

On the argument status of non-logical ‘if’-clauses: Evidence from German

Frank Sode – November 3, 2022

Background: Non-logical readings

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Williams (1974) was the first to point out that (1-a) can have a reading that is unavailable for (1-b).

- (1) a. I would be happy if Bill was here.
- b. I would be dead if Bill was here.

The reason for this has to do with the fact that happiness can not only have a cause but also a subject matter. We can be happy *about* something.

The subject matter of happiness can be expressed by a *that*-clause.

- (2) a. I am happy.
 - b. I am happy that Bill is here.
-
- (3) a. I am dead.
 - b. *I am dead that Bill is here.

Background: Non-logical readings

Williams (1974) characterizes the two readings of (4) as follows:

(4) I would be happy if Bill was here.

On one reading, the “logical” reading, my happiness is not necessarily related to my knowledge that Bill is here; it is simply a consequence of his presence. The other sense of this sentence is, “I would be happy that Bill was here, if he were.” [my emphasis; FS]

This difference corresponds to the difference between **cause** and **reason**:

- (5) a. **Logical reading (cause)**: If Bill were here, his presence would (in some way or other) be the cause of my happiness.
- b. **Non-logical reading (reason)**: If Bill were here (and I knew about it), his presence would be the reason for my happiness.
[I would be happy *about the fact* that he was here.]

Terminology

There are other (typically factive) **evaluative predicates** that behave in the same way as *happy*:

good, nice, glad, like, prefer, etc.

If these predicates show up in a construction that looks like a counterfactual conditional at the surface, as illustrated in (6), I want to call the construction **conditional evaluative construction** (= [EVAL IF]); cf. Kaufmann (2017).

- (6) a. It would { be good / nice / preferable } if Bill was here.
b. I would { be glad / like it / prefer (it) } if Bill was here.

If IF surfaces as an *if*-clause, I will write [EVAL *if*] for the construction.

If [EVAL IF] is understood in such a way that the subject matter of emotion is specified by IF, I want to call the corresponding reading of [EVAL IF] and IF **subject matter related**.

Two intuitions about subject matter related IFs

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There is consensus that IF in [EVAL IF] can have subject matter-related readings.

But there is no consensus how exactly these readings should be paraphrased, i.e., what the truth conditions of [EVAL IF] on these readings are.

Two intuitions about subject matter related IF-clauses

(7) I would be glad if Bill was here.

Williams' non-logical readings of [EVAL IF]

- Paraphrase for (7): 'I would be glad **that Bill was here** if he were.'
- *if*-clause: global restrictor reading (= 'if he were')
- \Rightarrow globally: counterfactual / hypothetical
- subject matter: **known fact** (under globally cf. / hyp. circumstances)

True desire readings of [EVAL IF]

Grosz (2012); Kaufmann (2017); Longenbaugh (2019); Sode (2021)

- Paraphrase for (7): 'I wish **Bill was here**.'
- *if*-clause: purely subject matter related reading
- \Rightarrow globally: not counterfactual (evaluated in the actual world)
- subject matter: **counterfactual / hypothetical circumstances**

Two intuitions about subject matter related IF-clauses

'I would be glad that Bill was here if he were.'

≠

'I wish Bill was here.'

Grosz (2012); Kaufmann (2017); Longenbaugh (2019); Sode (2021)

Preview

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The dialectics of the argument is as follows:

- Data from German can be used to show that [EVAL IF] can have both readings.
- There is a kind of IF in German that only shows up in [EVAL IF] on a subject matter related reading for IF, namely: conditional V2-clauses.
- German conditional V2-clauses only have true desire readings.
- Since German conditional V2-clauses can be paraphrased by *wenn* ('if')-clauses without a change in the truth conditions (in the same context), this can be taken as indirect evidence that German *wenn* ('if')-clauses can have true desire readings.

In the last part of the talk, I sketch how true desire readings can be derived in a compositional way, summarizing ideas from Sode (2021), and discuss the implications for our understanding of the source of X-marking in desire reports.

Background: Conditional V2

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In German, many evaluative predicates that license subject matter related IF in [EVAL IF] also license V2-clauses in subjunctive mood; cf. Frank (1998):

gut ('good'), *gut finden* ('like'), *froh* ('happy'), *lieber sein* ('be preferred', 'prefer'), *schön* ('nice'), *einfach* ('easy'), *sicher* ('safe'), *bequem* ('convenient'), *schlau* ('clever'), *vernünftig* ('reasonable'), *wohl* ('well'), etc.

