

Discourse referents and intensional objects

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Discourse referents

- Elements of common ground
 - i.e. mental states of interlocutors
- Can be introduced:
 - linguistically
 - extralinguistically
- Correspond to:
 - Real or hypothetical referents
 - In a “many to many” relationship
- Can split and merge

Split and merge

- Double vision:

| |
|-----------------------------------|
| x |
| Londres (x) pretty (x) |

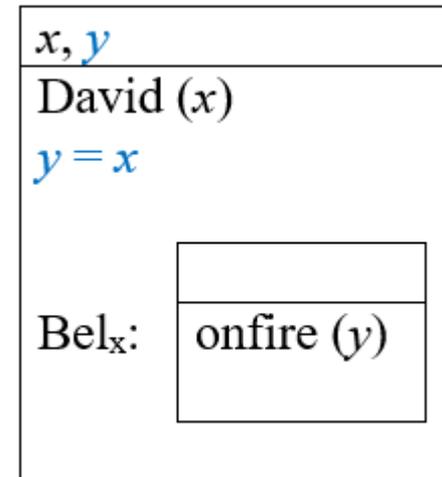
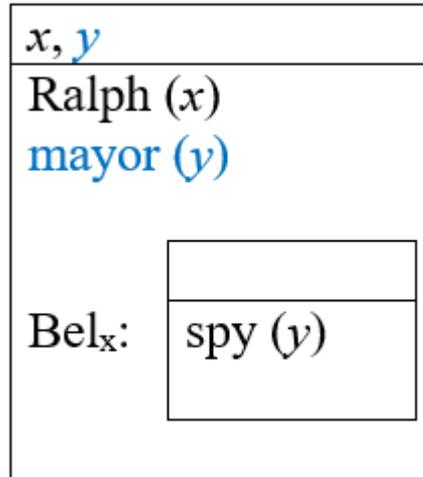
| |
|--------------------------------|
| y |
| London (y) ugly (y) |

- Twins:

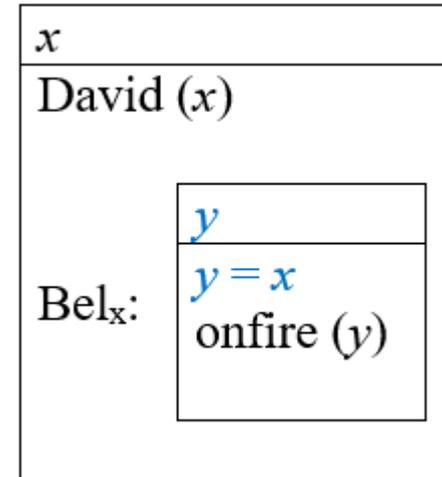
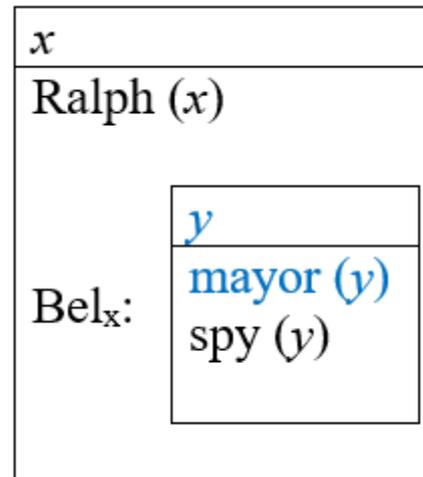
| |
|--|
| x |
| properties_of_one_twin (x) properties_of_another_twin (x) |

De se as a special case of de dicto

- De re



- De dicto/de se



Identity and necessity

- Contingent identity:
 - $(x = y) \nrightarrow \text{Bel}_z (x = y)$
 - $(x \neq y) \nrightarrow \text{Bel}_z (x \neq y)$
- Hintikka 1969a:
 - substitutivity (of identicals) does not work for propositional attitudes
- Semantics:
 - Variables x and y can denote the same individual in one worlds, but different individuals in another world.

