Against degree-based semantics for taste

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1 Introduction

Predicates of personal taste (PPTs, henceforth) seem to be a relatively recent focus for semanticists. Some features of the interpretation of adjectives such as 'tasty' or 'delicious' are currently receiving increasing attention. Recent formal models for the semantics of PPTs draw from semantics developed for other vague expressions, namely for relative gradable adjectives (RGAs, henceforth) such as 'tall' or 'expensive', and are particularly concerned with the subjective dimension entering in the utterance/interpretation of taste judgments.

These degree-based theories model the meaning of adjectives like 'tasty' as degrees on a subjectively determined scale. Orderings of degrees, intervals, or measure functions — prominently used for modeling the meaning of RGAs — are employed in models for the interpretation of PPTs. As the subject is taken to be the source of these structures, the judge in a context becomes an essential element in determining the meaning of PPTs. This is also intended to shed light on cases where the interpretation of utterances of taste judgments seem to involve borderline cases, tolerable alterations, or apparent incorrigibility.

Naturally, those who employ degree structures for the semantics of PPTs do not thereby claim that the semantics of these predicates is identical to that of RGAs. We will describe the main features and differences between degree-based models for these classes of expressions. Nevertheless, the use of the same kind of structures presupposes that PPTs taste and RGAs are sufficiently similar to allow for an account that relies on the same basic concepts. Against this, we claim that such a treatment leads to incorrect predictions for judgments of taste. We will focus here on the intelligibility and coherence of the logical, epistemological, and pragmatic assumptions these models make regarding the role of subjectivity, comparisons and measurements, and comparison classes. This will lead us to some open questions regarding the use of degree-based structures to model RGAs.

At this point, we should make clear the limitations of the current investigation. We focus in this paper on two examples of degree-based models for PPTs but the arguments we will give apply to this approach in general, i.e., beyond
the particular theories described here. Another word of warning: the models we will present mostly deal with PPTs as related to gustatory experiences. We consider this a very narrow account for the semantics of adjectives like ‘tasty’, as the predicate can appear in related but broader contexts such as “a tasty recipe”, or when it is informally used to describe someone who is sexually attractive. However, in this paper we will not contest this focus. Last but not least, we do not claim that the theories we examine are mutually exclusive; as we will see, there share various features and receive common objections.

2 Affinities between ‘tall’ and ‘tasty’

In this section we list some prominent features relating RGAs and PPTs. PPTs are classified as gradable and as relative adjectives, they are vague, and they allow for interactive phenomena such as faultless disagreements. This should put in context the use of degree-based models similar to those given for adjectives like ‘tall’ to model predicates like ‘tasty’.1 RGAs and PPTs seem to be foremost connected by the fact that predicates like ‘tasty’ satisfy basic criteria to identify gradable adjectives.2

1. They can occur in predicative position, i.e., after copular verbs: “John is tall” and “The wine is tasty”. (Contrast this with “John is former.” (##))

2. They can be preceded by degree modifiers: “John is very tall” and “The cake was too sweet”. (Contrast this with “The concert was very excellent.” (##))

3. They allow the comparative and superlative forms: “John is taller than Mary” and “Chocolate is tastier than rice pudding”, “This is the tastiest Languado I’ve ever tried”.

(Contrast this with “Obama is more presidential than McCain.” (##))

Satisfaction of these features leads to classify PPTs as under the wider category of gradable adjectives. Now, as gradable adjectives have been classified into relative and absolute,3 adjectives like ‘tall’ and ‘tasty’ are grouped under the relative side of the division. The possibility to construct comparatives ‘taller’, ‘less tasty’, ‘as tasty’) helps to tell apart relative gradable adjectives from absolute ones. As a test, consider the difference between these two utterances:

- Absolute: “My glass is full but it could be fuller.” (##)

A reader of Glynnberg (2007) might find this section rather trivial, as he straightforwardly assumes that PPTs are gradable adjectives, and he even deploys Kennedy (2007)’s theory of PPTs and RGAs is precisely not to take their relation as straightforward, and instead


3 Cf. Kennedy and McNally (2006), Kennedy (2007). We do not claim here whether particular formal theory to predict this difference is right, but we do want to endorse the distinction he proposes.

- Relative: “The box is heavy but it could be heavier.”, and “The cake is tasty but it could be tastier.”