- (8) a. Es wäre $\left\{ \begin{array}{c} \text{gut} \\ \text{schön} \\ \text{einfacher} \\ \text{vernünftiger} \end{array} \right\}$, du würdest mehr Sport machen.
- b. Ich würde es $\left\{ \begin{array}{c} \text{gut finden} \\ \text{vorziehen} \end{array} \right\}$, du würdest mehr Sport machen.
- c. Es wäre mir $\left\{ \begin{array}{c} \text{lieber} \\ \text{wohler} \end{array} \right\}$, du würdest mehr Sport machen.

Three facts about this type of V2-clause

- V2 can be adequately paraphrased by a *wenn*-clause; (9-a) \approx (9-b)
- V2 cannot be paraphrased by a *dass*-clause, (9-c); Frank (1998)
- V2 is considered to be ungrammatical in indicative mood; (9-d)
(exceptions: Q&A)

- (9) a. Es wäre gut, du würdest mehr Sport machen.
It be.PstSubj good you will.PstSubj more sports do
'It would be good if you did more sports.'
- b. Es wäre gut, wenn du mehr Sport machen würdest. wenn
'It would be good if you did more sports.'
- c. *Es wäre gut, dass du mehr Sport machen würdest. dass
- d. *Es ist gut, du machst mehr Sport.
It be.Ind good you do.Ind more sports

Conditional V2

I call this V2 phenomenon **conditional V2** and the structure [**EVAL V2**].

conditional V2 \neq assertive V2

cf. Frank (1998); Meinunger (2007)

Another basic fact about V2

V2-clauses in subjunctive mood cannot be conditional antecedents.

V1-clauses in subjunctive mood, in contrast, can.

- (10) a. Wenn du mehr Sport machen würdest, wärst du fitter. wenn
‘You would be more fit if you did more sports.’
- b. Würdest du mehr Sport machen, wärst du fitter. V1
‘You would be more fit if you did more sports.’
- c. *Du wärst fitter, du würdest mehr Sport machen. V2
- (11) a. Du wärst fitter, wenn du mehr Sport machen würdest. wenn
‘You would be more fit if you did more sports.’
- b. Du wärst fitter, würdest du mehr Sport machen. V1
‘You would be more fit if you did more sports.’
- c. *Du würdest mehr Sport machen, wärst du fitter. V2

The puzzling fact

But as mentioned: [EVAL V2] can always be paraphrased by [EVAL *if*] without a change in truth conditions (in a given context).

- (12) Es wäre besser, du würdest mehr Sport machen.
It be.PstSubj better you will.PstSubj more sports do
'It would be better if you did more sports.' V2
- (13) Es wäre besser, wenn du mehr Sport machen würdest.
It be.PstSubj better if you more sports do will.PstSubj
'It would be better if you did more sports.' wenn

V2-clauses show up in the mood frame of counterfactuals

Counterfactual conditionals

- (14) a. Du wärest fitter, wenn du mehr Sport machen würdest.
you be.PstSubj more fit if you more sports do will.PstSubj
'You would be more fit if you did more sports.'
- b. Du wärest fitter gewesen, wenn du mehr Sport gemacht hättest.
you be.PstSubj more fit been if you more sports done have.PstSubj
'You would have been more fit if you had done more sports.'

[EVAL V2]

- (15) a. Es wäre besser, du würdest mehr Sport machen.
you be.PstSubj more fit you will.PstSubj more sports do
'It would be better if you did more sports.' / 'You should do more sports.'
- b. Es wäre besser gewesen, du hättest mehr Sport gemacht. ≈ (16)
you be.PstSubj more fit been you have.PstSubj more sports done
Literally: 'It would have been better if you had done more sports.'
- (16) Du hättest besser mehr Sport gemacht.
You have.PstSubj better more sports done
'You should have done more sports.'

Prediction

If there are Williams-type readings ('... glad that... if...') for [EVAL *if*], [EVAL *if*] should not in all contexts be paraphrasable as [EVAL V2].

The reason: On a Williams-type reading, the *if*-clause is interpreted as a conditional antecedent (in addition to whatever else happens).

Conditional V2-clauses don't have an interpretation as conditional antecedents.

Therefore, we expect:

contexts in which [EVAL V2] can be used

⊂

contexts in which [EVAL IF] can be used

Conditional V2: Only true desire readings

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A direct comparison shows that the contexts in which [EVAL V2] can be used are a proper subset of the contexts in which [EVAL *if*] can be used.

We find two differences: First, a V2-clause is only licensed if the argument position specifying the subject matter is not already filled otherwise.

