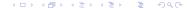
The meaning of free factive subjunctives

Eva Csipak

eva.csipak@phil.uni-goettingen.de Georg-August-Universität Göttingen

> ICI 19 July 26, 2013



Introduction

(1)Da wäre Pizza im Kühlschrank. there is. Sub pizza in-the fridge 'There is pizza in the fridge.' side message: 'Feel free to eat the pizza!'

Free factive subjunctives: unembedded use of the subjunctive factive interpretation



Roadmap

Introduction

- Claim 1: Free factive subjunctives are* hidden relevance conditionals
- Claim 2 : Free factive subjunctives need decision problems
- Claim 3 : They signal that they are not 'great information'

Introduction

Introduction

Uses of the subjunctive in German:

nonfactive uses:

```
reported speech:
optatives;
FLV conditionals:
counterfactual conditionals
```

factive uses:

```
'careful speech' (Buscha + Zoch 1984)
```



The data

Shopping

- (2) Heute hätten wir eine schöne Dorade. today have.Sub we a nice gilthead 'Today we have a nice gilthead.' If you would like to hear our specials, today we have a nice gilthead.
- (3) Das wären 19.95 Euro. that are.Sub 19.95 Euro 'That makes 19 95 Furo' If you would like to pay, that makes 19.95.



The data

Frequent naturally occurring example:

(4) Ich hätte eine Frage.

I have.Sub a question

'I have a question.'

If you are wondering what to do next, I have a question.

Presentational use:

Das wäre das Rathaus.

this is.Sub the city-hall

'This is city hall.'

If you are wondering whether this structure is worth taking a photo of, it is city hall.



(5)

The data

The data

Past tense

(6) Da wäre (doch) Pizza im Kühlschrank gewesen. there is.Sub Part pizza in-the fridge been 'There was pizza in the fridge.' If you were hungry, there was pizza in the fridge.

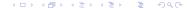


Unembedded nonfactive subjunctives

The data

Some languages (e.g. English) allow unembedded (but nonfactive) uses of the 'subjunctive'.

- a. Alex would have passed that test. (7)
 - b. Alex hätte den Test bestanden. Alex have. Sub the test passed 'Alex would have passed that test.'
- Note: Alex did not pass the test in w₀.



The data

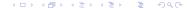
Unembedded nonfactive subjunctives

- Kasper (1992), Schueler (2008): unembedded nonfactive subjunctives are hidden counterfactuals:
- (8) a. Alex would have passed that test.
 - b. If he had taken it, Alex would have passed that test.
- The antecedent names a 'necessary precondition'.
- The 'necessary precondition' is retrieved from context.



Free factive subjunctives

- (9) a. Da wäre Pizza im Kühlschrank. there is.SuB pizza in-the fridge 'There is pizza in the fridge.'
 - b. Wenn du Hunger hast, da wäre Pizza im if you hunger have there is.Sub pizza in-the Kühlschrank. fridge
 - 'If you are hungry, there is pizza in the fridge.'
- $lue{}$ Speaker is committed to pizza in the fridge in w_0
- ⇒ A hidden relevance conditional!



The data

An analysis of relevance conditionals

- Many proposals assume a different syntax/semantics for relevance and hypothetical conditionals (e.g. Ebert, Endriss and Hinterwimmer (2008))
- Franke 2009: Relevance conditionals have the same semantics as hypothetical conditionals!
- The 'relevance conditional' interpretation comes about by pragmatic reasoning:
 - If antecedent and consequent are conditionally independent (world knowledge: they are not causally related), the speaker must have independent evidence to suggest that the consequent holds
 - \Rightarrow hearer reasons: the consequent must hold in w_0



The role of mood

The analysis in brief:

- FFS presuppose that there is a salient decision problem *D*
- *D* is referred to in the antecedent of a relevance conditional
- the prejacent of FFS must be relevant to D in the sense of van Rooij (2003)
- the subjunctive signals (non-truthconditionally) that there may be additional relevant information out there
- Disclaimer:

for now I have to assume that mood in German is ambiguous between FFS and a non-factive use



Contextual restrictions: Decision problems

Free factive subjunctives cannot occur in all places where indicatives occur.

