Conditional desires

Kai von Fintel

Slides at http://kvf.me/cd
The perennial puzzle

2 + 2 = ?
if + want = ?
The plan

• starting points
• an expected reading
• another reading (or even two?)
• the solution space
• what are conditionals?
Starting point: \textit{if}

\[ \lambda w_0. \forall w' \in f(p, w_0) : q(w') \]

Stalnaker\(^*\): \( f(p, w_0) = \) the \( p \)-worlds most similar to \( w_0 \)

centering: if \( w_0 \in p \Rightarrow w_0 \in f(p, w_0) \)
Some *ifs*

(1) If I have three cups of coffee, I will be completely wired.

(2) If I had had three cups of coffee, I would have been completely wired.

(3) If I had three cups of coffee, we’re out of beans.
Starting point: \textit{want}

A picture that’s too simple:

\[
\lambda w_0. \quad \forall w' \in \text{DES}(x, w_0) : \ q(w')
\]
(4) Next semester, I want to teach Mondays and Wednesdays.

$x$ wants $q \rightsquigarrow$

among $x$’s doxastic alternatives, the best ones (as far as $x$’s desires are concerned) are all $q$-cases
\[ \lambda w_0. \forall w' \in \text{BEST}_{x,w_0}(\text{DOX}_{x,w_0}): q(w') \]
Some wants

(5) I want to have no more than two cups of coffee.

(6) Julie wants Alyssa to buy beans.

(7) *Erika will, daß Petra Kaffee kauft.*
Erika wants that Petra coffee buys

“Erika wants Petra to buy coffee.”
If + want

(8) If I have three cups of coffee, I will want to work all night.

(9) If April lives in Bolivia, she wants to live in Bolivia.
If over want

\[ \lambda w_0. \forall w' \in f(w_0, p) : \forall w'' \in \text{BEST}_{x,w'}(\text{DOX}_{x,w'}) : q(w'') \]

Call this the **C-reading**: “conditional with want in consequent”
Another reading of *if* + *want*

Pasternak 2018:

(10) If I become a zombie, I want you to shoot me.

My current actual desire *for* the zombie scenario.

Not what my desires will be if I become a zombie.
Wanting a conditional to be true

(11) We want [the light to go on if the door is opened].

(12) If the door is opened, we want the light to go on.
Wanting to be shot

(13) I want [you to shoot me if I become a zombie].

(14) Shoot me if I become a zombie!
If I become a zombie, shoot me!

(15) It’s all set. Gina will shoot me if I become a zombie.
Want over if

\[ \lambda w_0. \forall w' \in \text{BEST}_{x,w_0}(\text{DOX}_{x,w_0}): \forall w'' \in f(p,w'): q(w'') \]

Call this the **W-reading**: “wide scope for want”
Yet another reading?

(16) I want Borussia Dortmund to win the Champions League.

(17) But if they don’t, I want Barça to win.
(18) If it isn’t 11 that comes up, Dawn wants an even number to come up.
(19) If I have three cups of coffee, I want the network to crash.
A different perspective

*if* + *want* can express a **restricted desire**

Among the *p*-worlds in the doxastic set, the agent prefers the *q*-worlds
The restricted reading illustrated

\[ \lambda w_0. \forall w' \in \text{BEST}_{x,w_0}(\text{DOX}_{x,w_0} \cap p) : q(w') \]

Call this the **R-reading**: “restricted”
R isn’t just about second best desires

Dawn bets on 8 and 11.

(20) If the number is odd, Dawn wants it to be 11.
    If the number is even, Dawn wants it to be 8.

(21) If a German club wins, I want it to be Dortmund.
    If a Spanish club wins, I want it to be Barça.
Is R a special case of W? [Take One]

• R isn’t the same as wanting a run-of-the-mill conditional proposition to be true
• But maybe we need to look beyond the run-of-the-mill
Why this isn’t straightforward

What would the selection function $f$ have to be like to deliver the R-reading?

$$f(BEST(DOX), p) = BEST(DOX \cap p)$$
Partisans of restricted readings

Defenses of irreducibly conditional desires or “restricted” desires:

• McDaniel & Bradley 2008
• Lycan 2012, 2016
• Blumberg & Holguín 2018
• Pasternak 2018
Whence the R-reading?