Intensional objects

- Functions from worlds to individuals
(Hughes & Cresswell 1996)
 - also known as individual concepts
- Can split and merge:
 - $F_1(w_1) = F_2(w_1)$
 - $F_1(w_2) \neq F_2(w_2)$
 - suitable for semantics of discourse referents in epistemic contexts

Problems

- De re interpretation becomes trivial
 - $\text{Bel}_z (\exists x P(x)) \rightarrow \exists x \text{Bel}_z (P(x))$
- Sometimes is what we need:
 - the player must take *the top card of the deck*
 - there is a card which the player must take
 - though in different worlds it is a different card
- But there is too much freedom:
 - *John believes that Trump is the president of the USA*
 - $\exists x (\text{Trump}(x) \ \& \ \text{Bel}_z (\text{president}(x)))$ – trivially true
- The set of functions must be restricted

Options

- Hintikka 1969b:
 - two kinds of quantifiers – physical and perceptual
- Kraut 1983:
 - different methods of cross-identification (MCIs)
- Gerbrandy 2000:
 - different counterpart relations between worlds
- Aloni 2005:
 - conceptual covers

Context

- Individual identity depends on context
- As a consequence, also context dependent:
 - knowing who
 - existential export out of attitudes:
 - *There is someone z believes to be Q*
- Depends on:
 - question under discussion (QUD, Roberts 2012)
 - set of possible answers to it
- Yet nobody answers, how exactly it depends

Example (Gerbrandy 2000)

- There are two – John and Peter
- One of them is a butcher, the other is a gardener
 - I do not know who is who
- I know the murderer is the butcher, not the gardener
- QUD: Is the murderer the butcher of the gardener?
 - I know who the murderer is
 - There is someone I believe to be the murderer
- QUD: Is the murderer John or Peter?
 - I do not know who the murderer is
 - There is no one I believe to be the murderer

Criteria

- *There is someone Z believes to be Q*
 - as opposed to: *Z believes that Q exists*
- When this utterance is felicitous?
 - The speaker and the subject of the ascription share a common description P about the object
 - $\exists x \exists P (P(x) \ \& \ Bel_z (P(x) \ \& \ Q(x)))$
 - P uniquely identifies the object in each epistemic world of the speaker and the subject
 - but not necessarily rigidly
 - Q is informative with regards to P
 - P is informative with regards to QUD

De re ascriptions

- *Z believes of R that it is Q*
- Similar criteria:
 - $\exists x \exists P (R(x) \ \& \ P(x) \ \& \ Bel_z (P(x) \ \& \ Q(x)))$
- P is like a acquaintance relation, but:
 - does not require causal or emotional interaction
 - depends on context
- *Frank believes that John is the murderer*
 - Frank believes that *the butcher* is the murderer
 - The speaker knows that *the butcher* is John

Cross-identification

- *John believes that Trump is the president of the USA*
 - True only if there is common P, which unites our idea of Trump and John's idea of the President of the USA
 - For example, P = the leader of the republicans
 - P defines the intensional object
 - If there is no such P then the utterance is false

Informativity

- P is informative with regards to QUD
 - P allows to select one of the alternatives
- Q is informative with regards to P
 - P does not entail Q
- But this is not enough!
 - *I know who wrote the letter (Q)*
 - *Who?*
 - *The one who writes the letter E backwards (P)*
 - knowing Q should not imply knowing P

P with regards to QUD

- Informative:
 - Thelma chases a thief who stole her purse
 - *There is someone Thelma believes to be a thief*
- Not informative:
 - But she fails to identify him at the police line-up
 - *# There is someone Thelma believes to be a thief*

Q with regards to P

- The detective: *The murderer is insane*
- Informative:
 - *There is someone the detective believes to be insane*
- Not informative:
 - # *There is someone the detective believes to be the murderer*
 - knowing Q should not imply knowing P

Conclusions

- Intensional objects
 - Are suitable for the role of semantic analogues of discourse referents
- But they must be restricted
 - mutual identification in the context with the same common description
 - informativity with regards to the utterance predicate and the question under discussion

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Thanks for your attention!
Questions?