X-marked desires

or:

What wanting and wishing crosslinguistically can tell us about the ingredients of counterfactuality

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(1)  a. I want the car to have GPS.
    b. I wish the car had GPS.
(2) Quiero que el coche tenga GPS.
want.1sg that the car have.3sg.PRES.SUBJ GPS

(3) Querría que el coche tuviera GPS.
want.1sg.COND that the car have.3sg.PAST.SUBJ GPS

counterfactual consequent morphology

counterfactual antecedent morphology
(4)  a. Eu quero que o carro tenha GPS.
   b. Eu queria que o carro tivesse GPS.
(5)  a. I prefer a car with GPS.
    b. I would prefer a car with GPS.
    c. I would have preferred a car with GPS.
0. Terminology: Xs and Os
1. X-marking in conditionals
2. Lessons from “transparent ought”
3. want + X = wish
4. The semantics of desire and X-marking
5. Unification?
0. Terminology: Xs and Os
The morphology used to produce counterfactual conditionals:

(6) If Rose had scored, we would have won.

Sometimes called “counterfactual”, sometimes “subjunctive”. Neither is correct.
Not always subjunctive:

(6) If Rose had scored, we would have won.

Not always counterfactual:

(7) a. If he had taken arsenic, he would be showing exactly these symptoms.

    b. If she brought pie, we would eat it rightaway.

    Anderson 1951

    future less vivid (FLV)
We need neutral terminology.

**O-marking**: ordinary, open, “indicative” conditionals

**X-marking**: the extra marking on counterfactuals, FLVs, etc.
The family business:

- von Fintel 1998: the meaning of “subjunctive” conditionals
  (⇝ Leahy 2017)

- Iatridou 2000: “counterfactual” = fake past + …
  (⇝ Ippolito 2013, Schulz 2014, Romero 2014, a.o.)

- von Fintel & Iatridou 2008: “counterfactual” marking
  weakens necessity modals (must + X = ought)

- today: want + X = wish
1. X-marking in conditionals
• What meaning does X-marking contribute?
• How does it achieve the meaning it contributes?
Not counterfactual:

(7)  
  a. If he had taken arsenic, he would be showing exactly these symptoms.  
     Anderson 1951
  b. If she brought pie, we would eat it rightaway.  
     future less vivid (FLV)

(8) The murderer used an ice-pick. But, if the butler had done it, he wouldn’t have used an ice-pick. So the murderer must have been someone else.  
     Stalnaker 1975

Note to self: engage with Zakkou 2017
Iatridou 2000: X-marked conditionals quantify over a domain of worlds that excludes the actual world.

But Mackay 2015:

(9)  
   a. If Jones had taken arsenic, things wouldn’t be quite as they actually are.
   
   b. If Jones had taken arsenic, everything would be exactly as it actually is.
Modus ponens:

(10) A: If Heather had left before 9am, she would have made it to the meeting.

B: Well, you’re wrong. She did leave before 9 and still didn’t make it.
For all conditionals: the domain of quantification must include antecedent worlds.

The meaning of O-marking:

- The domain of quantification is entirely within the context set.

The meaning of X-marking:

- The domain of quantification is not entirely within the context set.

Note to self: rethink in light of Mackay 2017
• von Fintel 1998: X-marking triggers non-inclusion presupposition
• Leahy 2017: X-marking has no meaning, triggers counterfactuality implicature when in competition with O-marking
How do O/X-marking have the meaning they do? As Iatridou 2000 showed, X-marking is complex:

- an extra layer of past, not obviously temporal
- often a future morpheme (in the consequent)
- often a “fake” aspect, not obviously temporal
- often subjunctive mood

We don’t understand much yet how these interact. Most work has been done on the role of past tense.
**Past-as-modal** The past tense morpheme is interpreted in the modal dimension. Given what we said earlier, it signals that the modal domain is not entirely included in the context set.

**Past-as-past** The past tense is a past tense with scope over the relevant modal operator. It moves the time of accessibility into the past, thereby widening the domain beyond the context set.

