## Predicates of personal taste and 'de re' construal

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# Predicates of Personal Taste (PPT) I

### PPTs, informally

Expressions of natural language (often: subset of i-level adjectives) seem intuitively sensitive to a "judge" (perspectival/experiential/appraising source), even when not syntactically expressed

- (1) The High Sierra is beautiful (for Mary).
- (2) The soup is delicious (to John).
  - Central puzzle: how to capture this sensitivity?
  - Put another way: how and where are judges encoded?

## PPT II

- An active debate within semantics and philosophy of language: contextualism, relativism, expressivism
- Classic data:
  - kinds of disagreement (Kölbel 2003; Lasersohn 2005 and much subsequent work) and agreement (Moltmann 2010)
  - retraction (MacFarlane 2005, 2014; Marques 2015)
  - genericity / group-relativity (Anand 2009; Bhatt and Pancheva 2006; Moltmann 2010, 2012; Pearson 2013a)
- Limiting our scope today
  - do not discuss the data above or take sides
  - do take for granted that PPTs are in some way special
  - focus on embedding under attitudes
  - but not the kind of embedding typically brought up

# Setting the stage I

A seemingly well-known fact

PPTs in attitudes have to be evaluated wrt to the most local taster (a.m.o Pearson 2013a; Stephenson 2007)

- (3) Context: Pascal and Mordecai are playing Mastermind. Pascal finds it difficult, while Mordecai easy. Pascal says:
  - a. ✓ Mordecai thinks that the game is easy<sub>MORDECAI</sub>, while in fact it is difficult<sub>PASCAL</sub>.
  - b. # Mordecai thinks that the game is easy\_MORDECAI and difficult\_PASCAI.

# Setting the stage II

A less well-known fact

PPTs in attitudes allow non-local tasters when in attributive position (mentioned in passim by Sæbø (2009: 337) and Pearson (2013a: 118, fn.15))

(4) ✓ Mordecai thinks that the difficult<sub>PASCAL</sub> game is easy<sub>MORDECAI</sub>.

# Analytical disputes

Pearson (2013a: 118)

Presumably [the difficult game] ... is construed de re and hence outside the scope of the attitude predicate.

Sæbø (2009: 337)

[I]t is just as easy to handle the phenomenon ... by saying that the judge argument of the attributive adjective is not saturated by the subject of thinks[, but] ... filled by the designated variable.

 So which is it? Can attributive disjoint PPTs be construed 'de dicto', or must they be 'de re'?

# Setting the stage III

#### Key observation

PTTs in attitudes allow non-local tasters when in attributive position.

(5)  $\checkmark$  Mordecai thinks that the difficult<sub>PASCAL</sub> game is easy<sub>MORDECAI</sub>.

#### This talk

- Empirically: Non-local taster only possible when the DP is read 'de re'
- Analytically: Is this instrumental in singling out the right approach, or in eliminating not so good ones?
  - Some theories undergenerate and disallow non-local tasters altogether (e.g. Pearson 2013a)
  - Some theories overgenerate and allow non 'de re' readings of DPs (e.g. Stephenson 2007; Sæbø 2009; Stojanovic 2007)

## The analytical take home

- Tasters are necessarily part of evaluation indices
- Choice of taster will
  - force a corresponding choice of world (hence, 'de re')
  - be governed by the same restrictions on worlds (Farkas 1997; Percus 2000)
- (6) ...  $w_1$  think [ [DP PPT NP ] PPT ]
- (7) ...  $w_1$  think [ [DP PPT NP ] PPT ]
- (8) \* ...  $w_1$  think [ [DP] PPT NP ] PPT ]

## Setting things up

- Issues we wish to avoid
  - Assuming attitude predicates introduce a judge, is it necessarily the attitude holder (Stephenson 2007; Lasersohn 2005)?
  - Can there be distinct judges per 'category' of judgment? (Anand 2009)
- We avoid them by
  - constructing cases where no judge can hold both PPT judgment
  - limiting ourselves to clear within-category opposites

# Perspective clash = 'de re' construal

Context: Mary and Sue are debating several items of clothing in a catalog. They happen on an item that Sue believes is a beautiful dress and Mary an ugly poncho. Sue says:

