $B_e(P) \geq s_e(B_e)$

(61) a. This painting is more beautiful than that painting.
   b. (61a) is true in c iff $B_e(P) > B_e(Q)$

Similarly, let’s use ‘$E_e$’ for a perspective variable the value of which in context, $E_e$, is a probability measure that represents the information and epistemic norms accepted for purposes of conversation. (62a) says that the contextually supplied probability measure $E_e$ maps the proposition $r$ that Raphaella will win to a degree of probability at least as great as the operative probability threshold. (63a) says that $E_e$ maps Raphaella’s winning $r$ to a greater degree of probability than it maps Thom’s winning $t$.

(62) a. It’s likely$_i$s_{j} that Raphaella will win.
   b. (62a) is true in c iff $E_e(r) \geq s_e(E_e)$

(63) a. It’s more likely$_i$ that Raphaella will win than that Thom will win.
   b. (63a) is true in c iff $E_e(r) > E_e(t)$

Uses of the positive and comparative forms presuppose a contextually determined body of aesthetic values (in (60)–(61), a value for $B_e$) or probability measure (in (62)–(63), a value for $E_e$)—an aesthetic or epistemic perspective.

So, what unifies evaluational adjectives semantically is that they denote context-dependent measure functions, or *evaluational perspectives*—$g_e$-supplied mappings to degrees of tastiness, beauty, probability, etc., depending on the adjective. The context-sensitivity of evaluational adjectives arises from the semantics of the lexical items and hence may be observed in both positive and comparative forms.
3.3  Aside: Experiencer arguments and multidimensionality

In §2.3 we saw that the perspective-sensitivity characteristic of evaluational adjectives cannot be assimilated to experiencer-sensitivity (associated with predicates taking a possibly implicit thematic experiencer argument) or dimension-sensitivity (associated with certain uses of multidimensional adjectives). Since the primary focus of this paper is on evaluational adjectives as a class, I will put aside potential linguistic differences among them regarding experiencer arguments and multidimensionality. Yet it may be helpful to briefly consider how experiencer-sensitivity and dimension-sensitivity might be incorporated into the semantics.

For the sake of argument let’s assume that PPTs have an argument place for a thematic experiencer of the sort specified by overt ‘to’/‘for’ phrases. One way of implementing experiencer-sensitivity is to skolemize taste perspective variables, indexing them to an element that may vary with a quantificational subject. To fix ideas, assume that taste perspectives are indexed to a (possibly singleton) set of individuals $f_R(x) = \{y \mid R(x,y)\}$, the set of individuals $y$ bearing a contextually relevant relation $R$ to $x$.\textsuperscript{29}

The truth conditions for (51), reproduced in (64), would be roughly as in (65).

$$
(64) \quad \begin{align*}
\text{a. } & \text{C’s dog food is tastier than C’s cat food} \\
\text{b. } & \text{C’s-dog-food}_a \text{ is more tasty-to-} f_R(a) \text{ than C’s-cat-food}_b \text{ is tasty-to-} f_R(b)
\end{align*}
$$

$$
(65) \quad (51) \text{ is true in } c \text{ iff } T_{f_R(a)}(a) > T_{f_R(b)}(b)
$$

The relevant relation is a relation $R$ picking out the set of individuals for whom the food product was made. The skolemized measure function $T_{f_R(x)}$ maps objects $x$ to a degree of tastiness to things $y$ bearing $R$ to $x$. $T_{f_R(a)}(a)$ is the dog food’s degree of tastiness-to-dogs according to $T_e$; $T_{f_R(b)}(b)$ is the cat food’s degree of tastiness-to-cats according to $T_e$; and so on. The contextually supplied taste perspective $T_{f_R(x)}$, which determines things’ levels of tastiness, is distinguished from the experiencer(s) $y$ doing the tasting.

Dimension-sensitivity isn’t necessary for perspective-sensitivity (§2.3). Yet in at least some contexts, measures of of largeness, similarity, etc.—as well as taste, beauty, etc.—may depend on which dimensions are relevant and how they compare. Hence the interpretation of multidimensional adjectives in the comparative may also be context-sensitive, as reflected in (33)–(34), (36) from §2.3, or (66)–(67) below with ‘similar-looking’.

$$
(66) \quad A: \text{ Sheena’s baby is more similar-looking to Tim’s baby than Pat’s is.} \quad \text{[favoring nose/mouth shape]}
$$

$$
B: \text{ No, Pat’s baby is more similar-looking to Tim’s baby.} \quad \text{[favoring hair/eyes]}
$$

$$
(67) \quad A \text{ finds Sheena’s baby more similar-looking to Tim’s baby than Pat’s is.}
$$

\textsuperscript{29} How exactly one implements this idea will depend on one’s views on the syntax and compositional semantics of the positive and comparative forms. A sample analysis is in (i) (cf. n. 27).

(i) \quad \begin{align*}
\text{a. } & \llbracket \text{tasty } k_{(e(e))} \text{ R}_{(e(e))} \rrbracket \\
\text{b. } & \llbracket \text{tasty}\rrbracket^c = \lambda k_{(e(e))} . \lambda R_{(e(e))} . \lambda x . \lambda y . k(R(x))(x)
\end{align*}

The perspective variables might be indexed instead to a (possibly plural) individual, kind, or property. It would be instructive to compare the options considered in Kennedy’s (2007) discussion of skolem functions and the sensitivity to a comparison class.
There are difficult questions about how to implement dimension-sensitivity in the syntax and semantics. What exactly needs to be parameterized? Just the set of dimensions (cf. Sassoon 2013b)? Or the set of dimensions and their relative weights (cf. Bylinina 2014)? Should even the operation for determining measure functions (mappings from individuals to degrees) from dimension sets be parameterized (pace Sassoon and Bylinina)? Examples such as (68)–(69) may provide preliminary support for parameterizing each of these elements (cf. Carr 2015). In (68) A and B might agree about the relevant values and the relative priorities of Bert’s saving different sets of children, yet debate about the comparative because it is unresolved whether to apply, say, Maximax (roughly, “do what has the best chance of bringing about the best outcome”) or some rule of expected-value maximization.

