Acquaintance inferences and the grammar of directness

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This talk is about what Ninan (2014) (following Wollheim 1980) calls the *Acquaintance Inference* (AI): a firsthand experience requirement imposed by subjective expressions such as Predicates of Personal Taste (PPTs) (*delicious*). In general, one is entitled to calling something delicious only upon having tried it. This requirement can be lifted, disappearing in scope of elements that we will call *obviators*. In this talk, we investigate the patterns of AI obviation for PPTs and similar constructions (e.g., psych predicates and subjective attitudes). We show that the cross-constructional variation in when acquaintance requirements can be obviated presents challenges for previous accounts of the AI (Pearson 2013; Ninan 2014). In place of these, we argue for the existence of two kinds of acquaintance content: (i) that of PPTs; and (ii) that of psych predicates, subjective attitudes and overt experiencer PPTs. For (i), we propose that the AI arises from an evidential restriction that is dependent on a parameter of interpretation which obviators update. For (ii), we argue that the AI is a classic presupposition.

Introduction A number of expressions with a subjective flavor—including predicates of personal taste (*tasty, beautiful*), psych predicates (*sounds, tastes*) and subjective attitudes (*find, consider*)—have been noted to give rise to the AI (see Pearson 2013; Klecha 2014; Ninan 2014; Kennedy and Willer 2016). Asserting sentences like one in (1), the speaker is committed to having a firsthand experience of the relevant kind with the object in question: gustatory (1a), auditory (1b), or visual (1c). Explicit denials of that commitment yield infelicity. However, the AI may disappear in the presence of certain *obviators* (Pearson 2013; Klecha 2014; Ninan 2014), including the classes below:

(1) a. The cake was **delicious**, #but I never tasted it. PPT
b. The piano **sounded** out of tune, #but I've never heard it. PSYCH PREDICATE
c. I **consider** the dress blue, #but I've never seen it. SUBJECTIVE ATTITUDE

(2) The cake ..... delicious, but I never tasted it.

a. **must/might** have been EPISTEMIC MODAL AUXILIARIES
b. **probably/possibly/maybe** was EPISTEMIC ADVERBS
c. **obviously/certainly/apparently** was PREDICATES OF CLARITY
d. **will/is going to** be FUTURATE OPERATORS

Intuitively, all obviators convey indirectness of some sort, with that of epistemic *must* receiving recent attention (von Fintel and Gillies 2010; Lassiter 2016). Fittingly, grammatical markers of indirect evidentiality, such as Turkish *miş* also obviate the AI (3).

(3) Ben durian-I dene-meliy-im. { Lezzetliy-**miş** / #Lezzetli }. TURKISH *miş*
I durian-ACC try-must-1SG tasty-**IND.EV** / tasty
'I should try durian one day. { It is tasty, **I hear/infer**. / #It is tasty. }'

Previous approaches The literature offers two ways of dealing with the above facts: (i) *pragmatic*, via a special convention associated with bare assertions (Ninan 2014) and (ii) *semantic*, via a presupposition (Pearson 2013). Ninan's pragmatic approach, invokes an epistemologically-grounded norm for the knowledge of unmarked propositions: for a speaker to know the truth of

o is tasty autocentrically (i.e., with herself as the relevant standard of taste, Lasersohn 2005), she must have prior acquaintance with o. Assertion of an unmarked proposition typically assumes this knowledge (Williamson 2000), hence triggering the AI. Modalized, hedged, or otherwise marked propositions are not subject to this convention, and hence are not predicted to bear an AI. Pearson's semantic proposal is more involved. Here, PPTs are dyadic predicates that presuppose an AI between the two arguments (4a). The proposal also assumes PPTs are i-level predicates in the sense of Chierchia (1995) – they are licensed in the scope of a generic operator, which unselectively binds the unexpressed taster argument and restricts by quantificational domain restriction Dom, yielding the representation in (4b).

(4) a. $[\![\text{ tasty-to }]\!]^{c,i} = \lambda x \lambda o : x$ has tried o in WORLD(i). 1 iff o is $tasty$ to x in SIT(i).
b. $[\forall \langle x, s \rangle : x \in Dom][\text{the cake is tasty-to } x \text{ in } s]$
c. $[\forall \langle x, s \rangle : x \in Dom][x \text{ has tried } o \text{ in WORLD}(s)]$

The presupposition in (4a) is taken to projects universally, yielding a generic presupposition corresponding to (4c). The presence of an AI for the speaker depends in this approach on whether the speaker is included in the contextual restriction of the generic. If she is not, as happens under what Lasersohn (2005) calls *exocentric* readings, then there is no AI (for the speaker). If she is, then the AI arises for the speaker, capturing something akin to an *autocentric* reading. Pearson suggests that *must* obviates the AI the same way: using *must* indicates indirect evidence by the speaker for the cake's tastiness, which, due to (4c), ensures she is not in Dom.

Auto/exocentricity revisited Pearson's account derives how exocentric readings obviate the AI. In addition, it also correctly predicts that exocentric readings still require an AI for the elements of Dom (5), something Ninan's pragmatic theory does not explicitly predict. Moreover, exocentric AIs seem to obviate like autocentric AIs (6), a fact likewise unpredicted by pragmatic account. (Issues for Pearson's hinge on the distribution of dispositional generics; in the talk we present evidence that these do not have the obviation patterns of PPTs.)