#### (9) COVERT TASTER

- a. ✓ Mary thought a beautiful<sub>SUE</sub> dress was ugly. [DE RE]
- b. # Mary thought a beautiful<sub>SUE</sub> poncho was ugly. [DE DICTO]

#### (10) OVERT TASTER

- a. ✓ Mary thought a dress beautiful to me was ugly. [DE RE]
- b. ✓ Mary thought a poncho beautiful to me was ugly. [DE DICTO]

## Obligatory 'de re'

- Prediction: infelicity in 'de re' blocking environments
- Prediction borne out: there-constructions and Free Indirect Discourse do not allow different perspectives

#### There I

Generalization (Keshet 2008, following Musan 1997)

Existential there bans 'de re' readings

- (11) Presence vs. absence of a contradiction
  - a. ✓ Mary thinks many fugitives are in jail. [DE RE]
  - b. # Mary thinks there are many fugitives in jail. [DE DICTO] (Keshet 2008: p. 48, ex. 24)

### There II

#### There and non-local tasters

Speaker's perspective only with an overt taster

- (12) COVERT TASTER
  - a. # Mary thought there was a beautiful<sub>SP</sub> item on sale. [DE RE]
  - b.  $\checkmark$  Mary thought there was a beautiful<sub>M</sub> item on sale. [DE DICTO]
- (13) OVERT TASTER
  - ✓ Mary thought there was an item beautiful to me on sale.

### Note: other environments

- several environments prohibit mismatched worlds: bare PP relatives, small clause complements of *have*, depictives
- but PPTs are not easily incorporated into these (they are i-level adjectives)

### Free Indirect Discourse I

### Free Indirect Discourse (FID)

- A hybrid with traits of both direct discourse and canonical embedding under attitudes (Eckardt 2014 and references therein)
- FID blocks 'de re' readings of DPs (Sharvit 2008)

### (14) a. Attitude report:

John thought that the dean liked him that day. (possible in a situation where John doesn't believe that the person liking him is the dean)

#### b. FID

The dean liked him today, thought John. (impossible in a situation where John doesn't believe that the person liking him is the dean) (Sharvit 2008: 367, 43b-c)

### Free Indirect Discourse II

#### FID and non-local tasters

Speaker's perspective only with an overt taster

#### (15) COVERT TASTER

Intended: A boring SPEAKER game was exciting MORDECAI, thought Mordecai.

Resulting: #A boring MORDECAI game was exciting MORDECAI, thought Mordecai.

# (16) Overt taster

✓A game boring to me was exciting MORDECAI, thought Mordecai. ( $me \neq Mordecai$ : in FID, personal indexicals such as I refer to the narrator; Schlenker 2004; Sharvit 2008)

#### The bottom line

- Non-local tasters require a 'de re' construal
- These facts alone are fully expected of adjectives
- These facts are tricky for theories of PPTs

# Previous approaches

- Can be divided into three classes
  - those that necessarily associate judges with evaluation index (Lasersohn 2005)
  - those that can dissociate judge from evaluation index (Stephenson 2007; Stojanovic 2007; Sæbø 2009)
  - those that necessarily dissociate judge from evaluation index (Pearson 2013a)
- We will show that only the first class derives our facts without additional machinery

#### A caveat

- No intent to argue for particular approach to 'de re'
- Will opportunistically assume major options: LF scope (Russell 1905), LF index binding (Percus 2000), and concept generators (Percus and Sauerland 2003)

# Necessarily associate I (Lasersohn 2005)

ullet indices are (minimally) of type  $D_e \times D_s$  (judges and worlds)

$$[17) \quad [\![\alpha]\!]^{c,\langle j,w\rangle} = \dots$$

- PPTs are sensitive to the judge coordinate of the index
- (18) [beautiful] $c, \langle j, w \rangle = \lambda y$ . 1 iff y is beautiful for j
  - ullet attitudes quantify over  $\langle att, w \rangle$  pairs

(19) 
$$\llbracket x \text{ think } \alpha \rrbracket^{c,\langle j,w\rangle} = 1 \text{ iff } \forall w' \in DOX_{x,w} \llbracket \alpha \rrbracket^{c,\langle x,w'\rangle} = 1$$

 everything in scope of attitude evaluated relative to shifted world and attitude holder qua judge

