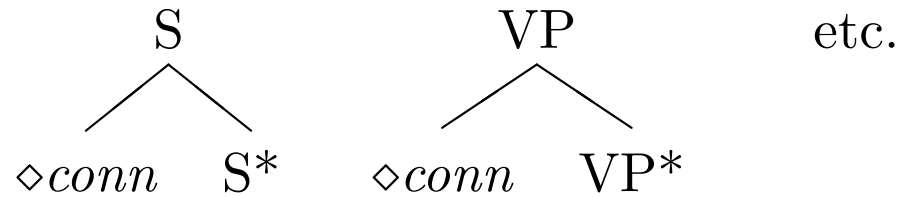


Part II: A Preliminary Cross-Linguistic Study

1. Types of Connectives
2. Attributions
3. Restrictions on Connectives' Arguments
4. Semantics of German *denn*

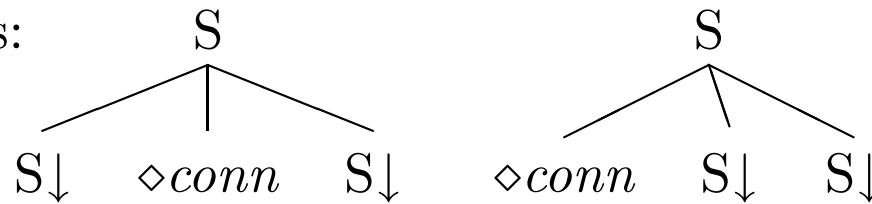
1. Types of Connectives: English

Adverbials:



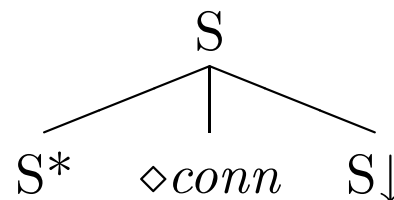
- however, instead, etc.

Subordinating Conjunctions:



- because, although, etc.

Coordinating Conjunctions:



- and, but

Types of Connectives: German

- adverbial connectives, conjunctions
- adverbials differ significantly with regard to their positioning (6 different locations for adverbials)
- 4 types of conjunctions:

Subordination

- verb-final word order in ARG2

Embedding

- connective + ARG2 are a constituent in ARG1

Pasch et al., 2003: *Handbuch der deutschen Konnektoren*. Berlin: de Gruyter.

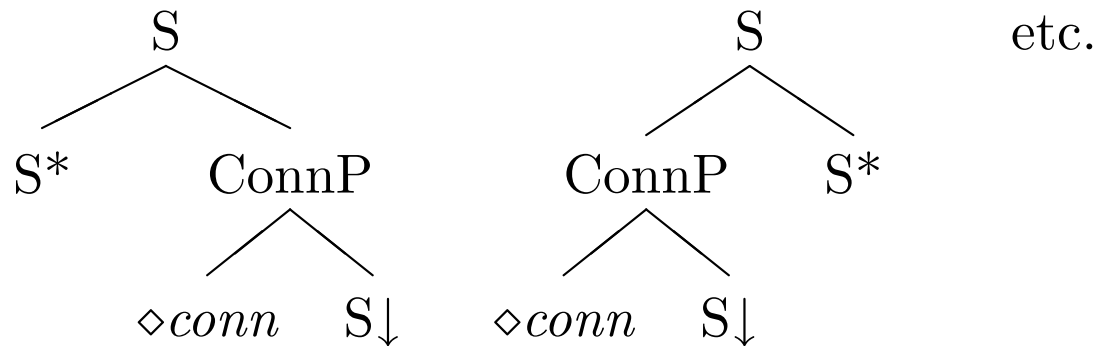
German Conjunctions

- (1) *Weil* er müde ist, geht er nach Hause. [+ sub ; + emb]
'Because he is tired, he's going home.'
- (2) Er wird schnell müde, *weshalb* er immer schon früh nach Hause geht. [+ sub ; - emb]
'He gets tired easily, *that's why* he always goes home early.'
- (3) *Vorausgesetzt*, er bekommt Urlaub, wollen wir nach Italien fahren. [- sub ; + emb]
'Provided that he gets vacation, we want to go to Italy.'
- (4) Der Chef ist im Urlaub *und* niemand kann ihn erreichen.
'The boss is on vacation *and* nobody can reach him.'
[- sub ; - emb]