A further common aspect is the existence of a lexical unit related to the adjective: we can speak about tastiness or about tallness (or height), and at least in English they are both formed as derived nouns via a suffix morpheme, i.e., they take the form ADJ+n. In principle, this should not imply anything about the nature of the associated concept; more specifically, this commonality does not entail that both adjectives are one-dimensional or multidimensional. In fact, there are reasons to believe ‘tasty’ is multidimensional, but this is not a matter to settle here.4

PPTs and RGAs are also related by their vagueness. RGAs are one of the most prominent classes of expressions that the literature on vagueness in semantics the mere consideration of this has tried to deal with.5 The meaning of these adjectives requires the specification of a context in which the predicate is applied, so that the same object or individual might fall in the extension of the adjective in a certain context but not in another. Adjectives like ‘tasty’ are very frequently used, but what makes an uttered statement expressing a taste preference true is notoriously variable. The recent literature in semantics mostly highlights the dependency on the evaluation of such reports on a judge, either the speaker or another subject. Other elements in the context of utterance are also responsible for the variability in the assessment of such statements. Just as an illustration, consider the difference between how likely it would be to endorse A’s and B’s utterance:

Dialogue (Taste and context)
A: Stout beer is tasty!
B: Stout beer is tasty for breakfast!

Another vague feature in PPTs is the existence of borderline cases. As with ‘tall’, there are things of which we can say they are clearly tall, some things which are clearly not tall, and a number of cases that are undecided. Unlike with RGAs like ‘tall’, part of this area in the case of ‘tasty’ is related to the experience-based nature of taste judgments; of what we have never tried before, we are not able to report whether we find it tasty. Yet, even things we have savoured, we might not want to classify in either the extension or the anti-extension of the adjective.

Both RGAs and PPTs allow ‘faultless disagreements’. After Köbbel (2004), this is the common name for situations in which a speaker and a respondent’s claims are opposed but none of which seems prima facie wrong or corrigible. It is easy to find examples of discussions in which the characteristic clash in the application of vagueness RGAs is responsible for a dead point for the dispute, Richard (2004) points out that RGAs display faultless disagreement; he notes,

4 Glynnberg (2007) takes ‘tasty’ to be multidimensional, but this assumes that PPTs are indeed RGAs, and this is precisely the point that we try to show to be problematic.

5 We can consider Fine (1975), Kemp (1970), Klein (1986) as the core of the approach we are referring to, but this is still an active area of research.
moreover, that (maybe all) vague predicates can show this effect. We can see pose A utters: “This Chablis is tasty!”; and B opposes to this saying: “No, it is nonetheless antagonistic. The stagnancy of this dialogue, reminiscent to that to believe alike.

Now, we should note two differences between RGAs and PPTs which will not be vague, a comparative judgment of the form “A is tastier than B” is no less related to RGAs such as “tall” is quantifiable by methods upon whose validity many affinities between RGAs and PPTs, the attempt to try and construct similar theories to calculate the meaning of each appears to be motivated.

3 Two degree-based models for taste

We will provide a basic description of Kennedy’s (2010) and Sassoon’s (2009) degree-based models for PPTs, highlighting their common features and divergencies. For reasons of spaced techniques are condensed to a reconstruction of the central concepts in their theories. Semantics who endorse degrees to account for RGAs tend to diverge when defining how the scale underlying the predicates’ measurements is formed, what kinds of measurements are needed in order to accommodate distributions in PPTs. Degree measurements functions which operate on a dimension associated to the predicate. PPTs such as ‘tasty’ — just like ‘tall’ — map arguments to numerical degrees with a plus (or difference) operation defined on them. In a given context, these functions determine the extent to which objects possess some gradable property.

The interpretation of the positive form involves a relation between the function’s degree measurement of the ADJ-ness found in the object, and a context-dependent standard associated with the property. For both authors, PPTs in the positive form are represented as headed by a null morpheme that has the same sematic function as overt degree morphology, it relates the degree argument of the adjective to an appropriate standard or threshold degree determining the positive and negative extension of the predicate.

Kennedy assumes that subjectivity in evaluative predicates involves a difference in how individuals order things, and he makes a distinction between dimensional and evaluative RGAs. With this distinction, the author provides an analysis of the difference in the use of predicates like ‘salty’ in contexts of measuring the salt content vs. tasting dishes in terms of an ambiguity in the adjective. To motivate this, he refers to Serbs (2009) to claim there is a difference in the embedding of these predicates under the attitude verb ‘to find’ (as in “The airline finds this bag ?Heavy/unsusceptable” and “Anna finds her bowl of pasta tasty”). He also notes that subjectivity in explicit comparisons is lost in the case of dimensional predicates but is retained the case of PPTs, as we have described in the previous section.

