

## Expressing Taste in Dialogue

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### Abstract

This paper deals with the semantics of taste judgements and the updates they bring about in the dialogue context. Unlike most approaches in formal semantics, we build on empirical work in Conversation Analysis to outline the rudiments of a formal theory that is in line with how taste judgements are used in actual conversation. We propose a model that treats predicates of personal taste such as ‘tasty’ as two-place predicates with an argument for the experiencer that can be generically bound, and combine this model with an Information State Update framework. The resulting system, although still preliminary, is shown to account for the possibility of disagreements over taste and for the fact that different types of constructions are used to perform different types of dialogue acts.

### 1 Introduction

Subjective judgements that convey personal evaluations are commonplace in everyday dialogue. A typical way of expressing such judgements is by means of *predicates of personal taste* (PPTs) such as ‘tasty’, ‘fun’, or ‘beautiful’.

- (1) a. Oysters are tasty.  
b. This game is fun.

Within a standard truth-conditional semantic tradition, explaining the meaning of sentences containing PPTs is tricky. This is so because, on the one hand, such predicates are related to pleasure which is embodied and thus anchored to particular individuals—if uttered sincerely, (1a) conveys the idea that oysters are tasty for the speaker—while, on the other hand, utterances like those in (1) may be met with a denial:

- (2) A: Oysters are tasty.

B: No, they aren’t. They are revolting!

But why would speakers disagree if taste is subjective? Because both participants seem to be speaking truthfully, dialogues like (2) are considered cases of *faultless disagreement* (Kölbel, 2004).

Predicates of personal taste and the problems they pose to extant formal semantic theories have motivated a fair amount of literature in recent years (a.o. Lasersohn (2005; 2009), Stephenson (2007), Stojanovic (2007), Sæbø (2009), Sassoon (2009), Moltmann (2010)). All these approaches, varied as they are, concentrate on providing detailed accounts of the formal semantics of PPTs but pay little attention to how utterances of subjective judgements function in actual dialogue. In contrast, researchers within the tradition of Conversation Analysis (CA), who themselves have long been interested in subjective and evaluative judgements (Pomerantz, 1978; Potter, 1998; Wiggins and Potter, 2003), bypass formal characterisations to focus instead on describing the situated dialogue practices in which such judgements are embedded.

In this paper we take the middle course. We propose a formal treatment of the semantics of subjective judgements with PPTs that is motivated by dialogue data from CA and that highlights the update effects these judgements—and the dialogue moves they are part of—bring about in the dialogue context. In the next section, we describe several desiderata which we believe any theory of PPTs should attempt to cover. After that, in Section 3, we review some related approaches within formal semantics. We present our proposal in Sections 4 and 5, first

by outlining a semantics for PPTs and then by modelling their dialogue update effects in an Information State Update framework. We conclude in Section 6 with a recap and outlook on future work.

## 2 Subjective Judgements & Personal Taste

In this section we lay down the basic desiderata that a theory of PPTs needs to account for.

### 2.1 Subjectivity

Evidence for the subjective character of PPTs comes from their capability to be embedded under propositional attitude verbs such as ‘find’ or ‘consider’ and to take ‘to/for’ arguments:

- (3) a. I find oysters tasty.  
b. This game is fun to me.

Subjective attitude predicates cannot embed a clause that expresses something which is either a fact or not a fact, as the infelicitousness of this example adapted from Sæbø (2009) shows:

- (4) # Many scientists find that the dinosaurs were extinguished by a major comet impact 65 million years ago.

Thus, together with dimensional adjectives in the positive form (‘I find that car expensive’), uses of PPTs seem to give rise to propositions which in some sense depend on the subject of the attitude.

### 2.2 Beyond Subjectivity: Disagreement

Despite their subjective character, utterances with PPTs may lead to disagreement. That is, while (6a) does not involve disagreement, intuitively (5) does. In categorical constructions such as (5) the judgment seems to go beyond the speaker’s subjectivity, which licenses a denial by the addressee.

- (5) A: Oysters are tasty.  
B: No, they aren’t!  
(6) a. A: I find oysters tasty.  
B: I don’t find them tasty at all.  
b. B’: # No, you don’t!

In contrast, denying A’s statement in (6b) does not seem to make sense. It may be sensible to mistrust A’s sincerity if there is evidence that could cast doubt on it. For instance, B could have replied “You just pushed them around on your plate when we had them last! Remember?” to A’s statement in (6a).

However, although A’s behaviour may be a cue to A’s personal taste, it is neither a necessary nor a sufficient condition to deny it.<sup>1</sup>

### 2.3 Speaker’s Commitment

Although categorical constructions such as those in (5) transcend subjectivity, by default the speaker remains committed. The following examples thus sound incoherent:<sup>2</sup>

- (7) a. # Oysters are tasty. But I don’t find them so.  
b. # I find oysters tasty. But they are not.

