24.910 Topics in Linguistic Theory: Propositional Attitudes
Spring 2009

Self-Locating ("*De Se*") Attitudes

❖ **Readings**

➢ Lewis (1979), Attitudes *De Dicto* and *De Se*. (In *Philosophical Review 88.*)

➢ Morgan (1970) CLS paper.

❖ **Important related papers**

➢ Perry (1977), Frege on Demonstratives. (In *Philosophical Review 86*)

➢ Perry (1979), The Problem of the Essential Indexical. (In *NOÛS 13.*)

➢ Chierchia (1989), Anaphora and Attitudes *De Se*.
(In Bartsch, van Benthem, & van Emde Boas (eds.), *Language in Context*.

❖ **The key observation:**
There are attitudes that cannot be captured in terms of sets of worlds.

Put another way:

➢ There are situations where a person intuitively comes to believe "something new" (or have some other attitude towards "something new"), but where the <u>set of possible worlds</u> compatible with their "before" and "after" beliefs cannot be distinguished from each other.

1. Starting Point

[a.k.a. linguistically oriented reconstruction of Lewis's Section I]

Look at what can be the <u>object</u> of attitude predicates (using *expect* as an example):

(1)   I expect Bruce.

(2)   I expect a cat.

(3)   I expect winter.

(4)   I expect to shovel snow.

(5)   I expect that someday mankind will inhabit at least five planets.

➢ These vary <u>syntactically</u>…

▪ NPs: *Bruce, a cat, winter,*
▪ Infinitival clauses: *to shovel snow*
▪ CPs: *that mankind will (someday) inhabit at least five planets*

➢ … and also <u>semantically</u> (at least on the face of it):

▪ individual / season / etc.: *Bruce*, *winter*

- quantificational object: *a cat*
  (on the reading 'a cat, any cat')
- activity: *to shovel snow*
- state of affairs: *that mankind will (someday) inhabit at least five planets*

➢ Of course, things that look like individuals can be recast as clausal / propositional type things:

- expecting Bruce ≈ expecting Bruce to appear
- wanting a cat ≈ wanting (oneself) to have a cat
- needing to shovel snow ≈ needing it to be the case that one shovels snow

❖ **A General Question:**

➢ Are all objects of attitude predicates the same kind of (abstract) object?

➢ Lewis's answer: Yes, but these things are <u>not</u> sets of worlds

2. Examples of *De Se* Attitudes

(6)   Messy Shopper example (Perry 1979, p.3)

I once followed a trail of sugar on a supermarket floor, pushing my cart down the aisle on one side of a tall counter and back the aisle on the other, seeking the shopper with the torn sack to tell him he was making a mess. With each trip around the counter, the trail became thicker. But I seemed unable to catch up. Finally it dawned on me. I was the shopper I was trying to catch.

Crucially: he came to believe something new: *I am making a mess.*

Note: It's not enough for him to have come to believe *John Perry is making a mess* (unless he also believes *I am John Perry*)

(7)   The Lingens / Stanford Library example (Perry 1977, p. 492):

An amnesiac, Rudolf Lingens, is lost in the Stanford library. He reads a number of things in the library, including a biography of himself, and a detailed account of the library in which he is lost. He believes any Fregean thought you think might help him. He still won't know who he is, and where he is, no matter how much knowledge he piles up, until that moment when he is ready to say,

This place is aisle five, floor six, of Main Library, Stanford.
I am Rudolf Lingens.

The point: when he realizes "I'm in the Stanford Library," he has come to know something that he didn't know before, even though he already knew that <u>Lingens</u> was in the Stanford library.

(8)   The "two gods" example (Lewis 1979, pp. 520-521)

> We can imagine a more difficult predicament. Consider the case of the two gods. They inhabit a certain possible world, and they know exactly which world it is. Therefore they know every proposition that is true at their world. Insofar as knowledge is a propositional attitude, they are omniscient. Still I can imagine them to suffer ignorance: neither one knows which of the two he is. They are not exactly alike. One lives on top of the tallest mountain and throws down manna; the other lives on top of the coldest mountain and throws down thunderbolts. Neither one knows whether he lives on the tallest mountain or on the coldest mountain; nor whether he throws manna or thunderbolts.

Part of the point here: each of these gods can place themselves in <u>logical</u> space, but they cannot place themselves in <u>ordinary space</u>.

→ That is, each god doesn't know whether he himself is located on the tallest mountain or on the coldest mountain (even though he knows everything there is to know about these mountains)

Terminological Remark

The term *de se* was (I believe) coined (by Lewis?) on analogy with the terms *de dicto* and *de re*, which are also used to distinguish different kinds of attitudes.

Example of *de re* and *de dicto* beliefs (just for reference):

Suppose that the man who lives upstairs happens to be the mayor's brother.
[based on example in Partee 1974]

(9)   Mary believes that <u>the mayor's brother</u> is insane.

   (i)   One reading [*de re*]: equivalent to (10)
            [Mary thinks to herself: "That guy is insane."]

   (ii)   Another reading [*de dicto*]: not equivalent to (10)
            [Mary thinks to herself: "The mayor's brother is insane."]