Past-as-past would appear to be the null hypothesis.

von Fintel 2005
X-marking on antecedent ($X_{\text{ant}}$) vs. on consequent ($X_{\text{cons}}$)

- do these contribute separately?
- many accounts interpret just $X_{\text{cons}}$
- $X_{\text{cons}} = X$-marking on the conditional modal
- $X_{\text{ant}}$ as an agreement/reflex phenomenon?
2. Lessons from “transparent ought”
(von Fintel & Iatridou 2008)
Weak necessity *ought*:

(11)  a. You ought to do the dishes but you don’t have to.
    b. #You have to do the dishes but you don’t have to.
    c. #You must do the dishes but you don’t have to.
Weak necessity modals differ from strong necessity modals in drawing on a secondary ordering source:

- what you must/have to do is necessitated by the primary ordering source
- what you ought to is required by the primary and secondary ordering sources together
Greek transparent *ought*:

(12) *Tha eprepe na plinis ta piata ala dhen ise*  
    FUT must+Past NA wash the dishes but NEG are  
    *ipexreomenos na to kanis*  
    obliged NA it do  

‘You ought to do the dishes but you are not obliged to do it’
French transparent *ought*:

(13) *Tu devrais faire la vaisselle, mais tu n’es pas obligé*

‘you ought to do the dishes but you are not obliged to do them’

And several others, including non-IE languages.
English is an outlier in having a lexical item for the weak necessity modal (though historically one can detect X-marking on *ought*).
X-marking on strong necessity modals is ambiguous:

- weak necessity in the actual world
- strong necessity in another (counterfactual) world
A weak necessity modal in the actual world:

(14)  *tha eprepe na pari aftin tin varka*

must+X  take this the boat

‘he ought to take the boat’

A strong necessity modal in a “counterfactual” world:

(15)  *An o Fred ithele na pai sto nisi, thae prepe*

If the Fred wanted to go to the island, must+X

*na pari aftin tin varka*

take this the boat

‘If Fred wanted to go to the island, he would have to use the boat’
The counterfactual strong necessity meaning is not much of a mystery but what’s happening in the transparent “ought” meaning? How does X-marking bring in the secondary ordering?
Our 2008 proposal (1/3):

In the transparent OUGHT cases, we are not moving to counterfactual worlds that differ from the actual world at the ground level of empirical facts: there are no different circumstances there, no different goals, primary or secondary, no different evidence, reliable or shaky. Instead, a parameter of evaluation is changed. We move from one context where a secondary ordering source is invisible to a strong necessity modal to a new context where that secondary ordering source is promoted in such a way as to become visible to the strong necessity modal.
Our 2008 proposal (2/3):

Perhaps, then, the counterfactual marking is co-opted here in a somewhat metalinguistic kind of way: “if we were in a context in which the secondary ordering source was promoted, then it would be a strong necessity that ...”. This would explain why even though there is CF-morphology, the modal claim is made firmly about the actual world; all that the morphology marks is a change in evaluation parameters.
Our 2008 proposal (3/3):

It is probably not an accident that counterfactual marking brings with it an element of tentativeness: the speaker is not saying that the secondary ordering source is something that has to be obeyed. The choice of whether to really promote the secondary ordering source is left open.
Rubinstein 2012 on primary and secondary ordering sources:

- “two kinds of priorities: ones that are presupposed to be collectively committed to, and ones that are presupposed not to be collectively committed to”
- “weak necessity modals are sensitive to priorities of both kinds, while strong necessity modals are sensitive only to priorities of the first kind”
Rubinstein 2014:

- “strong necessities are necessities relative to non-negotiable priorities”
- “weak necessities (expressed by predicates like should, better, and preferable) are necessities relative to negotiable priorities—raised and promoted by an opinionated individual”
X-marking:

1. on conditional modal: domain (modal base) is not a subset of the context set
2. on priority modal: ordering source is not a subset of the non-negotiable priorities

X-marking marks departure from default context
Two important considerations:

1. weak necessity/transparent *ought* talks about actual & current priorities
2. moving to a past evaluation point does not deliver a wider set of priorities
Past-as-past theory of X-marking does not obviously extend to transparent *ought*. 
3. want + X = wish
In English, Hindi, Turkish, the complement of wish has the morphology of the antecedent of an X-marked conditional:

(16)  a. Tracey wishes she had a faster car.

