

A phrasal construction for an *ex quōlibet falsum* inference

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Introduction

The Emperor-of-China construction (EoC-Cx)

Implicational/*dann* 'then' variant (*then*-EoC-Cx):

- (1) Also, wenn das stimmt, bin ich der Kaiser von China.
thus if this is correct am I the emperor of China
'This cannot be correct.' (lit.: 'If this is correct, I am the emperor of China.') (deTenTen23)

Conjunctive/*und* 'and' variant (*and*-EoC-Cx):

- (2) A: "Wir verwenden die besten und teuersten Materialien für unsere T-Shirts ..."
'We use the best and most expensive materials for our t-shirts'
B: Und ich bin der Kaiser von China!
and I am the emperor of China
'This is nonsense!' (lit.: 'And I am the emperor of China.') (deTenTen23)

Plan for the talk

- Syntax: Is the EoC-Cx an idiosyncratic phrasal construction? ⇒ Yes!
- Semantics: Does the EoC-Cx express a negation? ⇒ No!
- Pragmatics: How can we capture the strong rejection effect?
- Method:
 - ▶ Exploratory corpus data (deTenTen23)
 - ▶ Modeling within a constructional, constraint-based framework
 - ▶ ...with an explicit semantics-pragmatics interface

Overview

1 Introduction

2 Syntax

3 Semantics

4 Pragmatics

5 Conclusion

Syntax

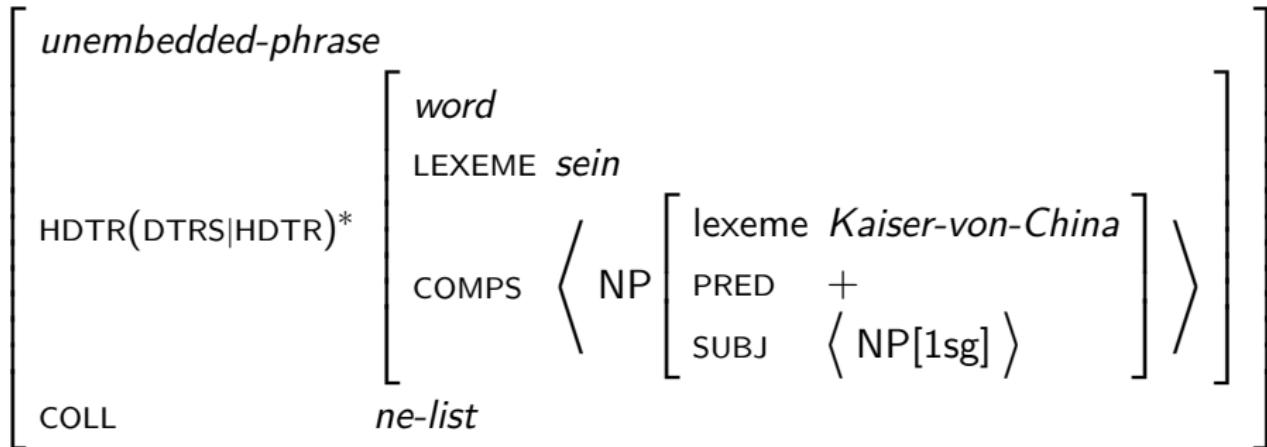
Corpus distribution: enTenTen23

- Query 1: `sein der Kaiser von China` 'be the emperor of China'
V2 – Subject-Verb: 50 hits; 20 relevant
- Query 2: `sein * der Kaiser von China`
V2 – Verb-Subject: 40 hits; 20 relevant
- Query 3: `der Kaiser von China sein`
V-Final: 40 hits; 0 relevant

Results:

- in all relevant examples: subject *ich* 'I'
- all relevant Subject-Verb examples with *und* 'and'
- all relevant Verb-Subject examples with *dann* 'then'
- Only in matrix clauses
- Antecedent typically a clause

HPSG specification 1 (syntax)



- idiosyncratic construction: Richter & Sailer (2009): COLL value *ne-list*
- Only in matrix clauses: *unembedded-sign* (Richter, 1997; Höhle, 2019)
- Lexically required material: via LEXEME values
- Subject *ich* 'I': specified in the SUBJ feature.
- To be dealt with in the semantics:
 - ▶ all relevant Subject-Verb examples with *und* 'and'
 - ▶ all relevant Verb-Subject examples with *dann* 'then'

Semantics

Constructional meaning?