- Restriction 1: There needs to be a salient decision problem in the context.
- **Context:** The addressee is participating in a clinical study. (10)He has to eat certain foods at certain times. He is hungry and is scheduled to eat pizza.
 - a. ?? Das einzige Essen wäre diese Pizza. the only food is.Sub this pizza intended: 'The only food option is to have this pizza.'
 - b. ✓ Das einzige Essen ist. IND diese Pizza.



Contextual restrictions

Contextual restrictions: decision problems

- Changing the context to add a decision problem makes the FFS acceptable.
- (11) Context: Speaker and addressee arrive in Geneva late at night. They want to eat something, but the only restaurant that is still open sells questionable pizza.
 - a. Das einzige Essen wäre diese Pizza.
 the only food is.Sub this pizza
 'The only food option is to have this pizza.'
 - b. *If you are wondering what to do about food,* das einzige Essen wäre diese Pizza.



Contextual restrictions

Contextual restrictions: decision problems

- Absence of a decision problem disallows FFS.
- (12) a. **Context:** The speaker wants to politely tell the addressee he looks terrible.
 - b. Du √siehst/??sähest schrecklich aus. you look.IND/ look.SUB terrible
 intended: 'You look terrible.'
 - c. ?? Wenn ich ehrlich bin, du sähest schrecklich aus. if I honest am you look.SUB terrible intended: 'If I am honest, you look terrible.'



Contextual restrictions

Contextual restrictions: Relevance

- Restriction 2: The prejacent of the FFS must be relevant to the solution of the decision problem in a particular way. Gricean relevance is not enough.
- Context: the addressee has just complained that he is (13)hungry.
 - a. ?? Du wärst auf Diät. you are.Sub on diet intended: 'You are on a diet.'
 - h

 Du hist IND auf Diät



Contextual restrictions: Relevance

- The consequent proposition needs to be relevant in the 'right' way!
- (14) ?? Wenn du Hunger hast, du wärst auf Diät. you hunger have you are. Sub on diet intended: 'If you are hungry, you are on a diet.'
 - ⇒ does not help addressee make a choice that best satisfies his goal



•00000

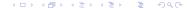
Decision problems

Decision problems: some background

The data

Decision problems are modelled (e.g. by van Rooij 2003) similar to questions as a partition of the decision maker's action alternatives:

- The decision maker calculates each action alternative's expected utility
- Expected utilities take into account what could be the case and how probable it is
- The action alternative with the highest expected utility is the 'optimal' action



000000

Decision problems: an example

Decision maker assigns utilities to each action, depending on states of the world:

action	pizza in fridge	pizza not in fridge
open fridge	18	1
order Chinese	1	13

Decision maker also assigns probabilites to states of the world:

probability	pizza in fridge	pizza not in fridge
	.1	.9



Expected utilities

The data

- **Expected utility** is then calculated from utility and probability
- 0.1*18 + 0.9*1 = 2.7 EU of open fridge
- 0.1*1 + 0.9*13 = 11.8 EU of order Chinese
- 'optimal' action is ordering Chinese



Relevance in decision problems

Decision makers can change their models on the basis of new facts!

old probability	pizza in fridge	pizza not in fridge
	.1	.9

'There is pizza in the fridge.'

new probability	pizza in fridge	pizza not in fridge
	.9	.1



Van Rooij (2003)'s notion of relevance

Old expected utilities

The data

- 0.1*18 + 0.9*1 = 2.7 EU of open fridge
- 0.1*1 + 0.9*13 = 11.8 EU of order Chinese
- New expected utilities
- \bullet 0.9*18 + 0.1*1 = 16.3 EU of open fridge
- 0.9*1 + 0.1*13 = 2.2 EU of order Chinese
 - ⇒Learning that there is pizza in the fridge is relevant to the decision problem.



Great information

When does a speaker give 'the best information'?

- For proposition p: expected utility of action a* given that p is higher than all other expected utilities
- p is 'great info' iff $\neg \exists q$ such that $EU(a_q \mid q) > EU(a^* \mid p)$
- free factive subjunctives signal that they are not 'great info'



•0

The meaning of free factive subjunctives

The meaning of the subjunctive

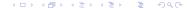
For a structure Sub(q), Sub signals the following.