The speaker’s commitment is also apparent from the fact that B’s dissent in (5), (6a), and (8) below is by itself not evidence that should lead A to give up her view on what the common ground should look like. That is, although B’s reactions are informative (each in their own way), they alone will not lead to A’s giving up her initial assertion. It would indeed be very odd for A to respond with ‘Oh, you are right, I don’t find them tasty’ or ‘Oh, you are right, they are not tasty’.

- (8) A: Oysters are tasty.  
B: Well, I don’t find them tasty at all.

### 2.4 Evaluative Practices

Work within CA provides insights into the type of *dialogue practices* in which subjective judgements of taste are used in actual conversation. Wiggins and Potter (2003) analyse a corpus of family mealtime dialogues with a focus on the constructions used to evaluate food. The aim of the study is to investigate how different types of expressions are used to perform particular activities. The authors show that categorical and subjective assessments are used to perform different types of acts. Categorical assessments (*objective* in the authors’ terminology) can be perceived as compliments (9) and can be used as attempts to persuade, as in Laura’s ‘It’s very nice’ in (10). In contrast, subjective assessments such as (6a)

<sup>1</sup>We thank one of the anonymous reviewers for pointing out this possibility.

<sup>2</sup>Similar replies may be appropriate in some contexts, for instance if used to report the results of a survey (‘Oysters are tasty’ (according to the survey)). Out of special contexts of this sort, however, (7a) and (7b) appear to be contradictory. All this suggests that the incoherence is not pragmatic as is the case in the ‘might’-version of Moore’s paradox (‘it is raining, it might not be raining’) but semantic, as we shall discuss in Section 4.

are not used for complimenting or persuading but function well as e.g. refusals to offers, as shown by Beth's 'I don't like red wine' in (10).<sup>3</sup>

(9) Doris: This is all delicious.

Laura: Thank you.

Beth: The chicken's lovely.

(10) Beth: Can I try some wine?

Laura: Oh, mm-hm. (0.2)<sup>4</sup>

Beth: I don't like red really.

Laura: It's very nice.

Bill: How d'you know, have you ever tried it?

Beth: I've tried it about a million times. I hate all red, it's too strong.

As Bill's response in (10) shows, a participant's subjective judgement can be questioned with an inquiry about that participant's past experience. In fact, had the evaluation in question been a categorical judgement, the same issue could have been raised.

### 3 Related Work

In this section we offer a critique of prominent previous approaches to the semantics and dialogue features of PPT.

#### 3.1 Lasersohn's approach

Lasersohn (2005; 2009) proposes to analyse PPTs by relativising the truth-evaluation of propositions in which they take place to a judge parameter. He defines PPTs as 'tasty' as one-place predicates *tasty(x)* where the object argument *x* is the substance under evaluation. The judge parameter is a third index *i*, standing for an individual, within the classical Kaplanian context-pairs containing a world *w* and time *t*. The denotation of predicates and sentences is assigned relative to context *c*, world *w*, and individual *i*. Lasersohn argues that his system accounts for the subjective character of the sentences involving PPTs (desideratum 2.1) by making truth-evaluation of a content dependent on the contextually given judge. He also claims that constancy of the content of the propositions asserted and de-

<sup>3</sup>Examples (9) and (10) are taken from Wiggins and Potter (2003). We have ignored the detailed CA transcription conventions.

<sup>4</sup>Wiggins and Potter point out that during this pause "there is good reason to think that Laura has [...] started to pour red wine (with white as another option)."

nied by the dialogue participants (DPs) in (5) accounts for the possibility of disagreement (desideratum 2.2). We argue, however, that it is difficult for Lasersohn to motivate B's reaction in (5) in regular situations of assessment and that thus desideratum 2.2 remains a challenge for his account.

Lasersohn considers three perspectives from which an assessment with a PPT can be made: autocentric, exocentric, and acentric. The autocentric perspective is the most common stance, that in which the speaker expresses her own taste. When an exocentric perspective is taken, truth-evaluation depends not on the speaker but on another agent whose taste is under consideration. An acentric stance is a birds-eye-view, i.e. the perspective taken when speaking about taste in general without a particular judge in mind. This case, according to Lasersohn, yields a non-truth-evaluable statement since the context provides no judge.