(A V2-clause cannot be a conditional antecedent.)

- (17) a. Ich würde (es) vorziehen, alleine zu sein, wenn ich alleine WÄre.
'I would prefer to be alone if I WAS alone.'
- b. *Ich würde (es) vorziehen, alleine zu sein, ich WÄre alleine.

Conditional V2: Only true desire readings

The same point can be made by forcing a referential anaphoric reading of *it*:

(18) Würdest du es vorziehen, alleine zu sein?

'Would you prefer to be alone?'

(19) Ich würde es vorziehen, wenn ich alleine WÄre.

I will.PstSubj it prefer if I alone be.PstSubj

B: 'I would prefer it (= to be alone) if I WAS alone.'

(20) #Ich würde es vorziehen, ich WÄre alleine.

I will.PstSubj it prefer I be.PstSubj alone

#'I would prefer if I WAS alone.' / 'I wish I WAS alone.'

Conditional V2: Only true desire readings

Second, a V2-clause that is subject matter-related doesn't allow for a global conditional interpretation. This can be seen when we embed *should* ('*should*') in a V2-clause in [EVAL V2]. We only get an interpretation that is similarly odd as the interpretation we get when we embed *sollte* under 'wish'.

(21) Ich fände es gut, wenn er sich bei dir melden sollte.
I find.PstSubj it good if he REFL at you contact should
'If he should contact you, I would like it.'

(22) *Ich fände es gut, er sollte sich bei dir melden.
I find.PstSubj it good he should REFL at you contact
≈ *'I wish he should contact you.'

(23) *Ich wünschte, er sollte sich bei dir melden.
I wish.PstSubj he should REFL at you contact
*'I wish he should contact you.'

Conditional V2: Only true desire readings

	Williams' readings	true desire readings
[EVAL <i>if</i>]	+	+
[EVAL V2]	-	+

'I would be glad that Bill was here if Bill were here' 'I wish Bill was here'

Conditional V2: Only true desire readings

Conclusion w.r.t. [EVAL V2]:

[EVAL V2] is a kind of [EVAL IF] (since [EVAL *if*] can be used instead of [EVAL V2] on the same interpretation).

V2 restricts the interpretation of [EVAL IF] to a true desire reading.

Put differently: A V2-clause disambiguates in favour of a true argument interpretation of IF. The counterfactual mood frame marks the subject matter of emotion as counterfactual / hypothetical, but not the wish.

Interim Conclusion

P1: If the interpretation of [EVAL V2] is restricted to true desire readings and

P2: if [EVAL *if*] can be used instead of [EVAL V2] on the same reading,

⇒ then it follows that [EVAL *if*] in German can have true desire readings.

The bigger picture: There are *if*-clauses in [EVAL *if*] that don't have a global counterfactual interpretation. What these *if*-clauses mark as counterfactual / hypothetical is only the subject matter of emotion.

This is not a completely new conclusion (Grosz (2012); Kaufmann (2017); Longenbaugh (2019); Sode (2021)); but the existence of [EVAL V2] in German that **only** has **true desire readings** makes this point more evident and the contexts in which these readings arise more easily to spot.

A compositional semantics for true desire readings

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Is there a way to derive WISH from EVAL IF?

(24) $\llbracket \text{I would be glad if Bill was here}^* \rrbracket = \llbracket \text{I wish Bill was here} \rrbracket$

* = on a true desire reading

Yes, there is!

A Neo-Heimian account

Starting point: Williams (1974) / Pesetsky (1991)'s open argument slot.

- (25)
- a. I would be glad if Bill was here.
 - b. [would [if Bill was here]][I be glad \emptyset] base generated
 \leadsto X-marking in a counterfactual conditional
 - c. [\emptyset 1 [I be glad t_1]][would [if Bill was here]] logical form
 - d. $\lambda w. \llbracket \text{glad} \rrbracket^w (\underbrace{\llbracket \text{would [if Bill was here]} \rrbracket}_{\text{intension of a restricted modal quantifier}}) (\llbracket \text{I} \rrbracket^w)$
- (26)
- a. I would be dead if Bill was here.
 - b. [would [if Bill was here]][I be dead] base generated
 \leadsto X-marking in a counterfactual conditional

A Neo-Heimian account

Combined with a semantics that takes its building blocks from Heim (1992)
see Sode (2021) for more details and discussion

$$(27) \quad \llbracket [\text{would [if } \varphi \text{]}] \rrbracket = \lambda w. \lambda p: w \in \llbracket \varphi \rrbracket. \text{Sim}_w(\llbracket \varphi \rrbracket) \subseteq p$$

