The linguistics of desire (2)

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Class 2: The semantics of desire

- relativizing Hintikka
- the Samaritan Paradox & Heim's diversity condition
- finding the best
- monotonicity and Heim's alternative
- making Hintikka even more flexible
- conflicting desires
- gradable desires … some other time

Reminder: Hintikka semantics for *believe*

x believes that $p = \forall w' \in \mathrm{DOX}(x, w) : \ w' \in p$

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- Like modals, attitudes are anchored to the actual world
- Unlike modals, the set of worlds they take us to is (i) lexically specified and (ii) depends on the subject of the attitude

The simplest Hintikka semantics for *want*

x wants $p = \forall w' \in \mathrm{DES}(x, w) : \; w' \in p$

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where $\text{DES}(x, w)$ is the set of worlds satisfying x's desires in w

Some predictions

- what desires *x* has may depend on what world they're in (desires are contingent)
- want ascriptions are non-trivial only when all of *x*'s desires can be satisfied jointly
- want ascriptions are upward entailing: if *x* wants *p*, *x* wants any logical consequence of *p*
- nothing is said about what desires are, just that we can ask of a world whether a desire is satisfied there

Flexible realism

An all-too-common pattern:

- Olga really enjoys her vacation and wishes it could last longer.
- But Olga knows that she has to go back to work and that she will.
- So, Olga wants to have a light workload for the next two weeks.

Best among the belief worlds

The system of preferences underlying desire ascriptions identifies the best worlds given the open choices among the subject's belief worlds.

$$x \text{ wants } p = \forall w' \in \text{BEST}(x, w)(\text{DOX}(x, w)) : \ w' \in p$$

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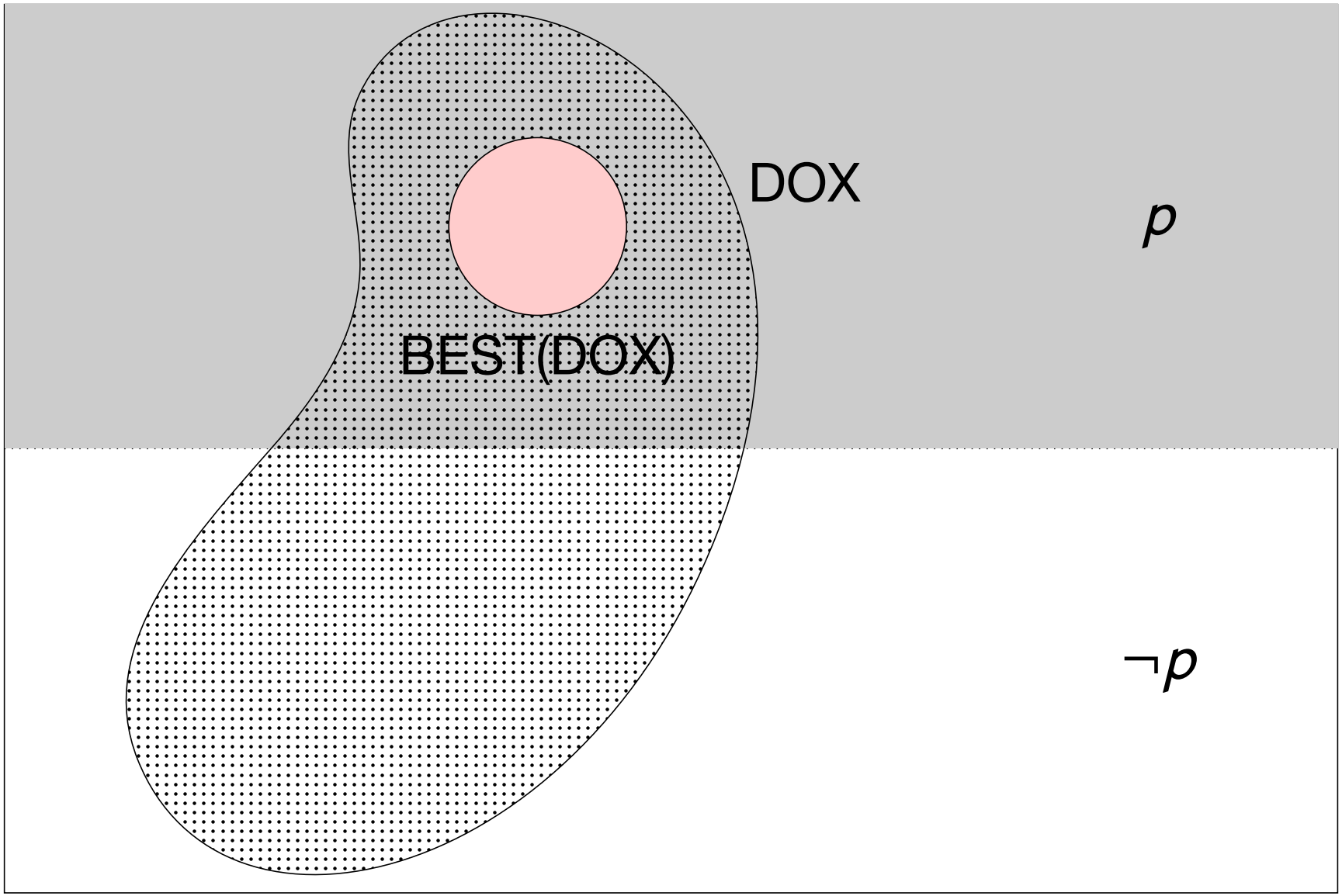
where $\text{DOX}(x, w)$ is the set of worlds compatible with x's belief state in w and $\text{BEST}(x, w)$ is a subset selection function.