Given Lasersohn's definitions of these three perspectives, none of them seems to be able to fully account for the fact that B can reply with a denial in (5). If A's contribution is uttered and evaluated autocentrically (i.e. by taking A as the contextually given input to fill in the judge parameter in the evaluation), a denial from B does not seem to make sense. Unless B takes A to be trying to have her proposition accepted as unrestrictedly true, there seems to be no reason for B to deny A's asserted proposition. An acentric perspective is likewise problematic since, as mentioned, for Lasersohn this would yield a non-truth-evaluable statement. If B takes A to make no claim of truth, why then does B deny the proposition A utters? Finally, an exocentric interpretation (where truth-evaluation depends on an agent other than the speaker whose taste is under consideration) could accommodate B's response in (5) if we consider that A wants B to accept that her proposition is true for B. B's reaction could then be analysed as rejecting this. It is obvious, however, that not all taste judgements can be taken to be made from another agent's perspective.

Overall, truth-relativist models such as Lasersohn's (but also Stephenson's, which will be reviewed below) do not seem to do justice to the data. In (5), A and B take each other as saying something false—an opinionated eavesdropper will certainly think that one of them is mistaken. Relativism

is not able to justify B's denial and thus account for this fact. The determination of a judge parameter as a requirement for interpretation not only makes it difficult to attain a coherent view of dialogues such as (5). It also obscures the relation between categorical and subjective judgments, even if differences in their contents can be discriminated, since it does not provide any insight into questions related to desiderata 2.3 and 2.4, such as 'what motivates A's choice of construction in (6a) and (5)?' or 'what distinguishes B's reaction in (5) and (8)?'.

### 3.2 Stephenson's approach

Stephenson (2007) proposes a formal improvement of Lasersohn (2005). According to her, PPTs like 'tasty' are two-place predicates  $tasty(i, x)$  with both an experiencer  $i$  and an object  $x$  as arguments. As Lasersohn, she enriches the Kaplanian context with a third index  $i$  representing a judge. When introduced as in (6a), the experiencer argument in 'tasty' is filled in by the subject heading the attitude verb. When standing alone as in (5), the experiencer-argument is filled in by a silent nominal item  $PRO_J$  that fixes the judge to be the one provided by index  $i$  in the context. In special cases, the experiencer-argument is filled in by a contextually salient individual, which Stephenson represents as a null pronoun *pro*.

As Lasersohn, she claims that truth-relativity accounts for desideratum 2.1. According to her view, disagreement in desideratum 2.2 takes place because even if A's assertion in (5) only depends on A believing that "Oysters are tasty" is true relative to himself, the conversational effect of assertions is to remove all worlds in which the proposition asserted is not true. In (5), this would motivate B's denial, even though here his conversational move is doomed to be unsuccessful, as B cannot expect to remove all of A's worlds in which the proposition B asserts is true. The main purpose of B's reaction is to make himself an exception to the universal quantification in the proposition A wants to get in the common ground. According to this analysis, however, a successful move for B in that case would be B's in (8). Stephenson's model does not meet desideratum 2.2, since it renders B's choice of a reaction in (5) unjustified. Why choose an unsuccessful move if a successful one is available? Furthermore, her view on

what is needed for assertions as in (5) is somewhat problematic. A in (5) may assert "Oysters are tasty" merely because A believes that it is true for him that oysters are tasty." Such a belief clearly allows for A's not having actually tried the oysters. However, A's judgement would be in such case questionable, as illustrated in (10).

### 3.3 Moltmann's approach

Instead of relativising truth to a judge or standard of taste parameter, Moltmann (2010) proposes to analyse the meaning of 'tasty' as that of an ambiguous expression. When embedded under 'know', or when used categorically as A's in (5), 'tasty' shows a form of first-person-based genericity, a generalisation by which the speaker quantifies over every agent in the relevant domain as someone he identifies with. The resulting sentence has absolute truth conditions. The details of this kind of genericity are given in terms of Moltmann's analysis of the generic pronoun 'one' (Moltmann, 2006). This form of genericity involves the ability of abstracting from the particularities of one's own person and situation, judging oneself to be normal in relevant respects, and then generalising to anyone meeting the same conditions. When embedded under subjective attitude verbs, 'tasty' is just like Stephenson's: a two-place predicate  $tasty(i, x)$ , where the subjective attitude verb fixes the experiencer-argument. According to the author, the resulting sentence is not directed at truth, but rather at expressing the experiencer's subjective stance. Moltmann claims to accommodate desideratum 2.1. In the case of (5) subjectivity enters in the determination of the agent whose experience is abstracted over. Desideratum 2.2 is accounted for by the absolute character of truth: one speaker claims the content of his assertion is true, the other one denies it. When embedded under subjective attitudes verbs, the interpretation of 'tasty' is subjective, creating a non-truth directed context.