The four types of German conjunctions.

	subord. conj.	postponers	V2-embedders	coord. conj.
subordinating?	yes	yes	no	no
embedding?	yes	no	yes	no
coordinating?	no	no	no	yes
internal word order	VF	VF	decl. V2	any
clause can ap- pear in Vor- feld or Mit- telfeld	yes	no	yes	no

German Subordinating Conjunctions



- trees for subordinating conjunctions and V2-embedders

2. Attributions: English

- relation expressed by the connective, as well as the arguments are attributed to some writer/speaker
- mixed attributions are possible:

(5) *The current distribution arrangement ends in March 1990, **although** Delmed said it will continue to provide supplies of the peritoneal dialysis products to National Medical, the spokeswoman said.*

Dinesh et al., ACL 2005 Corpus Annotation Workshop: *Attribution and the (Non)-Alignment of Syntactic and Discourse Arguments of Connectives*

Attributions: German

Frankfurter Rundschau, Feb. 2, 1998:

(6) [In Teheran hieß es, die Frau **sei** zum Auspeitschen verurteilt worden;] *die Todesstrafe **sei** ihr erspart geblieben, **weil** sie nicht verheiratet **sei**.*

[In Tehran they said that the woman was sentenced to whipping;] *she was saved from the death penalty, **because** she isn't married.*

○ RELATION (because): Tehran

ARG1: Tehran

ARG2: Tehran

○ **subjunctive** marks the scope of the attribution to a speaker

Attributions: German (2)

(7) [In Teheran hieß es, die Frau *sei* zum Auspeitschen verurteilt worden;] *die Todesstrafe sei ihr erspart geblieben, denn sie ist nicht verheiratet.*

[In Tehran they said that the woman was sentenced to whipping;] *she was saved from the death penalty, because she isn't married.*

○ RELATION (because): Tehran/author ?

ARG1: Tehran

ARG2: **author**

3. Restrictions on Connectives' Arguments

Eng. *instead*, Ger. *stattdessen*

- adverbial discourse connective – first argument is obtained anaphorically from the discourse context
- restrictions on antecedent: antecedent must name an unrealized alternative:
 - negated
 - embedded under want, ...
 - modalized

(8) No price for the new shares has been set. Instead, the companies will leave it up to the marketplace to decide.

(9) John wanted to eat a pear. Instead he ate an apple.

Miltsakaki et al., EACL 2003: *Anaphoric arguments of discourse connectives: Semantic properties of antecedents versus non-antecedents*

Restrictions on Connectives' Arguments (2)

German *sondern*

- coordinative conjunction – both arguments are identified structurally
- external argument must be negated:
 - *nicht* (not)
 - negative quantifier *kein* (no)

(10) Er ist **kein** Junggeselle, *sondern* verheiratet.
He is not-a bachelor, but married.

(11) * Er ist **unverheiratet**, *sondern* Junggeselle.
Int.: He is not-married, but a bachelor.

Abraham, 1975: *Deutsch aber, sondern und dafür und ihre Äquivalenten im Niederländischen und Englischen.*

sondern continued ...

Problem:

(12) Es [...] *stand* immer *außer Frage*, daß wir heiraten, *sondern*
es war nur die Frage so wann.

It was always *out of the question* that we will get married,
(but) it was only the question, when.

(HUB Corpus)

- negative adverbs *nie* (*never*), *kaum* (*rarely*), *unmöglich* (*impossible*)
- “negative” verbs *vermeiden* (*avoid*), *verzichten* (*do without sth.*)
- NPI?