DOX
BEST(DOX)
p
¬p

The Samaritan Paradox

- Someone was robbed.
- Vera wants to help the victim.

- Vera believes that someone was robbed.
- So, all of her belief worlds are worlds where someone was robbed.
- In the best of her belief worlds, she helps the victim.
- But in the best of her belief worlds, someone was robbed.

(1) !! Vera wants someone to have been robbed.

Heim's remedy

want presupposes that its prejacent is not settled in the DOX worlds

x wants p is only defined for *w* if $\text{DOX}(x, w) \not\subseteq p$ and $\text{DOX}(x, w) \cap p \neq \emptyset$

diversity condition

How to find the BEST **worlds**

- don’t analyze further
- calculate from comparative ordering of worlds
- calculate from a set of propositions

Finding the BEST **with an ordering**

- assign to x, w an ordering of worlds $>_{x,w}$ (better than)
- $w' >_{x,w} w''$
- For any set of worlds X, the BEST(x, w)-worlds in X are
  $\{w' \in X\colon\ \neg\exists w'' \in X$ such that $w'' >_{x,w} w'\}$

NB: The literature is hopelessly inconsistent with respect to the orientation of $>$!

Finding the BEST **with a set of propositions**

- assign to x, w a set of propositions X (the ones that x in w ideally wants to be true)
- idea: w' is better than w'' iff w' makes more propositions in the set true than w''
- define $>_X$ as follows: $w' >_X w''$ iff $\{p \in X\colon\ w'' \in p\} \subset \{p \in X\colon\ w' \in p\}$

Predicted monotonicity

(2) Alexis wants a puppet and a puzzle for Christmas.
So she wants a puppet for Christmas. (Asher 1987)

(3) A: Alexis wants a puppet and a puzzle for Christmas.

B: (goes to store and returns) I bought a puppet for Alexis.

A: !! Why did you do that? I didn't say she wanted a puppet!

Apparent non-monotonicity

(4) Nicholas hopes to get a free trip on the Concorde.
So Nicholas hopes to get a trip on the Concorde.

(Asher 1987)

Heim 1992

Taking inspiration from Stalnaker (1984: 89):

> *"wanting something is preferring it to certain relevant alternatives, the relevant alternatives being those possibilities that the agent believes will be realized if he does not get what he wants."*

Heim:

> *“An important feature of this analysis is that it sees a hidden conditional in every desire report. A little more explicitly, the leading intuition is that* John wants you to leave *means that John thinks that if you leave he will be in a more desirable world than if you don’t leave.”*

Heim's semantics

(5) $[\![\text{want}]\!]^w = \lambda p.\ \lambda x.\ \forall w' \in \text{DOX}(x, w):$
$\text{SIM}_{w'}(\text{DOX}(x, w) \cap p) >_{x,w} \text{SIM}_{w'}(\text{DOX}(x, w) - p)$

NB: this is a static reformulation of Heim's dynamic semantics

NB: if SIM is undefined for the empty set, this solves the Samaritan Paradox

Heim's semantics is very demanding

Every *p*-world in DOX needs to better than the most similar non-*p*-world. And every non-*p*-world needs to be worse than the most similar *p*-world.

Imagine you fancy some fish for dinner. If you don't order fish, you'd order a green salad. There's a belief world where the fish is undercooked; after all, you may not be so sure about the restaurant. There's no way even this place will mess up a green salad. So, there is a *p*-world in DOX (undercooked fish) that is worse than the nearest non-*p*-world (acceptable green salad).