It is easy to see that postulating an ambiguity for 'tasty', with a different lexical item being used depending on the attitude verb under which it is embedded, is undesirable. Such an approach blocks any straightforward explanation of 2.3, the relation of categorical and subjective judgements, as illustrated in (7a) and (7b). In any case, Moltmann's view contributes the idea of genericity being involved in some

of the data to be explained. While she sees this as a case of first-person-based genericity, we believe that getting rid of the speaker’s specificity might leave us with a predicate that has little to do with how ‘tasty’ is used. We take up the idea of genericity, though of a different kind, in our proposal below.<sup>5</sup>

A common criticism that applies to Lasersohn, Stephenson, and Moltmann (and to formal semanticists across the board) is their exclusive focus on minimal, constructed dialogues that can be far removed from actual linguistic practices. Relativists anchor truth on individual judges, and this seems to conflict with the fact that assertions like A’s in (5) are used to compliment or persuade, as discussed in Section 2.4. In Moltmann’s view, instead, the different practices associated with categorical and subjective judgments would be due to the lexical ambiguity she postulates. But rather than illuminating the observed tendencies in dialogue action, such a strategy leaves them unexplained. One of the main aims of our proposal is to predict the dialogue practices observed in the naturalistic data from CA. To do so, we will offer a semantic analysis of PPTs that is articulated within an account of the update effects of these predicates on the dialogue context.<sup>6</sup>

## 4 A Semantics for PPTs

We now turn to sketching a semantics for predicates of personal taste that meets the desiderata described in Section 2.

### 4.1 Particular vs. Categorical Uses

In short, we follow Stephenson (2007) in considering PPTs two-place predicates. For instance, we define ‘tasty’ as  $tasty(i, x)$  where  $i$  is an agent who is able to undergo a phenomenological experience of taste (a sortal requirement) and  $x$  is the object ar-

<sup>5</sup>In his preliminaries (his option 3b), Lasersohn (2005) briefly considers and dismisses a “genericity reading”. Our argumentation in 4 below will make clear why this form of genericity is not sufficient to account for the data.

<sup>6</sup>Besides the approaches reviewed in this section, there also exist contextualist models (Glanzberg, 2007; Sassoon, 2009; Stojanovic, 2007, among others) that avoid relativising truth-evaluation. But as Stojanovic (2007) shows, relativism and contextualism are, from the viewpoint of semantics, not much more than notational variants of one another. Contextualists have similar problems, thus, to meet the desiderata in Section 2. We therefore do not review these models here.

gument, an edible substance under evaluation. In line with Sæbø (2009)’s analysis, we see subjective verbs like ‘find’ and ‘for/to’-phrases as supplying the predicate’s first argument  $i$ .

- (11) I find the cake tasty.<sup>7</sup>  
 $\exists ix (i = \text{spk} \wedge \text{cake}(x) \wedge \text{tasty}(i, x))$

Now, when ‘tasty’ is used categorically as in (5) with the subjective argument  $i$  not being explicitly saturated, we argue that  $i$  acquires a generic interpretation, i.e. gets *generically bound*. As we shall see, this analysis yields the right results regarding disagreement (while avoiding the duplication of lexical entries à la Moltmann) and fits well with the dialogue data. Let us spell out the details a little bit further.

We assume a generic operator GEN following Krifka et al. (1995). GEN is a dyadic generic quantifier that relates two propositions, a *restrictor*  $\mathbf{R}$  and a *matrix*  $\mathbf{M}$ , as follows:

- (12)  $\text{GEN}[x_1 \dots x_n; y_1 \dots y_m]$   
 $(\mathbf{R}[x_1 \dots x_n]; \mathbf{M}[x_1 \dots x_n, y_1 \dots y_m])$

Here  $x_1 \dots x_n$  are variables to be bound by GEN and  $y_1 \dots y_m$  are variables bound existentially with scope in the matrix. An equivalent notation is thus the following (Krifka et al., 1995, p. 26):

- (13)  $\text{GEN}[x_1 \dots x_n;]$   
 $(\mathbf{R}[x_1 \dots x_n]; \exists y_1 \dots y_m \mathbf{M}[x_1 \dots x_n, y_1 \dots y_m])$

The relational nature of GEN accounts for the multiple readings of characterising sentences, as Krifka et al. show with this example:

- (14) Typhoons arise in this part of the Pacific.  
 a.  $\text{GEN}[x;]$  ( $x$  are typhoons;  $\exists y$  [ $y$  is this part of the Pacific &  $x$  arise in  $y$ ])  
*Intended reading:* For typhoons, it holds that they arise in this part of the Pacific.  
 b.  $\text{GEN}[x;]$  ( $x$  is this part of the Pacific;  
 $\exists y$  [ $y$  are typhoons &  $y$  arise in  $x$ ])  
*Intended reading:* For this part of the Pacific, it holds that there arise typhoons.

<sup>7</sup>Since the object is in this case a specific NP (‘the cake’) (11) is a particular observation about the speaker’s experience, a description of a how a given experiencer relates to a particular substance. Had the object been a kind (‘I find oysters tasty’), the speaker would have provided a general observation about herself (roughly, ‘whenever the speaker eats oysters, she finds them tasty’).