The model Kennedy proposes adapts his work with McNally (2010) on semantics for gradable colour words, suggesting that PPTs and other evaluative predicates are analyzed in the same way. For Kennedy (2010), a PPT like ‘salty’ presents these two readings; while the quantity reading — implemented with the function quant — measures the amount of salt that a dish actually contains, the quality reading — implemented with the function qual — involves a measurement of how closely an object’s taste approximates or diverges from a contextually given standard. But qual for PPTs introduces judge-dependence as with a judge parameter to represent the fact that qualitative assessment is judge-dependent. Thus, for ‘salty’, quant measures the amount of salt in an object, and qual measures how closely the object’s saltiness approximates the judge’s standard. Stand is defined as a relation which requires a degree to meet or exceed a norm or average on the scale based on the comparison class provided

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5 A well known — albeit debatable (See e.g., Luce (1992) and Velleman & Wilkenson (1985)) — classification is due to Stevens (1946). He proposed to break down measurement into five types, of which four appear to be related to the meaning of RGAs. Sassoon in nominal scales, and the degree function ranks objects in the domain of the structure. As example could be the ranking of candidates in a scale that assigns the same one-to-one relation between comparative among objects equal differences represent equivalent intervals. Additional subtraction can be performed on each value and/or multiply each value by a constant. Examples are the Celsius and the Kelvin scales. Ratio scales preserve ratios, a proportion among them is preserved under transformations that preserve the rank, producing and comparing among corresponding scale values. Interval scales of course cannot be performed on the scale. Ratio scales preserve ratios, a proportion among them is preserved under transformations that preserve the rank, producing and comparing among corresponding scale values. Interval scales scale data by a constant. Ratio scale data have a defined zero, which may not be changed.

6 Following Kennedy (1998)’s approach to RGAs.

7 Following Kennedy (1998)’s approach to RGAs.

8 Kennedy & McNally (2010) claim that colour words have a quantity reading that measures a property of the object that is relevant, like “Pink painted the leaves part/half/complete green”, and a quality reading which involves an object comparison or diverges from a “center” or prototype, as in “I see that your leaves are all completely painted, but some are greener than others. Try to ensure that the colors are identical.” Although the authors refer to the quantitative and qualitative readings of colour words ‘gradable’ and ‘incomparable’. Nevertheless, the definitions given for gradable still fall into the characterizations of degree-based models we started with.
by the context.\textsuperscript{10} In the case of ‘tasty’, only the qualitative reading seems to be available.

Formally, $j$ is a judge, $c$ is a context:

\textbf{Definition (Kennedy’s positive form for PPTs) }

\begin{align*}
[salt\text{quant}] & = \lambda j . \text{quant}(salt)(j)(c)c > \text{std}(\text{quant}(salt)(j)) \\
[salt\text{qual}] & = \lambda j . \text{qual}(salt)(j)(c)c > \text{std}(\text{qual}(salt)(j)) \\
taxy\text{qual} & = \lambda j . \text{qual}(taxy)(j)(c)c > \text{std}(\text{qual}(taxy)(j))
\end{align*}

Sassoon takes instead a non-relativistic approach, but presupposes that in the actual world there might not be a single unique interpretation of PPTs with partial contexts $i$ in Kamp (1975). $T_i$ is the set of contexts or completions in which every statement is either true or false—consistent with the information in the current partial context $c$. Each taste measure $f(tasty,t)(x)\text{ assigns values in the real numbers to an object }x\text{ with respect to an individual’s completion taste-completion }t$.\textsuperscript{11} Sassoon does not provide in (2009) a specific account of std(tasty,$t$), the standard of membership for an individual’s taste. If the way to proceed is that found in Sassoon (2007), then we should find the mean degree among the objects in the domain which we find tasty.

Crucially for Sassoon, none of the interpretations given by these degree functions corresponds to the inter-personal one, and people’s pragmatic processing of taste reports to a set of completions representing an individual’s taste functions and/or cut-off points. These restrictions might be explicit in the grammar of a statement, or implicit in a context. When implicit, they tend to be the default interpretation of non-contentious adjectives in a dialogue. Formally,

\textbf{Definition (Sassoon’s positive form for PPTs) }

A: [For A] The cake is tasty.

\textbf{Semantic analysis} 

For all $i \in T_t$, $f(tasty,t)([[\text{The cake}]]_i) > \text{std}(tasty,t).

\textbf{Pragmatic analysis} 

(a) For all $i \in T_t$ such that the values of $f(tasty,t)$ and $\text{std}(tasty,t)$ represent

A’s taste in $i$, $f(tasty,t)([[\text{The cake}]]_i) > \text{std}(tasty,t).