# Necessarily associate II (Lasersohn 2005)

- scope of attitude wrt shifted world and judge
- (20)  $[x \text{ think } \dots [D_P \text{ a beautiful poncho }] \dots]^{c,\langle j,w\rangle} = 1$  iff  $\forall w' \in DOX_{x,w} [\dots [D_P \text{ a beautiful poncho }] \dots]^{c,\langle x,w'\rangle} = 1$ .
  - only way to 'recover' higher judge is to evaluate attributive PPT against non-local index
  - but intersective modifiers have same index as entire DP (Keshet 2008)
  - Therefore, the entire DP must be read 'de re'
- (21)  $[x \text{ think } [\dots [DP \text{ a beautiful poncho }]^{c,\langle j,w@\rangle}\dots]^{c,\langle x,w'\rangle}]^{c,\langle j,w\rangle}=1$  iff  $\forall w'\in DOX_{x,w}\ \exists z[z \text{ is a poncho in } w@ \text{ and beautiful for } j\dots]$ 
  - Many unlike theories are similarly correct (MacFarlane 2014; Bylinina et al. 2014)

# Can dissociate I (Stephenson 2007)

- same index type & attitude shifting
- PPTs differ: judge is part of argument structure
- (22) [beautiful] $^{c,\langle j,w\rangle} = \lambda z.\lambda y$  1 iff y is beautiful for z.
  - z can be filled by PRO<sub>J</sub> or null pronominal
- (23) a. [beautiful PRO<sub>J</sub>] $^{c,\langle j,w\rangle} = 1$  iff  $\lambda y.$  y is beautiful for j
  - b. [beautiful pro<sub>i</sub>] $^{c,\langle j,w\rangle}=1$  iff  $\lambda y.$  y is beautiful for g(i)
  - If attrib. judge only PRO<sub>J</sub>, same readings as Lasersohn (2005)
  - ullet But use of pro $_i$  could allow 'de dicto' readings with mismatching judges
- (24) [ $x \text{ think} \dots [DP \text{ a beautiful pro}_{Susan} \text{ poncho}] \dots]^{c,\langle j,w\rangle} = 1 \text{ iff } \forall w' \in DOX_{x,w} \exists z[z \text{ is a poncho in } w' \text{ and beautiful for Susan} \dots]$

# Can dissociate II (Stojanovic 2007; Sæbø 2009)

- judge is a distinguished variable,  $x_0$
- PPTs dyadic (as for Stephenson):
- [beautiful]  $^{c} = \lambda y \lambda z \lambda w$ . 1 iff y is beautiful for z. (25)
  - main predicate PPTs: z unsaturated, yielding property bound by attitude (no *shift* per se in attitudes)
- [a poncho is beautiful]  $c = \lambda z \lambda w$ . 1 iff  $\exists y [y]$  is a poncho in w and (26)y is beautiful for z].
  - attributive PPTs: z filled by  $x_0$ .
- [beautiful  $x_0$ ] $^{c,\langle j,w\rangle} = \lambda y$  1 iff y is beautiful for g(0)]. (27)
  - allows different perspectives and 'de dicto' readings, like Stephenson [x think ... [DP] a beautiful  $x_0$  poncho ] ...  $]^{c,\langle j,w\rangle} = 1$  iff  $\forall w' \in DOX_{x,w}$  $\exists z[z \text{ is a poncho in } w' \text{ and beautiful for } g(0) = \text{Susan } \ldots].$

# Necessarily dissociate (Pearson 2013a)

- PPTs are dyadic, but
- judge is just a variable bound at LF by a high operator
- additionally: must be bound by closest binder (similar to Farkas/Percus constraints, but now for judges alone)
- (29)  $[\lambda x. \dots \text{ think } [\lambda y. \dots \text{ beautiful to } y]]$ 
  - Pearson assumes an LF generic operator as well, but irrelevant here (simply admits generic people like the judge)

# Necessarily dissociate (Pearson 2013a)

- for this theory, being read 'de re' is not enough to force non-local perspective
- only way to recover a judge is to move the DP out of the scope of the local binder
- (30)  $[\lambda x. \ldots [DP]$  beautiful to  $y]_j \ldots$  think  $[\lambda y. \ldots t_j]$ 
  - but there are empirical arguments against treating 'de re' as scopetaking (Keshet 2008; Charlow and Sharvit 2014)
  - and for attrib. PPTs we can construct scopal paradox arguments
- (31) a. John thinks that [ on each of his birthdays] $_i$ , [ $_{DP}$  the disgusting cake he was baked that day $_i$ ] was tasty.
  - b. [DP] the disgusting cake he was baked that  $day_{*i}]_j$  John thinks that [ on each of his birthdays $]_i$ ,  $t_i$  was tasty.