We can see that a sentence like (15) with the generic NP ‘the guests’ and ‘tasty’ embedded under the subjective verb ‘find’ is aptly analysed by such structures. This statement expresses a generic characterisation (i.e. a general observation) about the guests:

- (15) The guests find the cake tasty.  
 GEN[*i*;] (*guest*(*i*);  $\exists x[\textit{cake}(x) \wedge \textit{tasty}(i, x)]$ )  
*Intended reading*: For guests *i* in general, it holds that the cake is tasty for *i*.

One feature of characterising generic sentences is that they can not only yield so-called *typicality* readings such as the one in (15) but also *dispositional* readings, as illustrated with the following example:<sup>8</sup>

- (16) The printer prints 100 pages per minute.  
 a. *Typicality reading*: The printer regularly prints 100 pages per minute.  
 b. *Dispositional reading*: The printer is able to print 100 pages per minute.

We propose to analyse categorical constructions such as (5) and (17) as characterising generic sentences conveying a dispositional reading.

- (17) The cake is tasty.  
 GEN[*i*;] ( $P(i)$ ;  $\exists x[\textit{cake}(x) \wedge \textit{tasty}(i, x)]$ )  
*Dispositional reading*: For any agent *i* that is able to undergo a phenomenological experience of taste, it holds that the cake should be tasty for *i*.

The dispositional interpretation as such does not state a fact, but rather an expectation of facts or events to take place, it expresses a rule. This is again in line with Sæbø (2009)’s analysis according to which subjective attitude predicates like ‘find’ cannot embed a factual clause (see (4)). Thus, in principle, any standard semantics for GEN would work for our purposes as long as it allows us to distinguish between typicality and dispositional readings of characterising sentences.

A typicality reading closer to that of (15) is possible if additional conversational background is available (e.g., if the judgment is used to report the results of a survey; see footnote 2).

- (18) The cake is tasty.  
*Typicality reading*: For agents *i* able to un-

<sup>8</sup>The example is given by Menéndez-Benito (2005) who also offers a treatment of the typicality/dispositional distinction. We forgo the details here.

dergo a phenomenological experience of taste in general, it holds that the cake is tasty for *i*.

This switch to a typicality reading is either contextually triggered by a salient set of agents in the discourse context that can instantiate *i*, or it requires an explicit argument that does so. In any case the dispositional reading remains as basic, as the default interpretation of a categorical statement.<sup>9</sup>

Dispositions give us what we are after since they hold defeasibly across all (sortally adequate) agents, with a free choice on agents of no specific sort (Menéndez-Benito, 2005; Lekakou, 2004). We will remain vague about how GEN may accommodate dispositional readings.<sup>10</sup> We do assume, however, that the effect of GEN in (17) is to define a set  $P(i)$  which is characterised by the following minimal conditions:

- (19) a.  $P(i)$  includes actual and non-actual agents who are able to undergo a phenomenological experience of taste;  
 b.  $P(i)$  includes all DPs by default;  
 c. given *i* and *x*,  $\textit{tasty}(i, x)$  need not be a habit for *i*.<sup>11</sup>

These constraints on  $P(i)$  yield a set that goes beyond the DPs—in contrast with Stephenson’s treatment of categorical judgements—and whose elements are not related via identification with the speaker—unlike Moltmann’s take on first-person-based genericity.

## 4.2 Meeting the Desiderata

The analysis outlined above yields the required results regarding the points in Sections 2.1 and 2.2. The subjective character of PPTs (2.1) is accounted for by the agent-argument of the predicate, and the default inclusion of the DPs in  $P(i)$ . The possibility of disagreement (2.2) arises, we argue, from the fact

<sup>9</sup>As mentioned in fn. 5, Lasersohn (2005) briefly considers and dismisses a “genericity reading” according to which “Oysters are tasty” would mean something like “Oysters are tasty for people in general” or “Oysters are tasty for an arbitrarily selected person”. That is, he only considers the typicality reading of the generic interpretation, which is indeed not appropriate to account for desideratum 2.2.

<sup>10</sup>An analysis along the lines of Menéndez-Benito (2005) could be an option, but we leave this for future work.

<sup>11</sup>In other words, in line with Menéndez-Benito (2005), the habitual reading is not implied.

that in categorical constructions where the agent-argument is not saturated, such argument acquires a dispositional generic interpretation. The resulting generic content, which clearly goes beyond subjectivity, can be asserted or denied by the DPs. Note that we assume that in the case of denials negation takes low scope, that is, it applies to the PPT only. This is in line with the intuition that denials of this sort are categorical assessments too and thus have generic force. A discordant judgment embedded under a subjective attitude predicate does not have a generic interpretation and thus does not count as a denial.