Sassoon represents faultless disagreements as lack of pragmatic accommodation of implicit restrictions in the taste measures relevant for a completion in a indeterminacy regarding the degree function that PPTs denote. For Sassoon, individuals learn about other people’s particular tastes through individual eating experiences, based on which generalisations on taste can be inferred.

\textsuperscript{10} Kennedy & McNally (2005)

\textsuperscript{11} This follows Kennedy (1999)’s analysis of ROAs.

4 Assumptions of degree-based models for taste

In a nutshell, our main objection to this approach is that the use of degree-structures is at odds with the goals degree theorists set for their models, namely to represent the peculiar subjectivity involved in the semantics of PPTs, and to make sense of the evaluations expressed in taste reports. Some of the concepts that come with an ontology of degrees underlying the meaning of these predicates conflict with the epistemological level with the form of subjectivity that is characteristic for these predicates.

We will see that degree-models work by way of scales, measure functions, and standards. Yet these notions require a stable basis that cannot hinge on a purely subjective determination. We will also observe issues derived from the priority of comparisons in taste appreciation assumed by these models. Finally, we will point out inadequate predictions related to the role of comparison classes in setting the value of the standard needed for taste appreciations.

4.1 Measurement and subjectivity

We first argue that scales used in degree-based models presuppose a form of measurement to secure a unit or basic element forming degrees. We will show that the normativity of measurement is incompatible with the essential subjectivity underlying the definition of these functions according to Kennedy’s and Sassoon’s models. This will result in a more general objection that applies also to models other than those we focus on.

Degree-based theories claim that degree-functions are adequate to model the behaviour of taste evaluations in natural language. Now the mathematical notion of a degree function involves at least two forms of constancy. First, a function requires a unique assignment of a value. Second, degree-functions assign this values with respect to scales. As we have already noted, the use of scales presupposes a correct assignment of values by the degree functions, whatever option is taken for a scale.

One could immediately ask whether it makes sense to posit a unit, a measurement, or constant magnitude related to our taste experience (even if this is reduced to gustatory pleasure). Although neural correlates of sensorial experience on a tongue can and have been measured,\textsuperscript{12} if these are the measurements underlying the interpretation of PPTs, two critical remarks follow. On the one hand, the reduction of the semantics of PPTs to concomitant neural activity

\textsuperscript{12} Nothing hinges on this type of an analysis of gradability. If an analysis without degrees can be made to work out, then probably it can also be made compatible with the present proposal,” Sassoon (2009), p.139.

\textsuperscript{13} Cf. Lampl (1997).
would be part of a certainly debatable naturalizing enterprise. On the other
hand, this boltdown of our phenomenological experience of taste to concomi-
tant neural activity stands on an arguable neurophysiological reduction of our
cognitive and emotional activity.

However, if instead this unit or constant magnitude is related to our embod-
ied qualitative experience, our previous philosophical reaction is not adequate
to make this assumption. Observe that for Kennedy and Sassoon experience
preferences. For Kennedy, subjectivity in evaluative predicates such as “tasty”
comprise the relevant judge’s experience of tasting dishes.14 According to Sa-
sensory experience”. So, it would seem that Kennedy and Sassoon claim that
access to the experience of appreciating a product’s taste, which for Sassoon re-
come with external manifestations, with behavioural traces that other people
of that product. Certain facial expressions and physical postures tend to be cur- does not seem to deny this, Sassoon does, and this is an issue. Sassoon’s “case-
that we often see that someone evaluates a product as tasty, we do not make

Yet, Kennedy would demand the interpreter of a 3rd-person report knowl-
edge of whether s/he has indeed tasted the product under assessment. This
by an addressee of a taste report made by a speaker. Suppose A and B have just
met, they speak for the first time. If A, the speaker, determines how the valua-
tion function should be constructed, how does B, an addressee, check whether
her interpretation is correct, i.e., whether she constructs the valuation for ‘tasty’
according to the speaker’s scale? If the addressee can only construct a judge-
standard? According to Sassoon, we infer other people’s taste preferences by in-
ferences are defeasible, how do they get defeated if her interpretation of taste reports is
always anchored on her own experience?

Now, we come to the crux of a more general argument. Measurement is a
normative practice. Assignments of various kinds of degree functions have strict
determination of the amount or intensity in which taste or other property is
qualitatively experienced hinders the possibility for this magnitude or process
to be stable in general, for the values in the scale to be such as required by the

14 For Kennedy (2010), the following statement is infelicitous if Anna has not tasted the

function’s definition. The hindrance appears in two flanks.