- Construction: idiosyncratic form-meaning pairing.
- We could put the negative meaning into the semantics of the construction.
- Remark: I use Lexical Resource Semantics (LRS, Richter & Sailer 2004), but the observations/generalizations are independent of this choice)

Possible constructional meanings

- (3) a. Wenn Alex einen Preis gewonnen hat,
if Alex has a price won

bin ich der Kaiser von China!
am I the emperor of China (*then-EoC-Cx*)
- b. Alex hat einen Preis gewonnen
Alex has a price won

und ich bin der Kaiser von China!
and I am the emperor of China (*and-EoC-Cx*)

- Negation in the antecedent:
I am convinced that Alex did not win a price.
- Negated or inherently negative matrix predicate:
I strongly doubt that Alex has won a price.
- Exclamative meaning (just use-conditional):
No way has Alex won a price!

Diagnostic for semantic negativity: *jemals* 'ever'

- Negative Polarity Items (NPI): *jemals* 'ever', *einen Finger krumm machen* 'lift a finger', ...
- *Jemals* 'ever' is not felicitous in simple, affirmative clauses, but require a licenser:
 - (4) a. *Alex has **ever** helped Kim. / Nobody has **ever** helped Kim.
 - b. *Alex has **lifted a finger** to help Kim.
/ Alex hasn't **lifted a finger** to help Kim.
- Clause-mate negation is a licenser for all NPIs (roughly)
- There is a variety of other licensors and NPIs differ with respect to their exact licensing requirements (Hoeksema, 2024)
 - (5) a. Few people have **ever** helped Kim.
/ *Few people have **lifted a finger** to help Kim.
 - b. *Alex might have **ever** helped Kim.
/ Alex might have **lifted a finger** to help Kim.
- Sedivy (1990): *jemals* 'ever' requires a licenser in the semantics and cannot be licensed indirectly.

NPI licensing in phrasal constructions

Phrasal construction can in principle license NPIs. In those cases, their meaning representation can be assumed to be (constructionally)

- *I'll be damned if S* licensed virtually any NPI in the *if* part (von Bergen & von Bergen, 1993):
(6) I'll be damned if I **ever** help you!
- The Incredulity Response Construction/ Mad Magazine sentences (Akmajian, 1984; Lambrecht, 1990)
(7) Ich und **jemals** einen eigenen Garten haben?!
I and ever an own garden have (deTenTen23)

NPIs in the three potential meanings of the EoC-Cx

- Negation of the antecedent: NPIs should be licensed.
- Negated or inherently negative matrix predicate: NPIs should be licensed:

(8) Ich bezweifle, dass Alex **jemals** einen Preis gewonnen hat.
I doubt that Alex ever a price won has
'I doubt that Alex has ever won a Price'

- Exclamative meaning: NPIs should be licensed

(9) Als ob Alex **jemals** einen Preis gewonnen hat!
as if Alex ever a price won has
'No way Alex has ever won a price!'

Jemals 'ever' would be licensed in any of the potential constructional meanings.

NPI licensing in the *then*-EoC-Cx

- NPIs can occur in the antecedent of the *then*-EoC-Cx.

(10) Wenn Alex **jemals** einen Preis gewonnen hat, bin ich der
if Alex ever a price won has am I the
Kaiser von China.
emperor of China

'If Alex has ever won a price, I am the emperor of China.'

- But: NPIs also ok in ordinary *if* clauses:

(11) Wenn Alex **jemals** einen Preis gewonnen hat, bin ich
if Alex ever a price won has am I
beindruckt.
impressed

'I am impressed if Alex has ever won a price.'

- No special constructional semantics needed to capture NPI-licensing in the *then*-EoC-Cx.

NPI licensing in the *and*-EoC-Cx

- No NPI licensing at all in the *and*-EoC-Cx:

(12) *Alex hat **jemals** einen Preis gewonnen und ich bin der
Alex ahs ever a price won and I am the
Kaiser von China!
emperor of China

Intended: 'I doubt that Alex has ever won a price.'

- This is exactly what we find in ordinary conjunction!

(13) *Alex hat **jemals** einen Preis gewonnen und ich bin
Alex has ever a price won and I am
beeindruckt.
impressed

Intended: 'Alex has won a price (at least once) and I am impressed.'

- Constructionally introduced negative semantics would make the wrong predictions for NPI licensing in the *and*-EoC-Cx.