- (20) a. A: These oysters are tasty.  
 $\text{GEN}[i;](P(i); \exists x[oysters(x) \wedge tasty(i, x)])$   
 b. B: No, they aren't!  
 $\text{GEN}[i;](P(i); \exists x[oysters(x) \wedge \neg tasty(i, x)])$   
 c. B: I don't find them tasty at all.  
 $\exists ix (i = \text{spk} \wedge oysters(x) \wedge \neg tasty(i, x))$

The oddness of B's denial in (6b), repeated in (21), is due to the fact that B's attribution concerns A's phenomenological experience but it may only be prompted by observations of A's behaviour.

- (21) A: I find oysters tasty.  
 B: # No, you don't!

PPTs denote neither only behaviour nor just phenomenological experiences. They denote a relation between agents able to undergo a phenomenological experience and a certain object. This relation is typically associated with particular behaviour, but such behaviour is neither necessary nor sufficient a condition for the relation to hold.

Desideratum 2.3 is better accounted for by looking into the conversational effects of utterances with PPTs. As mentioned, given the conditions stated in (19), by default the set of agents over which GEN ranges will include the DPs. Since generics admit exceptions, the addressee may choose to set herself apart by uttering (20c). Thus, in this setting, B's response in both (20b) and (20c) are perfectly coherent, in contrast to the predictions made by Stephenson's account. The speaker however remains committed, as given in (19). That is, we represent how the fact that  $tasty(a, o)$  holds (where  $a = \text{spk}$  &  $o$  are the relevant oysters) is a default condition for A

to assert (20a). We see this relation between subjective and categorical uses as a clear improvement on Moltmann's proposal.

At the same time, denying a categorical assertion (20b) or setting oneself apart from such generalisation (20c) does not necessarily challenge the speaker's commitment. By default a denial such as B's in (20b) expresses a generalisation that includes A. However, since A's initial assertion implied  $tasty(a, o)$ , such default is cancelled.

In order to analyse how the elements sketched in this section function in dialogue interaction, in the next section we take a dynamic perspective and look in more detail into how dialogue moves with subjective judgements update the dialogue context. As we shall see, the resulting system makes the right predictions regarding the types of taste judgements that are used in the evaluative practices analysed within the field of CA (desideratum 2.4).

In what follows, to avoid clutter, we will abbreviate the semantic representation proposed for categorical judgements like (20a) and (20b) as  $tasty(\text{GEN}(i), o)$  and  $\neg tasty(\text{GEN}(i), o)$ , respectively; and that proposed for subjective judgements like (20c) as  $\neg tasty(b, o)$ , or  $tasty(b, o)$  for the positive counterpart of such judgements.

## 5 Subjective Judgements in Dialogue

We assume the Information State Update (ISU) framework and model the information states of the DPs in terms of Ginzburg's *Dialogue Gameboard* (DGB) (Ginzburg, 1996; Ginzburg, forthcoming). The DGB is an elaboration of Stalnaker (1978)'s common ground representing not only agreed upon propositions, but different types of information that become public as a conversation proceeds. In Ginzburg's model, each DP has her own DGB (a kind of personal take on the conversational scoreboard (Lewis, 1979)). The dialogue context is thus made up of the DGBs of all DPs, which in unproblematic situations of mutual understanding can be taken to be identical.

The DGB is a data structure containing at least the following attributes:

- (22)  $\left[ \begin{array}{ll} \text{FACTS} & \text{Set}(\text{Proposition}) \\ \text{QUD} & \text{POSet}(\text{Question}) \\ \text{MOVES} & \text{List}(\text{DialogueMove}) \end{array} \right]$

FACTS is a set of propositions representing the knowledge that speakers share during a conversation; MOVES is a list of the dialogue moves (the illocutionary propositions) made in the dialogue; and QUD is a partially ordered set of questions under discussion. In Ginzburg’s model, asserting  $p$  does not immediately lead to adding  $p$  to FACTS. Instead, the issue ‘whether  $p$ ’ becomes under discussion, i.e.  $p?$  is added to QUD. Only when  $p$  is accepted by all DPs does it become part of the shared facts. In addition, FACTS can be updated by the accommodation of presuppositional information.

Let us now see how the information state of the DPs gets updated as a result of different types of utterances containing PPTs.

(23) a. A: The oysters are tasty.