(68) [Context: Bert is a lifeguard doing a training exercise. Two groups of children, group X and group Y, are drowning, and Bert is the only person available to help. Group Y is farther from Bert and includes fewer children than group X. Bert notices a close family friend among the children in group X. If Bert goes to group X first, he’ll likely save them and his dear friend, but he almost certainly won’t get to group Y in time. If Bert goes to group Y first, he may be able to pick up group X too on the way in, but it’s more likely that group X (including his dear friend) will drown before he can get to them. Strategy X is Bert’s option of going to group X first, and strategy Y is Bert’s option of going to group Y first.]

A: Bert’s going for strategy Y is better than his going for strategy X.
B: No, his going for strategy X is better. What is it with you and Maximax?!?

(69) A finds Bert’s trying to save group Y first morally better than his first trying to save group X.

Context can be treated as supplying a triple \( \delta_e = (D, \preceq, f) \) of a set of dimensions \( D \), a (possibly partial) preorder \( \preceq \) on \( D \) representing the relative priorities of these dimensions, and a function \( f \) mapping preordered sets to measure functions. In (68) A and B agree on the relevant dimensions \( D \) and priorities \( \preceq \). What is at-issue is what to endorse for the mapping \( f \) from this weighted dimension set \( (D, \preceq) \) to a measure function specifying actions’ value, and thus whether \( f(D, \preceq)(\text{save-X}) > f(D, \preceq)(\text{save-Y}) \).

Hereafter I will ignore experiencer arguments and dimension-sensitivity, and I will assume, as in §3.2, that the measure-function denotations of evaluational adjectives are determined via a simple perspective variable. I leave further investigation of complications in the syntax and lexical/compositional semantics of certain adjectives for future work (skolemized perspective variables, weighted dimension sets, etc.).

### 3.4 Discourse dynamics

This section illustrates how the proposed formal semantics for evaluational adjectives can be applied in representing the dynamics of discourse. For space purposes I will work through one example of a positive predication used in managing assumptions about (inter alia) what standards to accept and what perspectives to accept. This example can provide a model for other kinds of (non-)discourse-oriented use (Barker 2002, MacFarlane 2016, Silk 2016; see n. 11).

Uses of context-sensitive expressions reflect speakers’ assumptions about relevant content-determining features of context. The worlds in the context set—the worlds compatible with what has been accepted for purposes of conversation—fix facts about the interlocutors, the concrete discourse situation, and the semantic values of expressions (Stalnaker 1978, 2014).

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30Sassoon 2013b uses Boolean operations in determining adjectives’ measure functions from dimension sets; Bylinina 2014 uses a Euclidean distance function that incorporates weights.
Upon hearing an utterance of ‘This cake is tasty’ one may attempt to infer values for $T_e$ and $s_e$ that render the utterance appropriate and true (cf. (56)). At the relevant level of abstraction the hearer can be represented as checking, for each possibly relevant world $w$, whether the cake counts as tasty according to the standards and tastes endorsed in the conversation in $w$—i.e., whether the cake’s level of tastiness determined by the context in $w$, is at least as great as the standard for tastiness determined by the context in $w$. Assuming that the speaker is being cooperative, one can infer that she must be assuming that the discourse context isn’t represented by $\langle g_{e_1}, g_{e_2}, g_{e_3}, g_{e_4}\rangle$ and thus that $w_1$, $w_4$, $w_7$, and $w_8$ aren’t in fact live possibilities. If no one objects, the context set will be set to $\{w_2, w_3, w_5, w_6, w_9\}$, i.e. the set of worlds $w$ such that the cake’s tastiness in $w$, $\llbracket T_e \rrbracket^{k_a} (k)$, is at least the standard for tastiness determined by $\llbracket s_e \rrbracket^{k_n}$ given $\llbracket T_e \rrbracket^{k_n}$. Updating with ‘This cake is tasty’ in this context doesn’t settle on how tasty the cake is or a standard for tastiness, but it does rule out certain combinations thereof. Interlocutors needn’t accept precisely the same perspectives or standards in agreements about particular matters of normative/epistemic evaluation.

Although the compositional semantics takes as given a particular abstract representation $g$ which supplies values for (e.g.) pronouns, what contextual resolution is determined can become at-issue, or have main-point status, in concrete utterances (cf. Thomason et al. 2006, Simons 2007, Silk 2014, 2016, 2019a). Recall the comparative disagreement in (9) ($\S$2.1), reproduced below. A sample representation of the prior context is in (71), here using ‘$T_{m,n}$’ to indicate a taste perspective that assigns Alice’s cake $A$ a degree of tastiness $m$ (i.e., $\llbracket T_e \rrbracket^{s}(A) = T_{m,n}(A) = m$) and assigns Bert’s cake $B$ a degree of tastiness $n$ (i.e., $\llbracket T_e \rrbracket^{s}(B) = T_{m,n}(B) = n$). (Continue to simplify by using numbers to represent levels of tastiness ($\S$3.1), and assume that $A$ and $B$ agree on all relevant physical properties of the cakes, etc.)
A: Alice’s cake is tastier than Bert’s cake.

B: No way, Bert’s cake is tastier. Alice’s cake is too sweet.