First, it is conceptually problematic to claim, at the same time, that sub-
jects need to determine the value of an object’s degree of taste to interpret a
taste report, and that the operation of measurement or designating is entirely
subjective, basically because subjectivity and normativity are in conflict. Mea-
urement with one yardstick can be used to share the results of measurement
with others thanks to a consensus on how to calculate their length.15 In the case
of taste, there is no such consensus, such settled method, neither interpersonally
nor intrapersonally.

Second, if an individual can arbitrarily declare a product x in a context c
to have degree d of taste, how can a judge check if the ranking, unit, ratio,
and/or designation system are preserved? How could a single individual keep track
of his past measurements of taste in order to settle a proportion or a constant
necessary for a scale? The judge would have to retain the outcomes of his
estimations in order to induce a scale with which gradation in taste could make
sense. However, if memories of the intensity of past appreciations are not kept
by relating them to a settled scale, they can change as they are recalled, e.g., if
when recalling them we do so by relating them to a new, different scale.

More generally, our observation highlights the conceptual untenability of a
purely subjective epistemic access to the scale in which taste is measured. A
good modeling of communication turns out to be problematic if, as Kennedy,
Sassoon and others assume, production and interpretation of taste reports is so
strongly anchored in the 1st-person perspective. Cases of agreement or disagree-
ment in assessment would ultimately be cases of miscommunication, which turns
these exchanges into somewhat irrational actions. Beyond the case of Kennedy
and Sassoon, interval scale degree-based theories for RGAs are not a framework
to deal with PPTs. If taste reports presuppose an ordering dimension on which
subjects perform measurements, these cannot be just up to individual subjects.

4.2 Comparisons and taste

For Kennedy and Sassoon, comparison is basic in the interpretation of PPTs
in positive form. They analyse the meaning of ‘tasty’ as a comparison with a
standard. However, it is not clear whether it makes sense to maintain that a
standard of taste may exist for just one individual, as their models represent,
or how we can plausibly find this standard required for producing/interpreting
taste reports. Further questions are raised about how the comparison might be
performed, and why it would be nonetheless different from the case of compari-
sons underlying the positive form for RGAs.

Let us start by exploring what these authors might mean by a standard
or prototype underlying the interpretation of ‘tasty’. For Kennedy, std is

15 Cf. Wittgenstein (1969) § 193. One could try to argue that the judge’s scale is uniformly
constructed so that each ensouled product in the ordering is equidistant from its immediate
neighbours, and that he is aware of this. But this begs the question, as awareness of the uni-
formity in the distribution presupposes that he can check that elements in the scale equidistant,
which requires a unit of measurement.
a relation which requires a degree to meet or exceed a norm or average on the scale based on the comparison class provided by the context. Already for the case of RGAs there has been criticism on the average view on standards. Kennedy (2007) himself critiques Bartsch & Vennemann (1972)’s idea that the standard is given by the average of the relevant comparison class. So let’s suppose that Kennedy goes along the lines of (2007) assuming that a standard degree is given by a context-dependent norm which determines that all objects in the ordering with at least that degree of the property — taste — are also considered to have that property. As it seems, these context-dependent norms operate on the judges’ orderings, and on nothing else. There is no impediment, though, on two judges having identical orderings. Now, if these norms are interobjective, then if a speaker and an addressee in a discourse have the same orderings in that context, how could they have different values? But if the norms are subjective, it turns out that they essentially prevent any other judge to abide by its constraints. This is a dead end, at least insofar as norms require a community of application to be such.

Now, in the case of Sassoon it is not entirely clear how she proposes to compute $\text{std}(\text{tasty}, t)$ at a given completion $t$. If the way to proceed is that found in Sassoon (2007), it seems this is a problematic discourse:

**Dialogue (A new standard)**

A: “I had never tried such a tasty cake. It is my standard of taste!”

The minor problem is that a mean does not yield a good result; if no entity in the comparison class is judged as tasty as the cake in this occasion, then the mean cannot surpass the cakes degree of taste. The major problem is the cyclicity in which we incur: to find the standard, we need to evaluate which objects in the domain we find tasty, which in turns calls for knowing the standard of taste in this context, and so on and so forth.

It is worth adding a note to another — but related — approach to the question about the standard. Some authors ask us to compare it to the case of unit values for weight or height — like the kilogram or the metre. We have already argued against the idea of a scale associated with taste in the previous section. In any case, for the metre we agree that the value for the standard is arbitrary, but we do not disagree on how to use it as a reference. Two copies of the standard metre are indisputably longer than a single copy. In the case of taste, we could agree on the arbitrary value we associate with the gustatory experience, but we can surely disagree on how to use this as a reference. The fact that we disagree on the value of a similar gustatory experience cannot be resolved indicating the degree $d$ of the previously assessed experience.