B: No, they aren’t. They are revolting!

$$b. \left[ \begin{array}{l} \text{FACTS} \\ \text{QUD} \\ \text{MOVES} \end{array} \left\langle \begin{array}{l} \{tasty(a, o), \neg tasty(b, o)\} \\ \langle tasty(\text{GEN}(i), o)? \rangle \\ \langle \text{assert}(b, \neg tasty(\text{GEN}(i), o)), \\ \text{assert}(a, tasty(\text{GEN}(i), o)) \rangle \end{array} \right\rangle \right]$$

In (23) we see a context characteristic of situations of disagreement, with assertions with contradictory content. A’s assertion has introduced the question ‘ $tasty(\text{GEN}(i), o)?$ ’ for discussion, which remains unresolved. As mentioned in the previous section, the assertion ‘ $\text{assert}(a, tasty(\text{GEN}(i), o))$ ’ requires for its felicity accepting ‘ $tasty(a, o)$ ’. Thus speaker A accommodates the latter into FACTS. Note, however, that B does not need to accept that fact straight-away. She may consider it an issue under discussion and ask, for instance, whether A has actually tried the oysters (recall example (10) in Section 2.4). Unless an explicit objection is raised, however, we can safely assume that B also accommodates ‘ $tasty(a, o)$ ’ into FACTS after A’s assertion. Identical arguments apply to B’s denial, which updates FACTS with ‘ $\neg tasty(a, o)$ ’.

In contrast, in (24) where non-categorical uses are at play, we see an entirely different context. In this case there is no disagreement per se since the content of the DPs’ assertions is compatible with each other. Unless objections are raised by the DPs, the asserted propositions enter the shared FACTS and no question remains under discussion.

(24) a. A: I find these oysters tasty.

B: I don’t find them tasty at all.

$$b. \left[ \begin{array}{l} \text{FACTS} \\ \text{QUD} \\ \text{MOVES} \end{array} \left\langle \begin{array}{l} \{tasty(a, o), \neg tasty(b, o)\} \\ \langle \rangle \\ \langle \text{assert}(b, \neg tasty(b, o)), \\ \text{assert}(a, tasty(a, o)) \rangle \end{array} \right\rangle \right]$$

In a situation in which B replies to a categorical utterance with a particular observation like in (25), once more there is no overt disagreement. However in this case the issue raised by A’s assertion remains unresolved. Note that accepting ‘ $tasty(\text{GEN}(i), o)$ ’ would require accommodating ‘ $tasty(b, o)$ ’, which would lead to inconsistency. The generalisation may well be part of A’s beliefs but it does not enter the common ground.

(25) a. A: These oysters are tasty.

B: I don’t find them so.

$$b. \left[ \begin{array}{l} \text{FACTS} \\ \text{QUD} \\ \text{MOVES} \end{array} \left\langle \begin{array}{l} \{tasty(a, o), \neg tasty(b, o)\} \\ \langle tasty(\text{GEN}(i), o)? \rangle \\ \langle \text{assert}(b, \neg tasty(b, o)), \\ \text{assert}(a, tasty(\text{GEN}(i), o)) \rangle \end{array} \right\rangle \right]$$

Particular subjective assessments are thus well suited to refuse offers in a polite manner because they convey an individual judgement that does not challenge the conversational partner. As responses to offers in the form of categorical assessments, they are able to exploit the default character of generalisation by setting the speaker aside without need to be in conflict with the addressee.

Categorical assessments are effective as compliments and as persuasion moves because their generic interpretation is “stronger” than the particularised interpretation of subjective judgements. Doris and Beth’s categorical assessments in (9) (repeated here as (26)) convey that the chicken is not only tasty for them but for agents (of the appropriate sort) *in general* and hence make a stronger compliment to Laura.

(26) Doris: This is all delicious.

Laura: Thank you.

Beth: The chicken’s lovely.

Similarly, since the generic character of a categorical assertion includes the addressee by default, categorical formulations are also effective in persuasive practices. In (10) (partially repeated in (27)) we find



a situation which in a way is the opposite of that in (25), where a subjective judgement is countered by a categorical one. In this case, Laura may not have accepted Beth’s subjective assessment and raises the issue ‘*nice*(GEN(*i*), red\_wine)?’ with the hope that it can be accepted into the common ground.

(27) Beth: I don’t like red really.

Laura: It’s very nice.

Laura’s information state after her own utterance would thus be the following:

$$(28) \left[ \begin{array}{l} \text{FACTS} \\ \text{QUD} \\ \text{MOVES} \end{array} \begin{array}{l} \textit{Set}(\textit{Proposition}) \\ \left\langle \begin{array}{l} \textit{nice}(\textit{GEN}(i), \textit{red\_wine})? \\ \textit{tasty}(b, \textit{red\_wine})? \end{array} \right\rangle \\ \left\langle \begin{array}{l} \textit{assert}(l, \textit{nice}(\textit{GEN}(i), \textit{red\_wine})), \\ \textit{assert}(b, \textit{tasty}(b, \textit{red\_wine})) \end{array} \right\rangle \end{array} \right]$$

## 6 Conclusions

The present paper should be seen as an effort to strike a balance between formal and empirical aspects of the semantics of PPTs. Building on existing formal semantics approaches, we have proposed an account of predicates such as ‘tasty’ that treats them as two-place relations *tasty*(*i*, *x*). In particular uses of these predicates, the experiencer argument *i* is saturated by an explicit element which may be provided by the subject of a subjective attitude verb. Our analysis also covers categorical uses, relating them to particular ones. In categorical uses, the experiencer argument *i* is bound by a generic quantifier, yielding a dispositional reading of the property attributed to the object *x* under evaluation. Our initial desiderata can be met within this simple semantics, and a key to this is the default character of dispositional properties.