CS = \{u_1, \ldots, u_4\}

\begin{align*}
    u_1: & \quad [T_e]^{g_1} = T_{5,8} \\
    u_2: & \quad [T_e]^{g_2} = T_{6,7} \\
    u_3: & \quad [T_e]^{g_3} = T_{8,5} \\
    u_4: & \quad [T_e]^{g_4} = T_{7,6}
\end{align*}

One effect of accepting A’s utterance would be that the context set is updated to include only worlds in which (among other things) the concrete discourse situation determines an abstract representation $g$ that maps $T_e$ to a taste perspective $T$ such that $T(A) > T(B)$ (cf. (57))—i.e., a set of worlds in which the tastes endorsed for purposes of conversation rank Alice’s cake A above Bert’s cake B, namely \{u_3, u_4\}. Since B endorses different tastes, she objects. One effect of accepting B’s utterance would be that the context set is updated to include only worlds in which (among other things) the concrete discourse situation determines an abstract representation $g$ that maps $T_e$ to a taste perspective $T$ such that $T(b) > T(a)$, namely \{u_1, u_2\}. So, as expected, A undergoes an analogous abductive reasoning process and infers that B must wish to take for granted tastes ranking Bert’s cake above Alice’s. If A accepts B’s justification for B’s denial, it can become taken for granted that the level of sweetness in Alice’s cake makes it less tasty than Bert’s cake, and the context set can be set to \{u_1, u_2\}.

It is important to be clear about what level, if any, discourses such as (9) are “about the context.” The formal pragmatics locates a specific incompatibility in the interlocutors’ proposed updates: A’s and B’s utterances carry incompatible assumptions about what value for $T_e$ is determined by their concrete conversational situation. This doesn’t imply that the disagreement is fundamentally about the context, how to use words, etc. (cf. Richard 2008, Silk 2016; contrast Barker 2002, 2013, Plunkett & Sundell 2013, Kennedy & Willer 2016; see n. 11). More fundamentally, A and B disagree about how tastiness is determined as a function of sweetness; they disagree about what tastes to accept for purposes of conversation. It is this substantive evaluative disagreement which grounds the incompatible representations of context presupposed by their utterances. In using evaluational adjectives speakers can manage their assumptions about what standards, values, etc. to accept and why. This reflects the paradigmatic roles of evaluational adjectives in expressing speakers’ attitudes and coordinating on an overall evaluative and epistemic perspective.\footnote{As per §§1, 2.1, the treatment of the discourse dynamics in this section could be adapted to a non-contextualist framework (see n. 11). For instance, in a basic expressivist semantics and pragmatics, semantic values in context could be treated as sets of tuples of worlds, tastes, norms, standards, etc.; and the representation of discourse could be enriched accordingly to a set $C$ of tuples compatible with the information, tastes, norms, standards, etc. accepted for purposes of conversation. Roughly put, a discourse-oriented use of (e.g.) ‘tasty’ in (57) would be a use in which the set of tuples \(\langle w, T, \ldots \rangle\) constituting the sentence’s semantic value non-trivially distinguishes among tuples in $C$ with the same non-$T$ coordinates.}

\section*{4 | EVALUATIONAL ADJECTIVES AND EVALUATIONAL DOMAINS}

The relevant linguistic commonalities among evaluational adjectives (§2) motivate a common semantic treatment (§3): Adjectives such as PPTs, aesthetic adjectives, moral adjectives, epistemic adjectives, etc. are semantically unified, and distinguished from RGAs like ‘tall’, in denoting
context-dependent measure functions—contextually supplied “perspectives” specifying how tasty, beautiful, likely, etc. things are. Yet many theorists in the literature on PPTs have avoided generalizing their accounts to other evaluative domains because of apparent implications of antirealism and subjectivity. For instance, Lasersohn (2005) conceptually motivates his relativist account of PPTs on the basis that they don’t concern “matters of fact”; he continues:

The status of predicates such as good or beautiful immediately raises fundamental issues for ethics and aesthetics [...] Accordingly, we will [...] leave open the status of more philosophically ‘charged’ predicates like good and beautiful. (Lasersohn 2005: 644–645)

This section encourages rethinking the relation between the formal semantics/pragmatics of evaluative adjectives and substantive philosophical issues about the corresponding domains of normative and epistemic evaluation.

Compositional semantics investigates the semantic values of expressions and how the semantic values of complex expressions are calculated as a function of the semantic values of their parts. The compositional semantics takes as given an abstract representation (e.g., an assignment function (§3)) that assigns values to free variables, where these values figure in calculations of the semantic values of complex expressions. Formal semantics leaves open the metasemantic question of what abstract context (or range of abstract contexts) represents a given concrete conversational situation.

Questions about subjectivity/objectivity with evaluational adjectives can be located in the metasemantics of what makes it the case that such-and-such formal perspectives (hence values for perspective variables) represent the norms, values, etc. in concrete discourses. For instance: What makes it the case that something has such-and-such degree of tastiness, beauty, moral value, likelihood, etc.? What are the relations among different domains of evaluation, and thus among the values determined in concrete contexts of different types of perspective variables? For such-and-such type of perspective variable, is a single value determined by all contexts, or can the relevant perspective (tastes, values, norms, probabilities, etc.) vary across contexts? Is the denoted perspective wholly determined by the attitudes of the conversational participants? On a “relativist” view about taste, different concrete contexts might determine different taste perspectives. Conflicting taste judgments about a certain object could thus both be true. In contrast, a defender of the objectivity of morality—or at least the objective purport of moral language—might identify the operative moral perspective with moral norms determined independently of particular speaker attitudes. If a universal body of moral norms was correct, the same moral perspective would be supplied across contexts. This would be a substantive normative matter rather than something built into the conventional meaning and representation of semantic competence.