\[ x \text{ wants } q \]

if \( p \)
Questions

- How is the R-reading derived?
- What happened to the meaning of *if*?
The solution space

1. a dedicated mechanism for R
2. R as a special case of W, after all
The history of the conditional is the history of a syntactic mistake. There is no two-place if … then connective in the logical forms for natural languages. If-clauses are devices for restricting the domains of various operators. Whenever there is no explicit operator, we have to posit one. (Kratzer 1986)
Applications to other cases of restricted readings

- adverbs of quantification
- deontic conditionals
- epistemic conditionals
- determiner quantifiers
How we get three readings

R = if $p$ restricts (the modal base of) want
W = if $p$ restricts an implicit operator in the scope of want
C = if $p$ restricts an implicit operator with scope over want
Compositional implementation?

- *if*-clause makes salient a set of worlds, which an operator can restrict itself to
- *if*-clause as restrictive modifier of the domain of an operator
von Fintel 1994 applied to R-desires

\[
\text{if}_n p \quad \text{x wants}_n q
\]

\[
\left[ \text{if}_n p, q \right]^g = \left[ q \right]^{g^+}
\]

where \( g^+ \) is just like \( g \) except that

\[
g^+(n) = g(n) \cap \left[ p \right]^g
\]

\[
\left[ \text{want}_n \right]^g = \lambda q. \lambda x. \lambda w.
\forall w' \in \text{BEST}(\text{DOX}(x, w) \cap g(n)) : q(w')
\]
von Fintel & Heim 2011 applied to R-desires

\[
\begin{align*}
\text{want} & \quad \text{DOX} \quad \text{if p} \\
\quad \quad \quad \text{BEST} & \\
x & \quad q
\end{align*}
\]

\[
\llbracket \text{if} \rrbracket = \lambda p_{st}. \lambda m_{s,st}. \lambda w. \lambda w'. w' \in m(w) \land w' \in p
\]
The costs

- unsettled compositional implementation
  - in general
  - the LF of attitudes is not well-understood
- no uniform meaning for conditionals
Can we (should we) go for a cheaper solution?

- R as a special case of W, after all?
Some ways to get R from W

• Way 1: Decomposing attitudes
• Way 2: Belnap or Hook+
Way 1: Decomposing attitudes

Kratzer 2006, Moulton 2009, 2015, Moltmann 2017:

• attitude verbs are not modal operators
• they are predicates of mental states
• their prejacent describes the content of the mental state
• the prejacent contains an implicit modal

\[ x \text{ wants } q \iff \text{wants}(x,e) \land \forall w' \in \text{BEST}_e(DOX_e) : q(w') \]
Getting R

• The implicit modal can be restricted by *if* in however way we get restricted O-readings of modals
• The LF of desire predicates does not need to be specially massaged to allow O
Way 2: funky conditionals

• We don’t get R with a “normal” conditional below.
• But there are at least two other options.
• See von Fintel & Gillies 2015 for more.
Way 2A: Using Belnap to get to R

Two ingredients:

1. if $p, q \rightsquigarrow$ three-valued proposition
   - T if $p \& q$
   - F if $p \& \neg q$
   - $\star$ if $\neg p$

2. the BEST function in desire ascriptions is not applied to DOX but to those worlds in DOX for which the prejacent is either T or F

Way 2B: Hook+

Kratzer 2015:

- the material conditional ("hook", \( \supset \))
- plus: makes the proposition \( p \) salient
- the higher operator can restrict itself pragmatically to that salient proposition
Pragmatic restriction from below

$x$ wants ($p \supset q$)
Way 2 redux

For a domain that consists only of p-worlds, many conditional meanings collapse into q!

Belnap = Hook = strongly centered Stalnaker

The magic in Way 2 is all in the restriction to p-worlds.
Where we are

Conditional desires have a reading (R) that can only be delivered by

- the compositionally adventurous restrictor theory, and/or
- a non-standard meaning for conditionals
Outlook

• Conditional desires are an underexplored testbed for theories of conditionals (and desires).
• Connections to deontic conditional and conditional imperatives.
• Evaluate alternative theories of desire ascriptions.
(22) If he’s comatose, he wants to be comatose.

(23) I have three cups of coffee and I want the network to crash.

(24) #If I {became/had become} a zombie, I wish you had shot me. (Pasternak 2018)
References