\approx Heim (1992)

$$(28) \quad \llbracket \text{glad} \rrbracket = \lambda w. \lambda Q_{s(st)t}. \lambda x: \text{Dox}_x(w) \subseteq \text{dom}(Q).$$
$$Q(w') <_{x,w} \text{THRESHOLD}(Q)(w'),$$

for every $w' \in \text{Dox}_x(w)$

Sode (2021)

$$(29) \quad \text{THRESHOLD}(Q) =_{\text{def}}$$
$$\lambda w'_s. \lambda q_{st}. \text{Sim}_{w'}(W \setminus \text{RESTRICTOR}(Q)) \subseteq q$$

$$(30) \quad \text{RESTRICTOR}(Q) =_{\text{def}} \lambda w. Q(w)(\lambda w'. w' = w)$$

$$(31) \quad \llbracket [\text{glad [would [if } \varphi \text{]}] \rrbracket = \llbracket [\text{wish } \varphi \text{]} \rrbracket_{\text{HEIM}}$$

A Neo-Heimian account

What is the new idea of this Neo-Heimian semantics?

The new idea is the assumption that grammar treats the conditional modal operator as a true argument.

We can think of this in this way: Grammar coerces a counterfactual modal operator (that typically is used as an adverbial modifier) into a thematic argument for the purpose of specifying a subject matter as “counterfactual”.

The semantic argument type of the evaluative predicate is not that of a proposition $\langle s, t \rangle$ but that of a modal quantifier in intension $\langle s, \langle \langle s, t \rangle, t \rangle \rangle$.

What about V2?

Against the background of these theoretical assumptions, we can restate the use conditions of V2-clause in [EVAL IF] as follows:

If a *wenn*-clause in subjunctive mood restricts a counterfactual conditional operator that is interpreted as a thematic argument of EVAL (specifying its subject matter), then the *if*-clause can be substituted by a V2-clause.

(32) * [I be dead] [would V2-clause] \leadsto restricted 'would' = modifier

(33) ✓ [I be glad \emptyset] [would V2-clause] \leadsto restricted 'would' = argument

Summary and conclusion

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- I have argued that German [EVAL V2] is a type of [EVAL IF].
- While German [EVAL *if*] has both Williams-type readings (globally counterfactual readings) and true desire readings (counterfactual only w.r.t. the subject matter), [EVAL V2] only has true desire readings.
- I have shown how true desire readings can be derived by combining EVAL and IF if we assume that EVAL treats IF as an intensional quantifier in a thematic argument position specifying the subject matter of emotion.
- Given that both [EVAL *if*] and [EVAL V2] are “regular” counterfactual conditionals when it comes to the licensing of the overt morphology, X-marking in [EVAL IF] is reducible to X-marking in counterfactual conditionals.
- What makes true desire reports of [EVAL IF] special is that in true desire reports IF is not interpreted as an adverbial modifier but as a true intensional argument. The difference only relates to LF.

Literature I

- Frank, Nicola. 1998. Präferenzprädikate und abhängige Verbzweitsätze. Magisterarbeit Universität Tübingen. Arbeitspapiere des SFB 340. Bericht Nr. 128.
- Grosz, Patrick Georg. 2012. *On the grammar of optative constructions*. Amsterdam: Benjamins.
- Heim, Irene. 1992. Presupposition Projection and the Semantics of Attitude Verbs. *Journal of Semantics* 9.3. 183–221.
- Kaufmann, Magda. 2017. *Japanese modals and other evaluations*. MIT, Seminar “The Linguistics of Desire”, November 29.
- Longenbaugh, Nicholas. 2019. *On expletives and the agreement-movement correlation*: Department of Linguistics and Philosophy. MIT dissertation.
- Meinunger, André. 2007. In the mood of desire and hope. In *Tense, Mood and Aspect*, 155–176. Amsterdam, New York: Rodopi.
- Pesetsky, D. 1991. Zero syntax. Vol. 2: Infinitives. Manuscript.

Literature II

Sode, Frank. 2021. A semantics for complement fulfilling conditionals with *glad*.
In P. G. Grosz, L. Martí, H. Pearson, Y. Sudo & S. Zobel (eds.), *Proceedings of Sinn und Bedeutung 25*, 769–786.

doi:<https://doi.org/10.18148/sub/2021.v25i0.966>.

Williams, Edwin Samuel. 1974. *Rule ordering in syntax*. Cambridge, MA:
Massachusetts Institute of Technology dissertation.