So, contrary to common assumptions, giving evaluational adjectives a unified context-sensitive semantics doesn’t imply that evaluative matters are in general “subjective” or “matters of taste.” Yet speakers’ (meta)normative views about what determines the relevant perspectives (tastes, norms, etc.) across contexts can lead to differences among the adjectives in patterns of use. The remainder of this section considers four such differences, concerning first-person experience requirements,


33For further discussion on relations among the formal semantics, metasemantics, and substantive (meta)normative theorizing, see Silk 2013, 2016, 2017c, 2019b; see Forrester 1989: chs. 2, 13, Plunkett & Shapiro 2017 for points in a similar spirit.
attitude-dependence, Yalcin-style “evaluative contradictions,” and discourse disagreements. To fix ideas I focus on PPTs, aesthetic adjectives, and moral adjectives.\textsuperscript{34}

First, there is variation among evaluational adjectives concerning the degree to which they are associated with certain subjective experiences.\textsuperscript{35} It is hard to hear an ascription ‘x is tasty’ as felicitous unless the speaker has had a relevant kind of first-personal experience with x.

(72) ??This cake is tasty, but I haven’t tried it.

Such examples improve with aesthetic adjectives. Suppose Highbrow hears Philistine dissing the new Botticelli exhibit at the art museum. Philistine isn’t one for art criticism, but he knows what he doesn’t like. Highbrow hasn’t seen the Botticelli paintings, but he has heard the experts praising them, and he is apt to defer. A dialogue ensues:

(73) \textit{Philistine}: I’m never getting dragged to the art museum again. All that famous Botticelli stuff was trash.

\textit{Highbrow}: You’re wrong. The Botticellis are beautiful. I haven’t seen them myself, but I’ve heard enough about them to know that you don’t know what you’re talking about.

\textit{Philistine}: Yeah right. My kid could have done that.

\textit{Highbrow}: Not a chance. The mastery with symmetries, color, balance, classical themes that I read about—that’s enough for me to know they’re beautiful.

I find it harder to construct an analogous context to improve the judgment for (72) with ‘tasty’. For moral adjectives it is hard to know what the relevant distinctive kind of experience would need to be. Regardless, as observed in §2.3, examples such as (43) are felicitous.

(74) \textit{God}: Coveting thy neighbor’s wife is wrong.

\textsuperscript{34}Although the patterns of judgments reported here are supported by preliminary data (below), speakers may differ on judgments about particular examples. Such differences only support the present point that substantive (meta)normative assumptions can affect patterns of use among evaluational adjectives. An acceptability judgment task was conducted via Amazon Mechanical Turk. Participants were 45 self-reported native English speakers, filtered to U.S. IP addresses. Participants were asked how natural they would find the target sentence if used in a conversation, on a scale from 1 (“completely unnatural”) to 7 (“completely natural”); they were encouraged to imagine the use of the sentence as part of a larger conversation to help it make sense. A summary of the data is as follows. For 1st-person-experience examples like (72)–(74) (where the speaker uses the adjective either without having had a relevant 1st-personal experience or while denying that they have had such an experience): with ‘tasty’ the average rating was 2.4 (SEM = .15), with ‘beautiful’ the average rating was 3.2 (SEM = .19), and with ‘wrong’ the average rating was 6.7 (SEM = .08). For examples like (75)–(77) conveying the possibility of attitude-independence: with ‘tasty’ the average rating was 3.6 (SEM = .29), with ‘beautiful’ the average rating was 5.2 (SEM = .20), and with ‘wrong’ the average rating was 5.2 (SEM = .24). For embedded “evaluative contradictions” like (81b)–(83): with ‘tasty’ the average rating was 3.8 (SEM = .26), with ‘beautiful’ the average rating was 4.2 (SEM = .29), and with ‘wrong’ the average rating was 5.8 (SEM = .22). The judgments reported in the main text also cohere with patterns of judgments in linguistic and philosophical literatures. For instance, it is widely assumed in linguistic work on PPTs that PPTs have something like a “direct experience” requirement (n. 35); and while philosophers and linguists have generally accepted some sort of attitude-dependence about matters of taste, intuitions about the possibility of attitude-independence aren’t without precedent, as in certain generic analyses of PPTs (Pearson 2013). On the flip side, in metaethics, even among attitude-dependent accounts of morality, it is nearly universally accepted that moral truths can come apart from individuals’ actual beliefs and evaluative attitudes. As the mean between two extremes, in philosophical aesthetics, questions about first-person experience requirements and attitude-independence are hotly debated (n. 35).

A second variation concerns the extent to which speakers can consistently allow that the predicate might apply while denying that they have the associated value or attitude. Examples such as (75) with ‘tasty’ are odd, whereas (76) with moral uses of ‘permissible’ are perfectly coherent.

(75) ??We don’t like the cake, but maybe it’s actually tasty.
(76)  
  a. Like you, I’m horrified at the idea of torture, but maybe it’s sometimes permissible.
  b. Like you, I’m repulsed at the idea of killing an infant, but maybe infanticide is actually permissible.

Aesthetic adjectives appear to be somewhere in the middle, but felicitous examples seem possible. Imagine Philistine on the cusp of a cultural transformation saying:

(77) I still can’t see what’s so great about those paintings, but maybe they’re actually beautiful.

A third difference concerns the extent to which the adjectives can felicitously embed in certain suppositional environments. Yalcin (2007) observes that unlike with Moore-paradoxical sentences ((78)), the felt incoherence of variants with certain epistemic modal expressions often persists in suppositional environments ((79); see also (80)). As Dorr & Hawthorne (2013) put it, sentences ‘ϕ and might ¬ϕ’ frequently give rise to a “phenomenology of contradiction.”