So, according to Heim, it's false that you want fish. It may also be false that you want green salad. It's hard to have desires in Heim's world.

Heim's semantics is (therefore) non-monotonic

(6) Gina wants perfectly cooked fish for dinner.
$\not\Rightarrow$ Gina wants fish for dinner.

The incredulous stare

(7) Gina wants perfectly cooked fish for dinner, but she doesn’t want fish for dinner.

The incredulous stare

(7) Gina wants perfectly cooked fish for dinner, but she doesn’t want fish for dinner.

What?

More examples

(8) Natasha wants to leave on Saturday, but she doesn’t want to leave on the weekend.

(9) Filip wants to run 5 miles but he doesn’t want to run.

Explaining counterexamples

- context shifts
- free choice-ish readings
- conflicting desires

Free trips and discounts

Heim (classnotes):

(10) John is in a furniture store, looking at a couch that has a very scary price-tag. The salesman comes up to him:

Salesman: Would you like to buy this couch?

John: No.

Salesman: Would you like to buy it at 25% off?

John: Yes.

Simpliciter

Asher 1987:

(11) Nicholas wants to get a free trip on the Concorde.
So, Nicholas wants to get a trip on the Concorde.

“If I want to ride on the Concorde and not pay for it, it doesn’t necessarily follow that I also want to ride on the Concorde simpliciter. It may mean bankruptcy!” (Asher 1987: 171).

Ambivalence

(12) Denzel is ambivalent. He wants his first cup to be green tea and he wants his first cup to be coffee.

How to we deal with conflicting desires?

- multiple orderings
- contextually assigned

Breaking out of the DOX prison

- babysitters
- endless weekends
- Bolivia

Babysitters

(13) (Jan hired a babysitter because) she wants to go to the movies tonight.

(14) $\text{DOX}^{+}(x, w) = \{w' \in W\colon$ w' is compatible with everything that x in w believes to be the case no matter how she chooses to act$\}$

Danger

There are worlds in DOX + that together with Heim's semantics make it even harder to want anything.

Pointed out to us by Milo Phillips-Brown

Endless weekends

(15) I want this weekend to last forever. (But I know, of course, that it will be over in a few hours.)

Heim on endless weekends

“I am even less sure how to respond to this example. One strategy might be similar to the one I just took with [the babysitter example]: maybe for some reason not all the subject’s beliefs are taken into account here either, but only a subset too weak to imply that Monday is right around the corner.”

“Alternatively, [the endless weekend example] might be seen as reporting the attitudes of a mildly split personality. The reasonable part of me knows and is resigned to the fact that time passes, but the primitive creature of passion has lost sight of it. Another loose end.”

Bolivia

(16) I have what I want.

(17) I live in Bolivia because I want to live in Bolivia.

(18) A: You're drunk!

B: Yes, and I want to be because only this way can I forget about …

Iatridou 2000

von Fintel 1999

$[\![\text{want}]\!]^{f,h,w}(x)(p)$ is defined only if

1. $f(x,w) = \text{DOX}(x,w)$
2. $f(x,w) \cap p \neq \emptyset$
3. $f(x,w) - p \neq \emptyset$
4. $h(x,w)$ is the set of propositions that x in w compares worlds with

If defined, $[\![\text{want}]\!]^{f,h,w}(x)(p) = 1$ iff
$\forall w' \in \text{BEST}_{h(x,w)}(f(x,w)) :\ p(w') = 1$

Making von Fintel 1999 flexible

- drop the requirement that the domain = DOX
- drop the requirement that the ordering is **the** ordering

Want vs. Hope

(19) Irene hopes this weekend lasts forever.

(20) Sabine lives in Bolivia because she hopes to live in Bolivia.

Hope

- hardwired to DOX
- hence, diversity condition on DOX
- also (?): some element of lack of control

(21) I hope to solve this problem by tonight.

Determining the domain of *want*

- Start with DOX but go out far enough to include prejacent worlds.
- Similar to counterfactual reasoning.
- Ongoing work by Thomas Grano & Milo Phillips-Brown.

Stay tuned

Conclusion (for today)

- a flexible Hintikka analysis built on von Fintel 1999
- more freedom in choosing the domain and ordering parameters
- monotonic (wrt a chosen domain and ordering)
- conflicting desires from choices of ordering
- the linguistics of attitudes is even more like the linguistics of modals than we thought

An annoying problem

Villalta 2008:

(22) a. I want to be rich.

b. I believe that I will be rich iff I work hard now.

c. ∴ I want to work hard now.

I want to but …

Phillips-Brown, Milo. 2017. I want to, but …. *Sinn und Bedeutung* 21.