- (16)a. presupposition: there is a salient decision problem D.
 - b. Then SUB signals that \exists k: $EU(a_k|p) \ge EU(a_i|p) \forall i$ where a_i are action alternatives of D.
 - Note: compared to what counts as 'great info', this is quite weakl



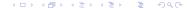
Competition with the indicative?

- Indicative signals nothing about potential EUs of action alternatives
 - \Rightarrow subjunctive is more complex!
- FFS asserts propositional content *plus* conveys info that relevance of the proposition is 'ok'
 - \Rightarrow implicature: there might be propositions with 'better' relevance
- this causes tentative/polite effects of FFS



Summary

- Free factive subjunctives presuppose a decision problem
- They have relevance conditional antecedents
- They signal that the information conveyed may not be the most informative



Open questions

- Why are FFSs restricted to these specific contexts? should follow from question 2
- How can we integrate the meaning of the subjunctive in FFS with that in reported speech and counterfactuals? some vague ideas...
- What about other languages?
 e.g. Polish (A. Pietraszko, pc)



Thank you!



Buscha, J. and I. Zoch. 1984. Der Konjunktiv. Leipzig: Enzyklopädie.

Condoravdi, C. and S. Lauer. 2012. Anankastic conditionals are just conditionals. Slides of talk presented at MIT.

Ebert, C., C. Endriss and S. Hinterwimmer. 2008. Topics as speech acts. In: Proceedings of WCCFL 27.

von Fintel, K. and S. latridou. 2006. Anankastic conditionals and related matters. Slides of talk presented at the University of Tübingen.

Frank, A. 1997. Context dependence in modal constructions. PhD thesis, Stuttgart University.

Franke, M. 2009. Signal to act. PhD thesis, Universiteit Amsterdam.

Ippolito, M. 2008. Subjunctive conditionals. In: Proceedings of SuB 12.

Kasper, W. 1992. Presuppositions, composition, and simple subjunctives. *Journal of Semantics* 9, pp. 307–331.

Kaufmann, S. and Schwager, M. 2009. A uniform analysis of conditional imperatives. *Proceedings of SALT 19*, pp. 239–256.

Kratzer, A. 1981. The notional category of modality. In: H.J. Eikmeyer and H. Rieser (eds.), Words, Worlds, and Contexts. Berlin: deGruyter, pp. 38–74.

van Rooij, R. 2003. Questioning to resolve decision problems. *Linguistics and Philosophy 26*, pp. 727–763.

Schueler, D. 2008. The syntax and semantics of implicit conditionals. PhD thesis, UCLA.



Appendix: potential problems

Relevance conditionals allow mixed-and-matched moods, but hypothetical conditionals don't.

- (17) a. 'If you are hungry, there is pizza in the fridge.'
 - b. √Wenn du Hunger hast, ist da Pizza im Kühlschrank.
 - c. VWenn du Hunger hast,
 wäre da Pizza im
 Kühlschrank.
 - d. √Wenn du Hunger hättest,
 ist da Pizza im Kühlschrank.
 - e. Venn du Hunger hättest, wäre da Pizza im Kühlschrank.

- (18) a. 'If Alex is/was hungry, he will/would go to the mensa.'
 - b. √Wenn Alex Hunger hat, geht er in die Mensa.
 - c. ??Wenn Alex Hunger hat, ginge er in die Mensa.
 - d. ??Wenn Alex Hunger hätte, geht er in die Mensa.
 - e. √Wenn Alex Hunger hätte, ginge er in die Mensa.



Mix-and-match moods

The data

- a. 'If you are hungry, there is pizza in the fridge.' (19)
 - b. Wenn du Hunger hast, ist da Pizza im Kühlschrank. $Ind/Ind \Rightarrow neutral$
 - c. Wenn du Hunger hast, wäre da Pizza im Kühlschrank. Ind/Sub⇒pizza not 'great'
 - d. Wenn du Hunger hättest, ist da Pizza im Kühlschrank. Sub/Ind⇒unlikely that hungry
 - e. Wenn du Hunger hättest, wäre da Pizza im Kiihlschrank Sub/Sub⇒unlikely that hungry AND pizza not 'great'



(20)Wenn du Hunger hast, da wäre Pizza im you hunger have. Ind there is. Sub pizza in-the Kühlschrank. fridge

'If you are hungry, there is pizza in the fridge.'