   b. kaash vo lambaa ho-taa
   wish he tall be-Hab

   ‘I wish he was tall’

   c. Keşke önüümüzdeki salı gel-se-ydi
   l.wish next tuesday come-SA-PST

   ‘I wish he would come next Tuesday’
Other languages go further:

(17)  a. X-marked conditional: \( \text{if } p_{X_{\text{ant}}}, q_{X_{\text{cons}}} \)

   b. X-marked desires: \( x \text{ wants}_{X_{\text{cons}} } \text{ that } p_{X_{\text{ant}}} \)

\( X_{\text{ant}} = \text{the morphology on the antecedent of an X-marked conditional} \)
\( X_{\text{cons}} = \text{the morphology on the consequent of an X-marked conditional} \)
Spanish:

(18) Si fuera más alto sería un jugador de baloncesto.
    If be.3.sg.PAST.SUBJ more tall be.3.sg.COND a player of basketball
    ‘If s/he was taller, s/he would be a basketball player’

(19) Querría que fuera más alto de lo que es.
    Want.3.sg.COND that be.3.sg.PAST.SUBJ more tall than it that s/he is
    ‘I wish s/he was taller than s/he is’
Greek:

(20) An icha aftokinito tora, tha imun
    If have.PST.1sg car now, FUT was.PST.1sg
eftichismeni
    happy

‘If I had a car now, I would be happy’

(21) Tha ithela na icha aftokinito tora
    FUT want.PST.1sg NA have.PST.1sg car now

‘I wish I had a car now’
English (wish), Hindi (kaash), Turkish (keşke) don’t show the full pattern because they lexicalize the wish-predicate instead of deriving it via want+X.

Spanish and Greek have “transparent” wishes.

There are other cases with wrinkles (French voudrais (= vouloir + $X_{\text{cons}}$) has morphology in its complement that is not quite the same as the antecedent of X-marked conditionals).
We find the same pattern with X-marking on wants that we found earlier with X-marking on necessity modals.

- *wish*-reading
- *want* in another (counterfactual) world
A thwarted desire in the actual world:

(22) *Tha ithele na imun psiloteri*

FUT want+Past NA was taller

‘She wishes I was taller’

A desire in a CF world, no desire in the actual world:

(23) *An itan psiloteros tha ithele makritero krevati*

if was taller FUT want+Past longer bed

‘If he was taller he would want a longer bed’
transparent languages:

strong necessity + CF

OUGHT
modal claim in actual
world

"ought"

WISH
desire in actual
world

"wish"

WOULD HAVE TO
modal claim in counterfactual
world

"would have to"

WOULD WANT
desire in counterfactual world

"would want"

want + CF

English:

transparent languages:
4. The semantics of desire and X-marking
The hope:

Understanding how \(\text{want} + X_{\text{cons}} = \text{wish}\) will help us understand both the semantics of desires and the nature of X-marking.
Slightly enriched Hintikka, à la von Fintel 1999:

• $x$ wants $\phi$ makes a claim about $x$'s beliefs and preferences in the actual world
• among $x$’s belief worlds, all the best worlds according to $x$’s preferences are $\phi$-worlds
• easily modeled with Kratzerian modal base (doxastic accessibility) and bouletic ordering source

Wanting vs. wishing

- Heim: “John wishes you were gone means John thinks that if you were gone he would be in a more desirable world than he is in because you are not gone.”
- Iatridou: “A thinks that if she had B, she would be happy (that she has B)”

Intriguing that these paraphrases have the complement of wish in the antecedent of an X-marked conditional

⇒ in fact, as we’ve seen, wish-complements do show antecedent X-marking!
What one might expect:
WANT that $\phi_0$-marking = want
WANT that $\phi_X$-marking = wish

But that’s not what we find. Plus, it might have been bad news for past-as-past since then there wouldn’t be any action on the modal/attitude operator.
Another thing one might expect: X-marking that talks about the positive emotion that the agent would have in a particular scenario.

(24)  a.  Jill would be pleased if you came.
    b.  Olga would have been pleased if you had come.