(10)   Mary believes that <u>the man who lives upstairs</u> is insane.

3. Another Approach

❖ **Two notions of "thinking the same thing"**

Scenario (based on Perry, 1977: pp. 489, 492):

- Deval Patrick is the governor of Massachusetts.
- Donald Carcieri is the governor of Rhode Island.
- Patrick thinks to himself: *I am the governor of Massachusetts*. [true]
- Carcieri thinks to himself: *I am the governor of Massachusetts*. [false]

→ There is a sense in which Patrick and Carcieri think the same thing; and there is also a sense in which they think different things.

4. A Linguistic Perspective

Q. But are *de se* attitudes actually expressed in language?
A. Yes, at least in certain cases:

(11)   Ernie Banks examples (Morgan 1970, pp. 380-381):

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                              Suppose that the base-
ball player Ernie Banks gets beaned, develops amnesia,
and is taken to the hospital, where I am his doctor.  He
doesn't know his name.  I, his doctor, know who he is,
but I don't tell him.  I observe his behavior over a per-
iod of time while he's in the hospital with no identity.
During this time, he reads in the newspapers about a
baseball player named Ernie Banks.  He decides he likes
Ernie Banks, and would like him to leave Chicago and
go to New York to play for the Mets.  I the doctor want
to report this behavior of my patient Ernie Banks.  Con-
sider (5) through (7) in light of this situation.

        (5a)  Ernie Banks wants [Ernie Banks to leave
                                 Chicago]_S
        (5b)  Ernie Banks wants to leave Chicago.
        (6a)  Ernie Banks would like [Ernie Banks to
                                 play for the Mets]_S

        (6b)  Ernie Banks would like to play for the Mets
        (7a)  Ernie Banks hopes for [Ernie Banks to move
                                 to New York]_S
        (7b)  Ernie Banks hopes to move to New York.
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Want:

(12)   [Context: Lingens, the amnesiac lost in the Stanford library, happens upon a book that tells a story of a man named Rudolf Lingens, who is lost in the Stanford library. Lingens feels sympathy for the man he is reading about (after all, he is in a similar situation!), and says to himself, "Poor guy, I hope he gets out of the library eventually." Of course, Lingens doesn't realize that the man he is reading about is himself.]

    i) # Lingens wants to get out of the Stanford library.
        [**obligatorily** *de se*]

    ii) OK Lingens wants himself to get out of the Stanford library.
        [**not obligatorily** *de se*]

Italian *credere* (Chierchia 1989):

(13)   [Context: Pavarotti hears an opera singer on the radio. The voice is beautiful, and Pavarotti thinks to himself, "that man is a genius." He doesn't realize that the radio is playing a recording of Pavarotti himself.]

    i) # Pavarotti crede   di essere un genio.
        Pavarotti believes C be   a genius
        (Lit., "Pavarotti believes to be a genius")
        [**obligatorily** *de se*]

    ii) OK Pavarotti crede   che gli e un genio.
        Pavarotti believes C he is a genius
        (Lit., "Pavarotti believes that he's a genius")
        [**not obligatorily** *de se*]

5. Semantics for *De Se* Attitudes

> So far: we've talked about the <u>set of worlds</u> compatible with a person's beliefs (or knowledge, desires, etc.)

> New view: [at least for control constructions] talk about the set of <u>world-individual pairs</u> $\langle w,x \rangle$ such that it's compatible with a person's beliefs (or knowledge, desires, etc.) that <u>they themselves are x in w</u>.

> A new / second lexical meaning for attitude predicates:

(14) $\text{Bel-DS}_{x,w} = \{\langle w',y \rangle: \text{it's compatible with what x believes in w that x } \underline{\text{is}} \text{ y in w'}\}$

   $[\![\text{believe}_{DS}]\!]^w = [\lambda P_{\langle s,\langle e,t \rangle \rangle} . [\lambda x . \forall \langle w',y \rangle \in \text{Bel-DS}_{x,w} . P(w')(y)=1]$

(15) $\text{Want-DS}_{x,w} = \{\langle w',y \rangle: \text{it's compatible with x's desires in w for x to } \underline{\text{is}} \text{ y in w'}\}$

   $[\![\text{want}_{DS}]\!]^w = [\lambda P_{\langle s,\langle e,t \rangle \rangle} . [\lambda x . \forall \langle w',y \rangle \in \text{Want-DS}_{x,w} . P(w')(y)=1]$

> Meaning for infinitival clauses:

(16) $[\![\text{PRO to be a genius}]\!]^w = [\lambda x . x \text{ is a genius in w}]$

   intension of this: $[\lambda w' . [\lambda x . x \text{ is a genius in w'}]]$

> **In effect**: this means attitude predicates (in these cases) express a relationship between an individual and a <u>property</u> rather than an individual and a proposition.

❖ **In-class exercise**

Compute truth conditions for:

(17)   Sue wants to be a genius.

❖ **Remaining Issues:**

> Treat attitude predicates as <u>always</u> taking properties, or have them take propositions in "normal" cases?

> Special *de se* readings of belief reports with finite clauses?