(78)  
  a. #The butler is the killer but I don’t think that he is.
  b. Suppose that [the butler is the killer but I/you/we don’t think that he is].

(79)  
  a. #The butler is the killer but he might not be.
  b. ??Suppose that [the butler is the killer but he might not be].

(80)  
  a. #The butler is the killer but perhaps/really he isn’t.
  b. #Suppose that [the butler is the killer but perhaps/really he isn’t].

Analogous phenomena can be observed with PPTs. It is hard to hear (81b) with ‘tasty’ as consistent.

(81)  
  a. ??The cake is tasty but we all hate it.
  b. ??Suppose the cake is tasty but we all hate it.

In contrast, (82) with ‘wrong’ is perfectly natural. Consistent examples with ‘beautiful’ also seem possible, as reflected in the continuation in (83).

(82)  
  a. Suppose torture is wrong but we all support it.
  b. Suppose infanticide is wrong but we’re all for it.

(83) Suppose the Botticellis are beautiful but we don’t like them. Then we should take an art appreciation class.

Finally, a fourth difference among evaluational adjectives concerns the extent to which speakers tend to weaken their assertions in the face of disagreement. In discourse disagreements with ‘tasty’,

36 Whether such sentences are to be regarded as semantically contradictory or incoherent is controversial. Note that not all epistemic expressions pattern in the same way. Examples with epistemic expressions that can more readily receive descriptive uses are more natural (cf. (i)). (See Silk 2016, 2017b for additional examples and discussion.)

(i) ?Suppose that the butler is the killer but it’s certain/apparent that he isn’t.
it isn’t uncommon for speakers to fall back on explicitly relativized claims as a point of agreement, as in (84). Though we disagree about how tasty the cake is, settling the issue isn’t exactly a matter of grave concern. Better to put the question aside. You can agree that the cake tastes good to me, and I can agree that the cake doesn’t taste good to you.

(84)  Me:  This cake is tasty.
You:  No it isn’t. It’s gross. It’s way too sweet.
Me:  Nah, what do you know about sweet?
You:  Well it doesn’t taste good to me.
Me:  Fine. I think it tastes great.

Speakers may be more inclined to persist in disagreements about certain moral matters, as in (85).

(85)  Me:  It’s always morally worse to abort a fetus than to let it live.
You:  No, you’re wrong. Sometimes it’s better to have an abortion.
Me:  Absolutely not. Abortion is murder.
You:  Sorry, I disagree. I’m not backing down on this one.
Me:  Neither am I.
You:  This is going nowhere…

Here we refuse to fall back on relativized claims about our respective moral norms. We may regard questions about the moral status of abortion as deeply important and hence be less willing to take the question off the conversational table and conclude on a point of agreement. Registering our contrasting moral views may be more significant to us than finding common ground. (I suspect that the frequency of persisting disagreement in discourses with aesthetic adjectives is again somewhere between that with PPTs and moral adjectives.)

We shouldn’t assume, absent much further investigation, that such discourse differences among evaluative adjectives are reflected in the grammar or lexical semantics. It isn’t implausible that certain of the data reflect assumptions about whether the relevant perspective may be determined by factors independent of the individual’s/group’s attitudes. Judgments about (72)–(83) improve to the extent that one allows that what tastes/values/norms/etc. to endorse may come apart from one’s subjective experiences or attitudes. In discourse, settling whether something is morally wrong is typically more important to us than settling whether something is tasty; yet sometimes it is the moribus, not the gustibus, which non est disputandum. Disagreements about taste might persist, and disagreements about morality might not. As with prototypical factual disagreements, sometimes it just depends on what we care about. Views about the attitude-independence or universality of aesthetics, morality, etc. needn’t be built into the conventions of the language. How the conventional linguistic issues, substantive philosophical issues, and empirical facts about discourses interact and constrain theorizing may be more complex than initially seemed.

5  |  ‘FIND’ AND “SUBJECTIVITY”

Delineating semantic, metasemantic, and metanormative issues can bring into relief improved formalizations of certain common diagnostics for PPTs and putatively “subjective” language. This section

37In this way we can capture the relevance of others’ views in matters of taste without analyzing prototypical uses of PPTs explicitly as descriptions of what is “tasty to people in general” (for discussion of contrasts between PPTs and generics, see Lasersohn 2005: 653–654, Stephenson 2007b: 55–58, Pearson 2013: 18–21, 38–42). Sometimes we just take facts over and above our own gustatory experiences as bearing on what tastes (hence value for $T_e$) to endorse.
examines one such diagnostic more closely: the felicity of embedding under ‘find’ (§2). I find much of the data reported in the literature problematic. (The previous sentence is a counterexample to several accounts.) I will suggest that we understand embedding data with ‘find’ not in terms of a pretheoretic notion of subjectivity or a particular category of expression, but in terms of a general independently attested kind of use of context-sensitive language. The relevant kind of use can be given a precise analysis in terms of the formal semantics and pragmatics from §3.

In §2 we noted that ‘find x PRED’ ascriptions are only felicitous with complements exhibiting certain kinds of context-sensitivity (see n. 6).

(86)  
a. Fritz finds the cake tasty/#vegan.
   b. #Fritz finds 7/the number prime.

In light of contrasts such as in (86) with PPTs, felicitous embedding under ‘find’ has become a staple diagnostic for “subjectivity” in natural language. Yet there is little agreement about what the putative subjectivity amounts to, or about what the broader embedding data with ‘find’ even are.38 The alleged data have been used to support diverse syntactic and semantic conclusions, such as regarding argument structure, thematic experiencer arguments, contextualism vs. relativism, and multidimensionality.