## Summing up

#### PPT non-exceptionalism

PPTs pattern precisely like any non-perspectival predicate wrt 'de re' behavior

- Any theory which strongly links judgment perspectives with worlds of evaluation will get our data right
- But several extent theories do not do this, yielding theories that are either too weak or too strong
- Similarly, any implicit argument theory will be too weak, unless it is supplemented with Musan/Keshet-like constraints

# Things could have been otherwise...

- Data could have pointed to judges obeying Keshet/Musan-like constraints with other judges, but not with worlds/times
- This is essentially what a local-binding account would predict
- That we see judges patterning with worlds and times provides a strong argument for a unified representation

# Contemplating judicicide

- We are kept from abandoning judges wholesale based on
  - faultless disagreement (Kölbel 2003) (pro relativism no.1)
  - retraction (MacFarlane 2005, 2014) (pro relativism no.2)
  - restrictions on main predicates under find (Sæbø 2009)
- We suspect the latter could follow from a more rigorous examination of s-selection
- Hence: existence of judges rest on (dis)agreement and retraction

## A loophole

- PPTs have been argued to admit generic/acentric judges (Lasersohn 2005)
- (32) I know that stamp collecting is boring (for people in general), but I find it interesting.
  - Generic judges in attributive position admit 'de dicto' readings
- (33) Mary thought a beautifulgen poncho was ugly.
  - Suggests that generic judges are not mediated by the evaluation index (see Jackendoff (2007) for a lexical approach)

## **Epistemics**

- Epistemic modal auxiliaries are often grouped together with PPTs: they are also sensitive to some kind of "judge" (MacFarlane 2014; Pearson 2013b; Schaffer 2011; Stephenson 2007)
- Do epistemics within DPs exhibit the same pattern that we have discussed for PPTs?

## Embedded epistemics: similarities with PPTs

- Only local knower in main predicate position (Hacquard 2010; Stephenson 2007 on auxiliaries):
- (34) a. ✓ Jane thinks that a thunderstorm is likely JANE.
  - b. # Jane thinks that a thunderstorm is likely  $_{JANE}$  and  $_{impossible}$   $_{SPEAKER}$ .
  - Non-local knowers allowed in attributive position:
- (35) Jane thinks that an impossible SPEAKER thunderstorm is likely JANE.

## Embedded epistemics: dissimilarities with PPTs

- Non-local knowers do not force the DP to be construed 'de re':
- (36) Sue: Mary is certain that two potential vampires aren't vampires.
  - The taster  $\neq$  the knower (as we know from Stephenson 2007 for root cases):
- (37) Vampires might<sub>SPEAKER</sub> be scary.
  - Suggests a distinct source for epistemic judges.

Thank you!

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# Pearson (2013a) and concept generators

- Can Pearson's system derive 'de re' readings with distinct judges if one uses concept generators? No.
- Central problem: two different pieces of machinery that don't talk to each other
  - c.g.: handles world of evaluation (and indiv. concept)
  - binder: provides value for argument of PPT
- (38) [ $\lambda x$ [ Mary thinks [ $\lambda y$  CG(a dress that is beautiful to \_\_\_\_) is ugly to y ]]]

## Pearson (2013a) and concept generators

- perhaps the CG necessarily introduces a local binder
- (39) [ $\lambda x$ [ Mary thinks [ $\lambda y$  CG( $\lambda z$  a dress that is beautiful to z) is ugly to y ]]]
  - but how to relate *z* and *x* across the intervening binder? One could have the attitude verb take *x* as an argument and smuggle it into the concept generator, but that seems epicyclic.
- (40) [ $\lambda x$ [ Mary thinks x [ $\lambda y$  CG $_x$ ( $\lambda z$  a dress that is beautiful to z) is ugly to y ]]]
  - In sum: not impossible to allow the theory to account for the facts, but it requires non-trivial gymnastics