NPI licensing: Summary

- No support for a special constructional meaning that includes a negation.
- The *then*-EoC-Cx behaves like an ordinary conditional.
- The *and*-EoC-Cx behaves like an ordinary conjunction.
⇒ We can just assume a literal semantics of the construction.

HPSG specification 2 (at-issue semantics)

unembedded-phrase

HDTR(DTRS|HDTR)*

LRS

COLL

word

LEXEME *sein*

COMPS

EXCONT

ne-list

lexeme *Kaiser-von-China*

PRED +

SUBJ

$\langle \text{NP}[1\text{sg}] \rangle$

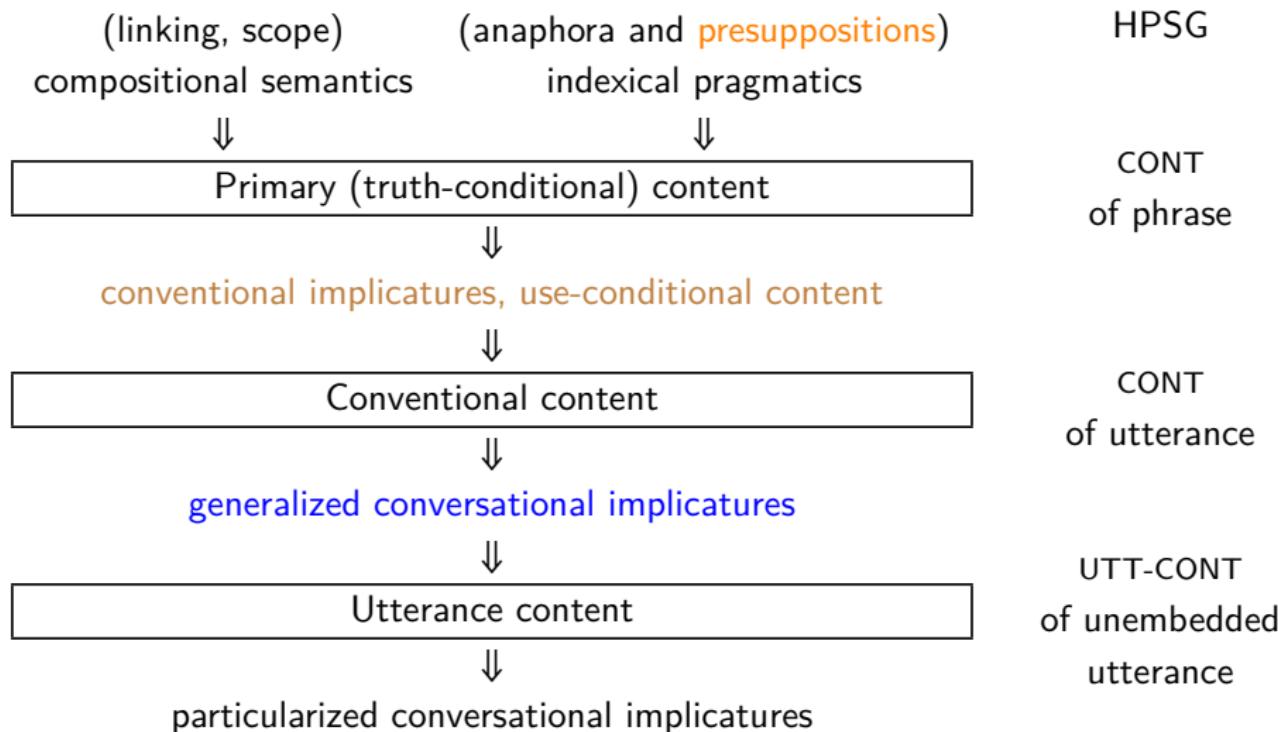
- Semantics: Specifying the overall content (EXCONT in Lexical Resource Semantics) as:

- ▶ either an implication: all relevant Verb-Subject examples with *dann* 'then'
- ▶ or a conjunction: all relevant Subject-Verb examples with *und* 'and': Conjunction

Pragmatics

Semantics-pragmatics interface

Levinson (2000), extended in Sailer (2021, 2024)



Preview of the analysis

Compositional Semantics:

(14) Wenn Alex das Rennen gewinnt, bin ich der Kaiser von China.

'If Alex wins the race, I am the emperor of China.'

At issue: **win(alex) → EoC(speaker)**

(15) Alex gewinnt das Rennen und ich bin der Kaiser von China.