Now, if we grant the degree theorists that we can indeed find a standard as they require, we can still ask how we are supposed to proceed in the comparison between the standard and the degree of taste of the object under evaluation. Suppose we compare degrees. Then to interpret taste reports such as “The cake is tasty”, it is necessary to:

(a) Calculate or recall the standard’s degree for “tasty”,

(b) Observe the degree of taste in the current object of appreciation,

(c) Notice a difference.

While the order between (a) and (b) can change, (c) should come after these two steps are performed. This brings in a number of questions. First, what prevents the judge from miscalculating or from wrongly recalling the standard’s degree? How can a mistake be detected? If no mistake can be detected, then there is no point in arguing this is a standard related to a comparison class, let alone to argue that the comparison between its degree and that of the current object can give indications of a judge’s preferences. We have already pointed out our suspicions for the claim that judges in these models indeed determine degrees in scales. A further point is that the order of application of (a) and (b) could be expected to bias the difference found in (c). Yet neither Kennedy’s nor Sassoon’s models seem to accommodate this. Last but not least, performing (a)-(c) implies cognitive demands — memory and degree discrimination — for which no evidence is provided.

To argue that we nonetheless compare states of mind is not a good escape, since this would require to show first that taste appreciation leads to states of mind, that we can keep track of these, and that we can have more than one of these states present simultaneously in order to observe them.

A further issue with (a)-(c) is that its application for RGAs such as ‘tall’ is articulated so that minute differences turn out to be negligible. In the case of RGAs such as ‘tall’, minute differences are precisely understood not to count — this is the challenge posed by the Sorites paradox —, and models for these adjectives are designed so that the small changes along the forced march are negligible. However, it does not seem obvious to claim that PPTs should have a similar treatment, i.e., that PPTs satisfy the so-called similarity constraint.

When $x$ and $y$ differ to only a very small degree in the property that a vague predicate $g$ is used to express, we are unable or unwilling to judge the proposition that $x$ is $g$ true and that $y$ is $g$ false.

Now, if for ‘tasty’ minute differences might change, the comparison in (c) must have as input very precise degree evaluations for the standard and for the object under appreciation, yet another implausible demand for meaningful talk of degrees in taste assessment. Another issue for these theories would be to accommodate cases in which a judge’s standard does not vary — no change is

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16 We can read in MacPherson (2009): “Think of a standard, rather, as something that determines a scale. The International Prototype Kilogram in Sèvres, France is, in this sense, a standard for weight — the ‘standard kilogram’. One’s ‘tasties’, too, determine a gustatory standard, quite independently of whether one can articulate this standard.”

17 Which dates back to Kemp (1973) and Dummett (1975). We take the present formulation from Kennedy (forthcoming).
introduced in the comparison class on which it is calculated, and yet she revises her appreciation of an object.

Degree-based models for RGAs take a comparison of degree as basic. This seems to be problematic if this operation is purely subjective, and if it is assumed Kennedy's and Sasseon's theories assume that at a semantic or a pragmatic level, taste statements are processed by virtue of a comparison with a standard and standard necessary, and as they are relativised to individuals, this sort of models will run into similar objections.

4.3 Comparison classes and evaluativity

The role that theories like Kennedy's and Sasseon's attribute to comparison classes in the semantics of PPTs is controversial. On the one hand, its role in entailing a semantic basis which partly conflicts with the normativity of these evaluations.

As we have seen, 'tasty' for Kennedy and Sasseon requires a comparison class in the appreciation of a current object of assessment, and a reference point. The restriction set by comparison classes in PPTs is required, and it can also delimit the relevant class of alternative objects on which to a comparison class introduces constraints that taste assessments seem not to fit.

The issue imposed by the need for a basis of experience of this condition is the issue in the case of the comparison class in the cake appreciated, and nothing else. If the comparison class is formed by a single's clauses for the positive form (see Section 3) are contradictory, as an

Both authors prior taste judgments. Nevertheless, daily taste judgments are meaningful even under evaluation. We do not want to deny that there is a history of past taste edge this fact does not amount to demanding the interpretation of each taste experience to require a different and previous similar tasting occasion.

Furthermore, there are arguable implications of the fact that the value of the standard seems to be tied with the comparison class the context sets on the determination of the standard. This would mean that if the standard is calculated with reference to a comparison class C, and a single object's value is modified, the valuation of an object z in C will vary. There is no reason to think, however, that a judge's taste must change if the valuation of other objects in the order, that a judge's taste must change if the valuation of other objects in the standard value is modified by a comparability of judgment of taste in which the evaluator is not willing to change her mind at all.