These reactions have been premature. We have seen felicitous embeddings under ‘find’ with various types of evaluational and non-evaluational adjectives: with ordinary unidimensional positive-form RGAs ((87)); with positive/comparative non-evaluative multidimensional adjectives ((88)); with positive/comparative PPTs (even given a dimension phrase; (89)); and with positive/comparative non-PPT evaluational adjectives (even given a dimension phrase; (90)–(93)) (see §§2, 3.3).

(87) [Context: see (12)]
   You might not find Bert tall. But I find him tall.

(88) [Context: see (66)–(67)]
   A: I find Sheena’s baby similar-looking to Tim’s baby.
   A’: I find Sheena’s baby more similar-looking to Tim’s baby than Pat’s is.

(89) [Context: see (9), (39)–(40)]
   A: I find this cake tasty (in sweetness).
   A’: I find this cake tastier (in sweetness) than that one.

(90) [Context: 1859 letter from literary critic Vasily Botkin to Tolstoy on Tolstoy’s Family Happiness (cf. (24))]
   A: “I find it beautiful (in all respects).”39
   A’: I find it more beautiful (in all respects) than The Kreutzer Sonata.

38 Some authors have claimed that ‘find’ disallows ordinary positive-form RGAs like ‘tall’ and only licenses PPTs (Fleisher 2013, Kennedy 2013); others that ‘find’ allows PPTs and positive-form RGAs (Sæbø 2009, Bouchard 2012) but disallows non-PPT evaluational adjectives (McNally & Stojanovic 2017); still others that ‘find’ allows PPTs, multidimensional non-PPT evaluational adjectives, and positive-form RGAs (Bylinina 2014, 2016). According to Kennedy & Willer 2016, a complement can be licensed only if it’s presupposed that its truth-value is underdetermined by both the “objective facts of the world” and “arbitrary matters of linguistic practice” (p. 917). (Terminology varies among authors; see also nn. 6, 12.)

39 In H. McLean In Quest of Tolstoy, 8 (left/right parentheses added).
(91) [Context (n. 40): discussing the morality of watching TV shows with sexual content, \( B \) says, “Do you think that the viewers of Naked and Afraid find blurred out bits titillating?”; \( A \) replies, “No I don’t…”]
\[ A: \quad \text{“I find them sinful.”}^{40} \]
\[ A': \quad \text{I find them more sinful than swears.} \]

(92) [Context: see (25)]
\[ A: \quad \text{I find Pat well-off.} \]
\[ A': \quad \text{I find Pat more well-off than Sal.} \]

(93) [Context: see (26)]
\[ A: \quad \text{I find peace likely.} \]
\[ A': \quad \text{I find peace more likely than war.} \]

The broader spectrum of examples is problematic for existing typologies and accounts of ‘find’. Not all of the adjectives felicitously embedding under ‘find’ need be intuitively classified as subjective or as concerning matters of taste. The interlocutors in (90)–(93) might be thoroughgoing realists about aesthetics, morality, welfare, probability (contrast e.g. Bouchard 2012: 10, Kennedy & Willer 2016: 914, 917, 928, Coppock 2018: 126–127; cf. §4). Perhaps at the end of the theoretical day we will recover a notion of subjectivity which our use of ‘find’ is tracking. But we shouldn’t expect a pretheoretic notion of subjectivity to play a fundamental explanatory role in the lexical semantics of ‘find’.

There is a salient contrast between (94) with ‘taller’, which is infelicitous, and (87)–(93): the embedded clauses in (87)–(93) are interpreted with respect to a contextual perspective or degree standard (and in some cases perhaps an independent dimensional element) (§§2–3).

(94) #I find Bert taller than Ed.

This might seem to suggest that sensitivity to a contextual parameter is what licenses embedding under ‘find’. However, simply saying this would fail to exclude examples with paradigm context-sensitive expressions like (11), reproduced in (95) (cf. (86a)). (95) is infelicitous even though the complement includes the definite description ‘the number’ and is sensitive to (something like) a contextual salience ordering on numbers; likewise for (96) with ‘the prime number between 20 and 25’.

(95) #Fritz finds the number prime.

(96) #Fritz finds 23 the prime number between 20 and 25.

Importantly, not all uses of ‘tall’ in the positive form are felicitous under ‘find’ either. *Purely descriptive* uses—uses which don’t distinguish among live degree standards, and distinguish among worlds solely with respect to their extra-contextual features—are infelicitous:

(97) [Context: It’s common ground that the standard for tallness is 6’. We’re talking about how much Juan grew over the summer.]
\[ A: \quad \text{Juan isn’t tall. He’s only 5’7”}. \]
\[ B: \quad \text{#You might not find Juan tall. But I find him tall.} \]

\(^{40}\)forums.catholic.com/t/is-it-okay-to-watch-naked-and-afraid/375875/34
This suggests that what is relevant for licensing under ‘find’ isn’t semantic context-dependence but a certain sort of use of context-sensitive language. Informally put, the use must be such that updating with the complement would adjust live values for a contextual parameter. This is the same familiar kind of use observed in our discussions of the discourse dynamics (§§2, 3.4). Generalizing our treatment of discourse-oriented uses from §3.4, call a use of \( \phi \) “\( g_{cw} \)-oriented” if updating with \( \phi \) would non-trivially distinguish among worlds \( w \) in the context set based on features determining the representation of context \( g_{cw} \) in those worlds. The above licensing condition can be put as follows: In order for ‘\( S \) finds \( \phi \)’ to be felicitous, the complement \( \phi \) must be used in a \( g_{cw} \)-oriented way.