'Alex wins the race and I am the emperor of China.'

win(alex) ∧ EoC(speaker)

Pragmatics:

- **Presupposition:** The subject is not the emperor of China.
- **Generalized conversational implicatures:** Inference associated with coordination, i.e. turning a coordination into an implication.
- **Use-conditional meaning:** Speaker does not want antecedent clause to be integrated into the Common Ground.

Presuppositions

- Presuppositions: conventionalized (arbitrary, non-calculable), cancelable, not reinforceable
- Percolate, but can be accommodated (“retrieved”) in the immediate scope of quantifiers, negation,
- In HPSG+LRS: Sailer & Am-David (2016):
- Introduced on a PRESUP(POSITION) list (and their subexpressions occur on the PARTS list)
- Percolation and retrieval for PRESUP (Sailer & Am-David, 2016, 653): Elements of the PRESUP list percolate until they are retrieved (accommodated) in the scope of an appropriate operator.

Presupposition of the EoC-Cx

- Presupposition: I am not the emperor of China
- Conventionalized: arbitrary, special to the particular construction
- Cancelability:
 - (16) Wenn das stimmt, bin ich der Kaiser von China – was ich übrigens tatsächlich bin, aber du hast trotzdem nicht recht.
‘If this is correct, I am the emperor of China – which I am actually, by the way, but you are still not right.’
- Non-reinforceablilty:
 - (17) Wenn das stimmt, bin ich der Kaiser von China – ??und das bin ich nun wirklich nicht.
‘If this is correct, I am the emperor of China – which I am definitely not.’

Deriving the negative meaning for the *then*-EoC-Cx

- At the level where the presupposition is accommodated (at an S-node in the scope of quantifiers/negation/modal/...):

(18) Wenn Alex das Rennen gewinnt, bin ich der Kaiser von China.
'If Alex wins the race, I am the emperor of China.'

At issue: **win(alex) → EoC(speaker)**

Presupposition: **¬EoC(speaker)**

Primary content:

(win(alex) → EoC(speaker)) ∧ ¬EoC(speaker)

- The primary content is only true when **win(alex)** is false.
- The speaker does not assert the falsehood of **win(alex)**, but says something that is only true in that case!

and-EoC-Cx

- (19) Alex gewinnt das Rennen – und ich bin der Kaiser von China.

'Alex wins the race – and I am the emperor of China'

At issue: **win(alex)** *und* **EoC(speaker)**

Presupposition: ... $\wedge \neg \text{EoC}(\text{speaker})$

Primary content: **win(alex)** $\wedge (\text{EoC}(\text{speaker}) \wedge \neg \text{EoC}(\text{speaker}))$

This formula is always false, independently of the truth value of **win(alex)**

Generalized conversational implicatures (GCI)

- GCIs: cancellable (optional), non-detachable (non-conventionalized, universal /derivable from Gricean maxims), largely context-independent.
 - Evidence for their relevance for truth-conditional meaning (Levinson, 2000; Carston & Hall, 2012)
- (20) a. It is better to [drive and drink] than to [drink and drive].
 b. She didn't write three books, she wrote four books (or maybe even more).

Generalized conversational implicatures in HPSG

- Proposal in Sailer (2021)
- GCI: $\alpha \mapsto_{GCI} \beta$
- Integration only at the utterance content

(21) Sailer (2021, 355)

Given two formulæ α, β , a rewriting rule for a generalized conversational implicature has the form $\alpha \mapsto_{GCI} \beta$.

Such a rule means: If α occurs in the conventional content, it can optionally be replaced with $(\alpha \wedge \beta)$ in the utterance content.

- Status of GCIs: Analogous to post-lexical rules in phonology (Höhle, 2019)

GCI for conjunction

- Horn (2004)
 - (22) a. They got a baby and married.
 \rightarrow_{GCI} They got a baby and **then/therfore** married.
 - b. The earth rotates and we experience night and day.
 \rightarrow_{GCI} The earth rotates and **therefore** we experience night and day.
- Suggested GCI: $(\phi \wedge \psi) \rightarrow_{GCI} (\phi \rightarrow (\phi \wedge \psi))$
- Required change in the theory:
 - ▶ GCI: $\alpha \rightarrow_{GCI} \beta$, where α is a subexpression of β .
 - ▶ Such a rule means: If α occurs in the conventional content, it can optionally be replaced with β in the utterance content.

Deriving the negativity of the *and*-EoC-Cx

(23) Alex gewinnt das Rennen – und ich bin der Kaiser von China.