(5) Hobbes's new food is tasty, #but no cat has ever tried it yet.

(6) Hobbes's new food {must be, probably is} tasty, but no cat has ever tried it yet.

Pearson's account faces several problems: a) as Ninan notes, the reasoning to the members of *Dom* from indirectness should carry over to the continuations in (1); b) moreover, *must* is conveying indirectness about a generic claim, and the speaker's judgment does not straightforwardly count as direct evidence of the group's assessment; c) more pressingly, since the speaker is not in *Dom*, she will not be committing to a judgment on the cake if/when she does try it. This is not the case (7), suggesting that the AI is really being lifted (as Ninan suggests), not that the speaker is necessarily irrelevant.

(7) Just look at it! The cake {is, must be} delicious, #but I am going to find it disgusting.

A Direct Proposal We take PPT AI content to comment not on a particular event (4a), but on direct evidential grounds for a proposition, since the acquaintance modality of PPTs like *beautiful* varies depending on the object (a voice vs. a shirt). Following the account of directness in von Fintel and Gillies (2010), a *kernel* of propositions K encodes direct knowledge, and the proposition $\bigcap K$ is the set worlds compatible with what is known directly and indirectly. We assume that

kernels are provided via an interpretive coordinate, parallel to Yalcin (2007), and hence we assume evaluation indices are minimally 4-tuples: ⟨world,time,kernel,judge⟩. Our semantics for a PPT is given in (8a); it is monadic and the presupposition is couched in terms of Fintel and Gillies' direct settlement (8b). Finally, assume evaluation of a proposition for truth conventionally sets the kernel to that of the auto/exocentric judge's directly experienced knowledge.

(8) a. $[\![\text{ tasty }]\!]^{c,\langle w,t,K,j\rangle}$ = $\lambda o : K$ directly settles whether o is tasty for j in w at t. 1 iff o is tasty for j in w at t

b. X directly settles whether p iff $\exists q \in X[q \subseteq p \vee q \cap p = \emptyset]$

Like (4a), this predicts that bare affirmative and negated propositions alike trigger a direct acquaintance inference by the judge, capturing the fact that exocentric and autocentric construals have an AI. For obviation, we propose that modals and other indirectness markers update the kernel (like attitudes for Yalcin): they eliminate the direct/indirect distinction by overwriting with $\{\bigcap K\}$ (9a), leading to a requirement that the relevant information state is decided on the prejacent (9a).

(9) a. $[\![\text{ must } \alpha]\!]^{c,\langle w,t,K,j\rangle}$ = $[\![\text{ must }]\!]^{c,\langle w,t,K,j\rangle}$ ($[\![\alpha]\!]^{c,\langle w,t,\{\bigcap K\},j\rangle}$)

b. $[\![\text{ must [the cake is tasty] }]\!]^{c,\langle w,t,K,j\rangle}$ is defined iff $\{\bigcap K\}$ directly settles whether the cake is tasty

c. $[\![\text{ must }]\!]^{c,\langle w,t,K,j\rangle}$ = $\lambda p : K$ does not directly settle whether $p. \bigcap K \subseteq p$.

(9c) provides Fintel & Gillies' semantics for *must*, which adds the at issue content that the information state is one where the prejacent is true as well as a requirement that the kernel doesn't directly settle the prejacent. These conditions are non-contradictory, principally because we have altered the coordinate that PPTs presuppose directness against, thereby making it relatively toothless.

Overt and Covert Experiencers Finally, we turn to additional cases requiring acquaintance. One argument for dyadic treatments of PPTs like those in (4a) is the possibility of 'overt experiencers' (*to me/Hobbes*) in addition to 'bare' uses. Interestingly, overt experiencers override all of the obviators but *might* (likely counterfactual here). This is precisely the behavior of psych predicates and predicates of judgment or perception (the latter two are omitted for space).

(10) a. The cake {#must/might have been, #probably/#possibly was, #obviously/#apparently was} delicious to {me, Epictetus}, but {I, he} never tasted it.

b. The cake {#must/might have, #probably/#possibly, #obviously/#apparently} delighted {me, Epictetus}, but {I, he} never tasted it.

The lack of an AI for bare PPTs under classic holes like *must* is taken as an argument against the presuppositional analysis in (4a) alone. However, overt experiencer PPTs pattern in line with that analysis, and parallel to other predicates with an acquaintance requirement for overt experiencer. In sum, this suggests that bare uses are not simply instances of covert experiencers (Stephenson 2005; Stojanovic 2007; Pearson 2013), but something else (Lasersohn 2005; MacFarlane 2014. Our approach can capture this by making overt experiencers sensitive not to the kernel coordinate but the kernel of the overt experiencer itself (11). In this way overt and bare uses have fundamentally the same requirement, but with respect to grammatically different sources for their kernel element.

(11) $[\![\text{ tasty to } \alpha]\!]^{c,i}$ = $\lambda o :$ $[\![\alpha]\!]^{c,i}$'s kernel in w at t directly settles whether o is tasty to j in w at t. 1 iff o is tasty to j in w at t

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