We do find this, but that’s not the construction we’re looking at: the main predicate is not be happy/pleased but want ...and it doesn’t talk about what the agent would want or would have wanted in a hypothetical scenario.
Transparent wishes have X-marking on both *want* and its complement:

\[ \text{want}_{X_{\text{cons}}} \text{ that } \phi_{X_{\text{ant}}} \]

Is one X-marking a reflex of the other?

- Heim: the morphology on \( \phi \) is there by agreement with *wish*
- Could it be the other way round? Some kind of object agreement?
A conditional analysis? Similar to the meta-linguistic conditional analysis we floated in 2008 for transparent oughts?
How about this?

\[ \text{want}_{X_{\text{cons}}} \phi X_{\text{ant}} = \text{if } \phi \text{ were attainable, I would want } \phi \]

Doesn’t capture that these aren’t hypothetical desires (just thwarted actual desires)
Imagine Mary is the sort of person who only wants things that are attainable. If something is unattainable, that suffices for her to not want it. I happen to know her general tastes in men and know with certainty that Pierce Brosnan falls within that category. As things stand, a date with him is unattainable, hence Mary has no desires about it.

(25) María quería que Pierce Brosnan quedara con ella.

“Mary wishes that Pierce Brosnan would go out with her.”
X-marking marks expansion of the modal domain (again)

- *want* requires its complement to be compatible with its modal domain
- The modal domain of *want* is the subject’s doxastic state
- So, the complement needs to be thought attainable
- When the complement is (thought) unattainable, the domain needs to expand beyond its default
- X-marking signals this expansion
Heim 1992 has a symmetric compatibility presupposition: both the complement and its negation need to be compatible with the subject’s doxastic state.

von Fintel 1999 and others follow her in this. This makes a bad prediction now.
We should find X-marking on desires not just when the complement is unattainable but also when it is believed to be true (settled, inevitable).

(26)  

a. I live in Bolivia because I want to live in Bolivia.  
b. *I live in Bolivia because I wish I lived in Bolivia.

Iatridou 2000: (38)/(40)
(27) J’habite en Bolivie parce que je veux/*voudrais habiter en Bolivie parce que je veux/*voudrais habiter en Bolivie parce que je veux/*voudrais habiter en Bolivie parce que je veux/*voudrais habiter en Bolivie parce que je veux/*voudrais habiter en Bolivie parce que je veux/*voudrais habiter en Bolivie parce que je veux/*voudrais habiter en Bolivie parce que je veux/*voudrais habiter en Bolivie parce que je veux/*voudrais habiter en Bolivie parce que je veux/*voudrais habiter en Bolivie parce que je veux/*voudrais habiter en Bolivie parce que je veux/*voudrais habiter en Bolivie parce que je veux/*voudrais habiter en Bolivie parce que je veux/*voudrais habiter en Bolivie parce que je veux/*voudrais habiter en Bolivie parce que je veux/*voudrais habiter en Bolivie parce que je veux/*voudrais habiter en Bolivie parce que je veux/*voudrais habiter en Bolivie parce que je veux/*voudrais habiter en Bolivie parce que je veux/*voudrais habiter en Bolivie parce que je veux/*voudrais habiter 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We need an asymmetric compatibility presupposition for want:

**symmetric** \( \phi \) and \( \neg \phi \) are compatible with \( DOX_a \)

**asymmetric** \( \phi \) is compatible with \( DOX_a \)
(28) I want this weekend to last forever.

cf. If he solved that problem, I’m a monkey’s uncle. ?
5. Unification?
Three cases of X-marking

**Conditional** domain of quantification not entirely within context set

**Transparent ought** set of priorities not entirely within the non-negotiable set

**Transparent wishes** domain of quantification not entirely within doxastic set
Anticipation by Stalnaker 1975:

“I take it that the subjunctive mood in English and some other languages is a conventional device for indicating that presuppositions are being suspended”
What would a past-as-past approach have to say?

- separate time arguments for modal base and ordering source
- usually co-indexed
- past modal base = wider domain of comparison
- ordering source needs to be same as main predication (= time of desire)

Thanks to Rob Pasternak, p.c.
• We have no formal proposal yet.
• Idea seems more in line with the past-as-modal camp.
• It is astonishing how little we understand about the interaction of tense, aspect, mood in the linguistics of modals, conditionals, and attitudes.

Scary and exhilarating.