It is also remarkable that differences in comparison classes in RGAs such as 'tall' do not work as in PPTs like 'tasty': comparison classes for RGAs can qualify contrasting judgments even in case they partially overlap; for taste judgments, if the comparison classes partially overlap, the contrasting effect is lost. Bea is a tall student, no matter that Bea is a tall student.

Degree-based theories for PPTs extend the feature of such models for RGAs in attributing comparison classes a crucial role in the determination of the denotation of PPTs, but our observation applies beyond their particular models. As Sasseon's approaches seem to be good examples of the issues brought about by claiming that a set of relevant alternatives must be basic for the interpretation of PPTs, but our observation applies beyond their particular models. As Sasseon's approaches seem to be good examples of the issues brought about by claiming that a set of relevant alternatives must be basic for the interpretation of PPTs, but our observation applies beyond their particular models. As Sasseon's approaches seem to be good examples of the issues brought about by claiming that a set of relevant alternatives must be basic for the interpretation of PPTs, but our observation applies beyond their particular models. As Sasseon's approaches seem to be good examples of the issues brought about by claiming that a set of relevant alternatives must be basic for the interpretation of PPTs, but our observation applies beyond their particular models.
that speakers/addressees do not have problems interpreting taste reports of products for which they have no relevantly similar experience, and we have also posed objections to the soundness of subjective comparisons of degrees as a sound operation to determine the interpretation of ‘tasty’.

3. Degree-based approaches to the meaning of PPTs assume that the comparison class cannot be empty, a requirement that seems unfounded as fact we have no relevant prior experience.

Despite the general character of these points, we believe they nonetheless indirectly contribute to further work in formal semantics, if only as notes of caution.

5 Degree-based models for RGAs?

At this point, the degree-based theorist seems to be in a predicament. Either degree-based models are suitable for all RGAs, but PPTs are not RGAs, or we must explore these options here.

If PPTs are not RGAs, then the criteria of identification of RGAs described in Section 2 must be wrong or insufficient. Yet, this conclusion might be position, they admit degree modifiers, comparatives, superlatives, there is a lexicon, they allow faultless disagreements were not contested by the objections characteristic of RGAs. A general form of the postulate we have opposed is where this property is measurable in degrees inducing scales with a contextually namely that PPTs describe qualities that can be present in various intensities, of these intensities is vague and contextually dependent. In view of this, let us consider the second option in the initial dilemma.

To see why degree-based models might not a suitable perspective on RGAs, property, and evaluations might be opposed despite the existence of a shared moniker is expensive even though both of them might know and agree on the object’s models might need a further twist to accommodate this subjective element express the extent to which an object presents a property, but rather how the speaker/addressees are affected or impressed by that extent. ‘Expensive’ can express a subject’s regard, and not just inform about the monetary amount related to it. This regard need not constitute a property in the object, but rather the effect that has on the agent. Kennedy quickly dismisses the issue of faultless disagreements in the case of dimensional gradable adjectives such as ‘tall’, ‘rich’ or ‘expensive’, but our remark should show that discussions in which neither participant is willing to give in can also involve appreciations of height, wealth, cost.

Next, consider the image of RGAs in the positive form as comparisons between a standard value and a new value. On the one hand, in is very hard to apply it if we are presented with an example like the following:

A: This mountain is high!

It seems that interpreters do not need to make any computation on the values of mountains they know in order to understand this exclamation. On the other hand, A might utter this to express the difficulty in the ascension, without reference to any comparison class or reference value. Moreover, some examples might illustrate why it is unlikely that speakers/addressees actually interpret the positive form as a comparison with a standard value. How does someone without knowledge of biology interpret the following example?

A: The NASA team of biologists found a huge colony of bacteria in the newly found lake in Mars.

It seems implausible that to claim that it is actually necessary to retrieve, or even guess, the standard value for the size of a colony of bacteria.

Additionally, the degree-based approach seems to turn uses of ‘tall’ or ‘fast’ as merely less fine-grained expressions than those allowed by natural language, and this simply does not square with how we use such adjectives in our everyday conversations. Degree-based models consider “John is 1.85 m. tall” to be a precisification of “John is tall.” Upon inspection, however, it seems difficult to find a common quality denoted by ‘tall’ in the first and the second statement; while the first one indicates a conventional unit of measurement, in the second one ‘tall’ functions as a predicate regarding length but without any specification of a conventional unit. This might suggest that Kennedy’s distinction between descriptive and evaluative uses in PPTs might also be applicable to RGAs, although evaluativity in the case of ‘tall’ is bound by an objective dimension — length — unlike the case of ‘tasty’.