'Alex wins the race – and I am the emperor of China'

At issue: **win(alex)** *und* **EoC(speaker)**

Presupposition: ... $\wedge \neg \text{EoC}(\text{speaker})$

Primary content: **win(alex)** \wedge (**EoC(speaker)** $\wedge \neg \text{EoC}(\text{speaker})$)

GCI: $(\phi \wedge \psi) \rightarrow_{GCI} (\phi \rightarrow (\phi \wedge \psi))$

Utterance content:

win(alex) \rightarrow (**win(alex)** \wedge (**EoC(speaker)** $\wedge \neg \text{EoC}(\text{speaker})$))

- This formula is only true if **win(alex)** is false.
- Just as in the *then*-EoC-Cx, the falsehood of **win(alex)** follows indirectly.

Deriving the negativity of the *and*-EoC-Cx

(23) Alex gewinnt das Rennen – und ich bin der Kaiser von China.

'Alex wins the race – and I am the emperor of China'

At issue: **win(alex)** *und* **EoC(speaker)**

Presupposition: ... $\wedge \neg \text{EoC}(\text{speaker})$

Primary content: **win(alex)** \wedge (**EoC(speaker)** $\wedge \neg \text{EoC}(\text{speaker})$)

GCI: $(\phi \wedge \psi) \rightarrow_{GCI} (\phi \rightarrow (\phi \wedge \psi))$

Utterance content:

win(alex) \rightarrow (**win(alex)** \wedge (**EoC(speaker)** $\wedge \neg \text{EoC}(\text{speaker})$))

- This formula is only true if **win(alex)** is false.
- Just as in the *then*-EoC-Cx, the falsehood of **win(alex)** follows indirectly.

But isn't this an odd way of expressing things ...?

Use-conditional meaning / Conventional Implicatures

- Special used conditions of the EoC-Cx
- Grice (1975); Bach (1994); Gutzmann (2013), ...
- Conventional Implicatures: conventionalized (arbitrary, not derivable from maxims, ...), cannot be cancelled, percolate to a level of an independent utterance
- In HPSG: Sailer & Am-David (2016), Rizea & Sailer (2020):
 - ▶ Introduced on a CI list (and their subexpressions occur on the PARTS list).
 - ▶ Retrieved in the immediate scope of some speech act operator.

(24) Alex, a linguist, speaks Portuguese.

Primary content: **speak-port(alex)**

CI: ... **linguist(alex)**

Conventional content: **speak-port(alex) **linguist(alex)****

Use-conditional content of the EoC-Cx

VERUM focus: Gutzmann et al. (2020), Sailer (2022):

- (25) Alex HAT das Rennen gewonnen.

Alex HAS the race won

at issue: Alex won the race

Contextually salient: Alex did not win the race.

Use-conditional meaning (VERUM): Do not integrate “Alex did not win the race” into the common ground.

Use conditional content of the EoC-Cx

- Claim: The use conditions of the EoC-Cx are similar to those of VERUM focus.
 - Antecedent proposition is contextually salient.
 - EoC-Cx's use conditions say that the antecedent should not be integrated into the common ground.
- (26) Alex gewinnt das Rennen – und ich bin der Kaiser von China.
Alex wins the race – and I am the emperor of China
Contextually salient: **win(alex)**
Use-conditional content: **prevent-CG-integration(\wedge win(alex))**

Truth conditions and use conditions of the EoC-Cx

- (27) a. Wenn Alex das Rennen gewinnt, bin ich der Kaiser von China.
'If Alex wins the race wins, I am the emperor of China'
- b. Alex gewinnt das Rennen – und ich bin der Kaiser von China.
'Alex wins the race – and I am the emperor of China.'

Truth conditions: The utterance is only true if **win(alex)** is false.