We have combined this semantics with an Information State Update framework in order to better analyse taste judgements in the context of different evaluative practices as identified within the field of Conversation Analysis. This allows a precise representation of the dynamic effects of particular and categorical taste judgements in dialogue exchanges, which predicts the patterns observed in the data.

Further work should consider details about the most appropriate semantic analysis fitting dispositional generics like categorical uses of PPTs. In particular, it seems that a framework of defaults in

update semantics as in Veltman (1996) might be well-suited to accommodate the dynamic effects we have described. This could also provide elements to account for defeasible inferences agents draw from categorical and subjective judgments. Another point of interest is the interaction between particular vs. kind experiencers- and object-arguments in *tasty*(*i*, *x*), in particular the issue of whether distributive readings are preferred in case both experiencer and object are generically quantified. This is also related to observations in CA which point at associations between types of evaluative practices and the choice of a particular vs. a kind object-arguments (Wiggins and Potter, 2003). This paper’s contribution offers a basis to explore these and other related issues further.

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## References

- J. Ginzburg. 1996. Interrogatives: Questions, facts and dialogue. In S. Lappin, editor, *The Handbook of Contemporary Semantic Theory*, pages 385–422. Blackwell.
- J. Ginzburg. forthcoming. *The Interactive Stance: Meaning for Conversation*. Oxford University Press. To appear in 2012.
- M. Glanzberg. 2007. Context, content, and relativism. *Philosophical Studies*, 136:1–29.
- M. Kölbel. 2004. Faultless disagreement. In *Proceedings of the Aristotelian Society*, volume 104, pages 53–73, University of London.
- M. Krifka, F.J. Pelletier, G.N. Carlson, A. Ter Meulen, G. Chierchia, and G. Link. 1995. Genericity: An introduction. In *The Generic Book*, pages 1–124. Chicago: The University of Chicago Press.
- P. Lasersohn. 2005. Context dependence, disagreement, and predicates of personal taste. *Linguistics and Philosophy*, 28(4):643–686.
- P. Lasersohn. 2009. Relative truth, speaker commitment, and control of implicit arguments. *Synthese*, 166(2):359–374.
- M. Lekakou. 2004. Middles as disposition ascriptions. In C. Meier and M. Weisgerber, editors, *Proceedings of Sinn und Bedeutung 8*. Universität Konstanz.
- D. Lewis. 1979. Score keeping in a language game. *Journal of Philosophical Logic*, 8:339–359.

- P. Menéndez-Benito. 2005. *The Grammar of Choice*. Ph.D. thesis, University of Massachusetts at Amherst.
- F. Moltmann. 2006. Generic one, arbitrary PRO, and the first person. *Natural Language Semantics*, 14(3):257–281.
- F. Moltmann. 2010. Relative truth and the first person. *Philosophical studies*, 150(2):187–220.
- A. Pomerantz. 1978. Compliment responses: Notes on the co-operation of multiple constraints. In J. Schenkein, editor, *Studies in the organisation of conversational interaction*, pages 79–112. Academic Press, New York.
- J. Potter. 1998. Discursive social psychology: From attitudes to evaluative practices. *European Review of social psychology*, 9(1):233–266.
- K. J. Sæbø. 2009. Judgment ascriptions. *Linguistics and Philosophy*, 32:327–352.
- G. W. Sassoon. 2009. Restricted quantification over tastes. In *Preproceedings of the Seventeenth Amsterdam Colloquium*. ILLC/Department of Philosophy, University of Amsterdam.
- R. Stalnaker. 1978. Assertion. In P. Cole, editor, *Pragmatics*, volume 9 of *Syntax and Semantics*, pages 315–332. New York Academic Press.
- T. Stephenson. 2007. Judge dependence, epistemic modals, and predicates of personal taste. *Linguistics and Philosophy*, 30:487–525.
- I. Stojanovic. 2007. Talking about taste: disagreement, implicit arguments, and relative truth. *Linguistics and Philosophy*, 30:691–706.
- F. Veltman. 1996. Defaults in update semantics. *Journal of Philosophical Logic*, 25:221–261.
- S. Wiggins and J. Potter. 2003. Attitudes and evaluative practices: Category vs. item and subjective vs. objective constructions in everyday food assessments. *British Journal of Social Psychology*, 42:513–531.