Finally, consider the role that comparison classes have in the interpretation of RGAs for these theories. It is easy to find contexts in which neither no clear comparison class is offered, or where various classes would fit:

A: Chomsky’s famous.

And as we have noted before, the interpretation of e.g., ‘expensive’, is not

exhaustively given by the comparison class provided by the context. Two speakers might agree on the class of luxury cars, but they might nonetheless disagree about whether a certain Bentley is expensive in case they disagree on what is worth paying for a luxury car. There is something to the interpretation of, e.g., “This car is expensive”, which is not directly provided by the relevant comparison class, in this case. And as the example with the mountain’s height illustrated, a comparison class might just be irrelevant. Even if someone reacted to A’s utterance saying “But there are higher mountains!”, A’s assessment remains unchallenged.

Our remonstrance hopefully suggests new alternatives to account for the meaning of PPTs and RGAs, insofar as they do not fit the degree-based theorist’s picture:

- A dialogic setting for the use of these adjectives is the niche in which their interpretation process should be observed.
- Certain properties of objects arouse an agent’s appreciation. This reaction is related to certain aspects of the object. If represented as predicates, their arguments will not be just objects in a domain.
- The appreciation may have a descriptive and/or a valorative dimension. For some predicates, the descriptive dimension of an appreciation may be quantified. In these cases, a descriptive appreciation requires a non-empty comparison class.
- Epistemic accessibility to the aspects of an object is not private (in the sense of being impossible for the 2nd and 3rd person perspective).
- An agent’s an aspatial evaluation isn’t private either (in the sense of being unintelligible for the 2nd and 3rd person perspective).
- The evaluative appreciation involves a normative attitude with respect to certain object’s aspects, but the verdict of the assessment does not have ipso prescriptive force.
- In the case of RGAs for which the descriptive dimension of an appreciation may be quantified, descriptions can be disputed invoking the aspects of the object which are appreciated.

Although this is not a concrete attempt at solving the problems we have criticised, it nonetheless provides positive guidelines for further research in formal semantics.

6 Conclusion

Apart from the suggestions for new work in the semantics of PPTs, at this point we can gather a few further concluding remarks.

Against degree-based semantics for taste

The theories considered here have the merit of being serious systematic approaches to the meaning of PPTs observing their affinities with RGAs. What’s more, they prompt us to look further into the relation between these classes of adjectives. Kennedy’s model draws our attention to affinities between colour terms and PPTs. It is worth exploring deeply in this relation, as the role of a perceiver is equally important, and the possibility to construct palettes is not constitutive but rather derivative from the normative aspect of basic colour terms. Sassoon’s theory emphasises the difference between RGAs and PPTs at the level of pragmatics. It would be interesting to observe similar discursive effects in other evaluative expressions, such as ethical reports, and to contrast them with the semantics and pragmatics of pain reports and other kinds of avowals. Hopefully, the present examination of the semantics of PPTs will shed some light on the affinities and contrasts with colour terms and avowals.

Keywords

Degree-semantic, relative gradable adjectives, predicates of personal taste, taste judgments.

References

Reasoning about coordination in the problem of conceptualization

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Abstract

Within the last decade or so, theories of inductive learning in games have increasingly become the primary approach in the construction of models for explaining how agents may resolve repeated coordination problems as well as the emergence of social conventions at the more general level. However, looking closer at a paradigm case of such models, the Drichlet model, this paper argues that such models only work for explaining emergence if presupposing pre-tailored and ad hoc conceptualizations of the recurrent decision problem faced by the agents. It then argues that such conceptualization itself rest on convention and thus that the models only work by begging the question they were thought to answer. Finally, the paper points to the possibility that a non-circular solution to the problem of conceptualization may be found in an understanding of the way agents reason about coordination, when the idea of repeated coordination itself acts as a frame for conceptualizing their mutual decision problem as a coordination problem.

"Thoughts without content are empty, intuitions without concepts are blind. The understanding is not capable of intuiting anything, and the senses are not capable of thinking anything. Only from their unification can cognition arise." I. Kant, Critique of Pure Reason (A51/B75)

1 Introduction

Accounting for the emergence and persistence of coordinative practices, also known as social conventions, has always posed an embarrassing obstacle in formal philosophy and economics (Binmore 1994). In particular, the specific reasoning procedures employed by individuals have continuously evoked formal reconstructions within logic, decision theory and game theory aimed at explaining how these procedures yield individual reasons for conformity (Gold & Sugden 2006), (Sugden & Zanarron 2008).