Use conditions: **prevent-CG-integration(\wedge win(alex))**

In detail:

- (28) Alex gewinnt das Rennen – und ich bin der Kaiser von China.
'Alex wins the race – and I am the emperor of China.'

a. At issue:

$$\text{win}(\text{alex} \wedge \text{EoC}(\text{speaker}))$$

b. Primary content (+ Presuppositions):

$$(\text{win}(\text{alex} \wedge (\text{EoC}(\text{speaker}) \wedge \neg \text{EoC}(\text{speaker}))))$$

c. Conventional content (+ use conditions):

$$(\text{win}(\text{alex} \wedge (\text{EoC}(\text{speaker}) \wedge \neg \text{EoC}(\text{speaker}))))$$

$$\wedge \text{prevent-CG-integration}(\wedge \text{win}(\text{alex}))$$

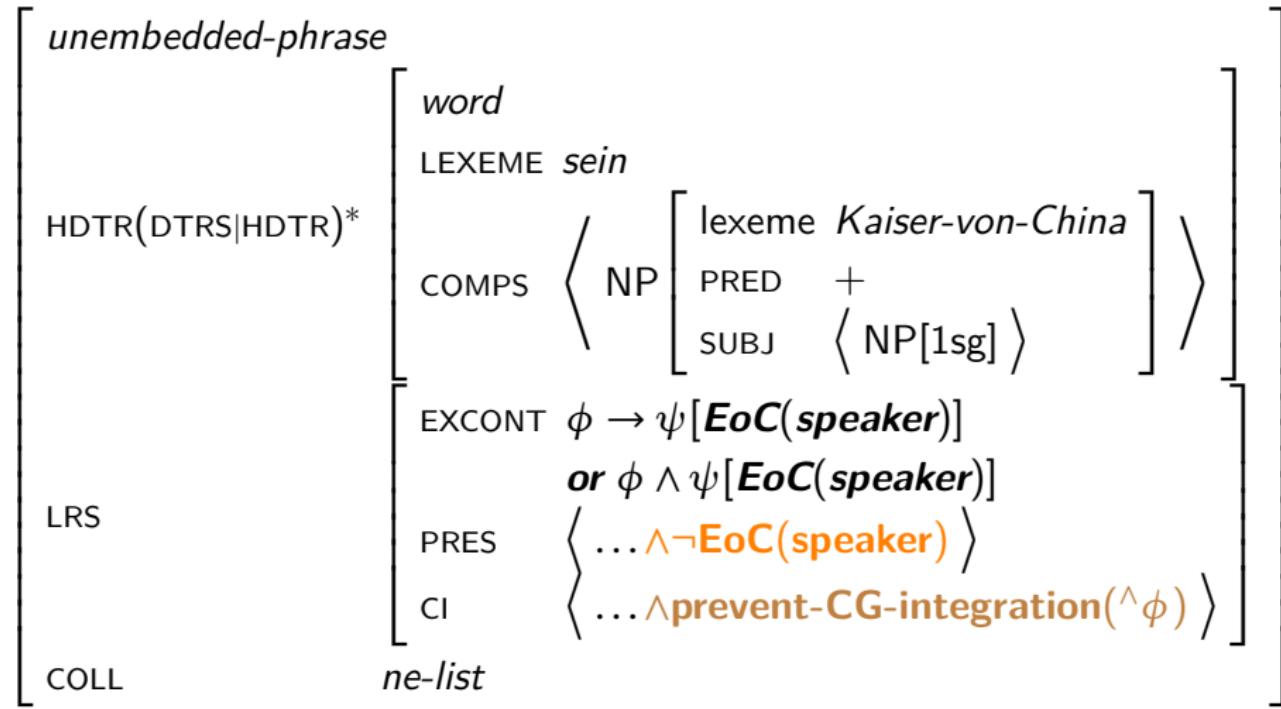
d. Utterance content (+ generalized conversational implicatures):

$$(\text{win}(\text{alex}) \rightarrow$$

$$(\text{win}(\text{alex} \wedge (\text{EoC}(\text{speaker}) \wedge \neg \text{EoC}(\text{speaker}))))$$

$$\wedge \text{prevent-CG-integration}(\wedge \text{win}(\text{alex}))$$

HPSG specification 3 (pragmatics)



Conclusion

Conclusion

- Neither syntax nor semantics irregular!
- But still: construction with idiosyncratic properties:
 - ▶ unembedded sign, first person subject, fixed syntax
 - ▶ presupposition and use-conditional meaning
- The interaction of the various meaning components trigger conversational inferences that lead to the negation-like effect of the construction.
- Criteria and analytical space for similar expressions:

(29) wenn Ostern und Weihnachten auf denselben Tag fallen
'when Easter and Christmas are on the same day'
am Sankt Nimmerleinstag 'on Saint-Never-Day'
dann fress ich 'nen Besen 'then will I eat a broom'
and I am the pope of Rome
van Eynce (pc): (nl) en Napoleon is mijn tante 'and Napoleon
is my aunt'

Thank you for your attention!

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