Note that the representation of context targeted in felicitous uses with ‘find’ needn’t be the representation of the discourse context (“global context”). In (98) it is common ground that the painting is beautiful, i.e. that \( \[ \langle \text{the-painting} \rangle \]^{k} \) meets the degree standard for beauty. What is at-issue is what Katie’s aesthetic perspective is like.

(98)  

\begin{align*}
\text{Me:} & \quad \text{We all agree that the painting is beautiful. What does Katie think?} \\
\text{You:} & \quad \text{Katie finds it beautiful too.}
\end{align*}

Your use of the complement in (98) is felicitous insofar as it distinguishes among live values for \( B_{k} \) determined in a relevant local (“derived”) context—here, the local attitude context representing Katie’s state of mind (cf. Stalnaker 1988, 2014, Heim 1992, Truckenbrodt 2006, Silk 2016, 2017b). The utterance distinguishes among worlds in the context set based on features determining the representation of Katie’s state of mind in those worlds.

The proposed felicity condition for ‘find’ can be formalized as in (99) (n. 6)—where, for any world \( w \) in the context set \( CS \), \( W_{w} \) is an equivalence class of worlds in \( CS \) with the same relevant extra-contextual features as \( w \); \( g_{cw} \) represents the conversational situation in \( w \); and \( g_{Su} \) represents \( S \)’s state of mind in \( w \).

(99)  

\begin{align*}
\text{An utterance of ‘\( S \) find(s) \( \phi \)’ is felicitous only if:}
\begin{enumerate}
\item[i.] for some \( u \in CS \), \( \langle \phi \rangle^{S_{u} \cdot u} = 0 \), and
for some \( v \in W_{u} \), \( \langle \phi \rangle^{S_{v} \cdot v} = 1 \)
or
\item[ii.] for some \( u \in CS \), \( Dox_{S_{u} \cdot u} \not\subseteq \langle \phi \rangle^{S_{u}} \), and
for some \( v \in W_{u} \), \( Dox_{S_{v} \cdot v} \subseteq \langle \phi \rangle^{S_{v}} \).
\end{enumerate}
\end{align*}

This says that ‘find’ is felicitous only if the use of the complement distinguishes among live representations of context, local or global.

The above account of embedding under ‘find’ makes no reference to notions such as subjectivity, discretionariness, attitude-/experience-dependence, or disagreement (faultless or otherwise, actual or anticipated). Uttering ‘\( S \) finds \( \phi \)’ needn’t imply that one takes the truth of \( \phi \) to be “somehow ‘up to [\( S \)]’” (Kennedy & Willer 2016: 914) or contingent given “all non-subjective facts” (Bouchard 2012: 10)—or indeed that “neither the facts of the world nor the conventions of linguistic practice that support coordination by stipulation provide a basis for asserting or denying [\( \phi \)], and further that the experiential/perspectival factors relevant for evaluating its truth are indeterminate” (Kennedy & Willer 2016: 928; cf. Coppock 2018: 126–127, n. 38). It implies that, for all that has been presupposed in the
conversation, the concrete context $c$ might determine a representation $g_c$ with respect to which $\phi$ is false. This condition might be satisfied because of disagreement over the value of a relevant contextual parameter, but disagreement isn’t necessary; consider (90), or the additional naturally occurring example in (100).

\[(100) \quad \text{[Context: from the comments on a blog post by A titled “A Beautiful Fall Day in Berlin”]}\]

B: “It’s autumn here, too […] Autumn is my favourite time of year.”
A: “I think it’s mine too. I find it beautiful and romantic!”\(^{42}\)
A’: I find autumn more beautiful than winter.

Let’s apply the formalization in (99) to certain of our examples. Start with the infelicitous use with ‘tall’ in (97). Slightly modifying the case, suppose the prior context set $CS$ is $\{u, v, z\}$: Juan is 67″ in $u$ and $v$, and Juan is 76″ in $z$; the conversational situation in $v$ determines a degree standard for tallness of 73″, i.e. $\langle g_{s_5} \rangle = 73$, and the conversational situation in $u$ and $z$ determines a degree standard for tallness of 72″, i.e. $\langle g_{s_2} \rangle = 72$. (Here and in what follows, assume that the worlds are otherwise equivalent; and continue to use numbers to represent degrees.) Uttering ‘I find Juan tall’ is correctly predicted to be infelicitous in the context since the complement $\phi$ is false at a world in $CS$ only if it’s false at every world in $CS$ with the same extra-contextual features: $\phi$ is false precisely at $\langle g_{s_5}, u \rangle$ and $\langle g_{s_2}, v \rangle$, and $W_v = W = \{u, v\}$. By contrast, uttering ‘I find Juan tall’ in a context such as (12) is predicted to be felicitous. Suppose now that $CS = \{u, v', z\}$, where in $v'$ Juan is again 67″ but the conversational situation determines a standard for tallness of 65″, i.e. $\langle g_{s_1} \rangle = 65$. Condition (i) in (99) is satisfied since $\phi$ is false at $\langle g_{s_1}, u \rangle$, and $\phi$ is true at $\langle g_{s_1}, v' \rangle$, where $v' \in W_v$.

Next, uttering ‘I find the cake tasty’ in the context from (70), partially reproduced in (101), is also predicted to be felicitous. Every world in the context set is equivalent in its extra-contextual features, so $W_w = CS$ for any $w \in CS$. Condition (i) in (99) is satisfied since (e.g.) the complement clause is false at $\langle g_{c_5}, w_1 \rangle$ and true at $\langle g_{c_2}, w_2 \rangle$.

\[(101) \quad \text{[Context: see (70)]} \]

\[
\begin{align*}
    w_1: & \quad \llbracket \mathbf{T}_e \rrbracket = T_5 & \llbracket \mathbf{g}_{s_1} \rrbracket = s_7 \\
    w_2: & \quad \llbracket \mathbf{T}_e \rrbracket = T_8 & \llbracket \mathbf{g}_{s_2} \rrbracket = s_7 \\
    \vdots
\end{align*}
\]

Whereas the complement in the above felicitous example with ‘tall’ distinguishes worlds $u$ and $v'$ vis-à-vis the standard for tallness determined by the concrete discourse in those worlds (i.e. 72 vs. 65), the complement in the felicitous example with ‘tasty’ in (101) distinguishes e.g. $w_1$ and $w_2$ vis-à-vis the determined tastes, i.e. the live tastes to endorse for purposes of conversation represented by $T_5$ and $T_8$. The loci of context-sensitivity may differ, but the formal diagnosis of their felicity under ‘find’ is the same (contrast Fleisher 2013): the uses of the complement distinguish among live representations of context.

Finally, consider the third-person example in (98). Suppose that the context set is $\{u, v\}$, where $u$ and $v$ are identical except for the state of Katie’s state of mind, specifically her tastes; and assume for simplicity that Katie’s states of mind in $u$ and $v$ can be represented by assignments with the same relevant features as $g_{c_1}$ and $g_{c_2}$ (respectively) from (101), i.e. that $g_{K_u} = g_{c_1}$ and $g_{K_v} = g_{c_2}$. Assuming that the cake’s physical properties are the same across Katie’s belief-worlds, the semantic value of the complement $\phi$ in $g_{K_u}$, $\llbracket \phi \rrbracket$, is the empty set of worlds; and the semantic value of $\phi$ in $g_{K_v}$, $\llbracket \phi \rrbracket$, is

\(^{42}\) cherylhoward.com/a-beautiful-fall-day-in-berlin
the set of all worlds. So, disjunct (ii) in (99) is satisfied: Katie’s belief-worlds in \(v, \text{Dox}_K, v\), are included in \([\phi^{g_K}v]\), and Katie’s belief-worlds in \(u, \text{Dox}_K, u\), aren’t included in \([\phi^{g_K}u]\).\(^{43}\)

This section has examined how the treatments of context-sensitivity in uses of adjectives from §§2–4 may shed light on diagnostics such as embedding under ‘find’. I suggested that we explain felicitous embedding under ‘find’ not in terms of some independent notion of subjectivity, but in terms of a general kind of use of context-sensitive language—indeed the same kind of discourse-oriented use discussed in §§2, 3.4, generalized here under the heading of “gcw-oriented use.”\(^{44}\) I hope the preliminary discussion here may provide a richer body of data for future accounts as well as a fruitful framework for theorizing about these data.

6 | CONCLUSION

This paper has delineated a theoretically interesting class of adjectives, which I called evaluational adjectives. This class includes predicates of personal taste as well as adjectives expressing various kinds of normative and epistemic evaluation, such as aesthetic, moral, and epistemic adjectives, among others. Evaluational adjectives are distinguished semantically in being sensitive to a perspective of evaluation—a contextually determined body of tastes, values, norms, etc. which evaluates how tasty, beautiful, likely, etc. things are. On the degree-based implementation developed here, perspectives are represented with contextually supplied measure functions. No particular mapping from items to degrees of taste, beauty, probability, etc. (depending on the adjective) is determined by the adjective’s conventional meaning. The semantic perspective-sensitivity characteristic of evaluational adjectives cannot be assimilated to vagueness, standard-sensitivity associated with the positive form, sensitivity to a thematic experiencer argument, or multidimensionality; and it needn’t be conceived in terms of pretheoretic notions of subjectivity (“opinion,” “discretionariness”), common in previous accounts. Delineating semantic, metasemantic, and metanormative issues can free up our linguistic and philosophical inquiries and elucidate more fruitful directions for theorizing. Rather than giving fundamental explanatory weight to a notion of subjectivity, I suggested analyzing data involving the discourse dynamics and embedding under ‘find’ in terms of a precise, independently attested kind of discourse-oriented use of context-sensitive language. The proposed formal semantics and pragmatics improves in empirical coverage and promises a more explanatory account of the broader spectrum of adjectives and uses.

Our discussion has raised various questions for future research. For instance, in §2 we observed cases of apparent sorites-susceptibility with evaluational adjectives in the comparative form. It is non-trivial how familiar accounts of vagueness phenomena with positive-form predicates may be extended to such comparative cases. The issue is particularly pressing in traditional semantic frameworks for gradation where the problematic transitivities are effectively hardwired into the scale structure (as in degree-based approaches) or qualitative orderings on individuals (as in delineation-based approaches) (see Silk 2016, 2017a). Second, although felicitous embedding under ‘find’ is possible across RGAs, evaluational adjectives, and multidimensional adjectives (§§2, 3.3, 5), not all embeddings are equally well attested. Detailed investigation of distributional differences among context-sensitive expressions

\(^{43}\)Though we have abstracted away from world-indexing standards and perspectives, one may assume here for simplicity that the values for the relevant variables deliver the same taste perspectives and standards across worlds, e.g. that \([s_{\langle \text{ed}, d \rangle}]^u = [s_{\langle \text{ed}, d \rangle}]^v\) for any relevant worlds \(u, v\).

\(^{44}\)See Silk 2014, 2016, 2019a for additional discussion and examples with context-sensitive language generally.
under ‘find’ and other related verbs is called for.\textsuperscript{45} Third, our primary focus has been on what unifies evaluational adjectives in the formal semantics. §§2.3, 3.3, 4 briefly flagged possible differences in argument structure and outlined conversational explanations for certain discourse differences among them. The interactions with multidimensionality and experiencer-dependence warrant careful independent examination. Comprehensive investigation of grammatical, lexical, and discourse differences among the adjectives is needed.

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