LDC 2003: 1997 HUB5 German Transcripts. LDC2003T03.

4. Analysis: *denn* vs. *weil* in German

- In addition to causal links between events and propositions, *denn* can express the causation of epistemically judged propositions (13a) or of speech acts (14a).

(13) a. *Es hat geregnet, denn die Straße ist ganz naß.*

b. * *Es hat geregnet, weil die Straße ganz naß ist.*

It was raining, because the street is wet.

(14) a. *Ist vom Mittag noch etwas übrig? Denn ich habe schon wieder Hunger.*

b. ?? *Ist vom Mittag noch etwas übrig? Weil ich schon wieder Hunger habe.*

Is there anything left over from lunch? – Because I'm already hungry again.

Conventional implicature

- *denn* can't be embedded under questions, negation, in the antecedent of conditionals or the consequent of a counterfactual. Nor can it be explicitly denied, or attributed to another speaker.

(15) a. *Wer kam zu spät, weil er den Bus verpaßt hat?*
b. ?? *Wer kam zu spät, denn er hat den Bus verpaßt?*
Who was late because he missed the bus?

(16) a. *Wenn Peter zu spät kam, weil er den Bus verpaßt hat, war es seine eigene Schuld und er sollte bestraft werden.*
b. * *Wenn Peter zu spät kam, denn er hat den Bus verpaßt, war es seine eigene Schuld und er sollte bestraft werden.*
If Peter was late because he missed the bus, it was his own fault and he should be punished.

Scheffler, Amst. Colloq. 2005: *Syntax and Semantics of Causal denn in German*

Weil-V2

- *weil* can fulfill the same function as *denn*, if it is used as a coordinative conjunction, not a subordinative conjunction

(17) Peter ist zuhause, weil sein Licht ist an.

‘Peter is home, because his light is on.’

(18) * Weil sein Licht ist an, ist Peter zuhause.

(19) * Wer ist zuhause, weil sein Licht ist an?

Int.: ‘Who is home because his light is on?’

- (18) shows that *V2-weil* is coordinating
- *V2-weil* is also semantically equal to *denn*, though! (19)
- English *because* shows a similar distinction

Other connectives show similar effects:

- relevance conditionals, etc.

(20) a. Wenn du mich brauchst, **bleibe ich** den ganzen Tag zuhause.

b. Wenn du mich brauchst, **ich bleibe** den ganzen Tag zuhause.

‘If you need me, I’ll stay at home all day.’

(21) a. Um ganz ehrlich zu sein, **muß man** eine gute Schule besucht haben.

b. Um ganz ehrlich zu sein, **man muß** eine gute Schule besucht haben.

‘To be honest one has to have gone to a good school.’

Relevance Analysis

- variables for potential literal acts (assertions, questions, etc.) are introduced by a meaning-shift rule when interpretation of a sentence would otherwise be divergent (Siegel, 2005)
- obligatory existential closure applies to these variables, based on the set of relevant entities
- for *denn*, both clauses can introduce potential literal acts independently, since they are complete CPs being coordinated. In this way, *denn* can target the variable introduced by the preceding clause as its argument.

Relevance Analysis - example

(22) If you're hungry, there's a pizza in the fridge.

- After the meaning shift, (22) can be paraphrased as “If you're hungry, there's an assertion that pizza is in the fridge and it is relevant.”

(14) a. *Ist vom Mittag noch etwas übrig? Denn ich habe schon wieder Hunger.*

Is there anything left over from lunch? – Because I'm already hungry again.

- Accordingly, (14a) is coerced to mean “Because I'm already hungry again, the question whether there's anything left from lunch is relevant.”

Summary

- Compare discourse connectives in English and German to better understand syntax and semantics.
- *structure* is very similar, although word order is an issue in German
- **attributions** introduce ambiguities; but subjunctive helps disambiguate
- some connectives pose **restrictions** on arguments; NPI connectives
- small semantic (or syntactic?) differences between connectives lead to large usage differences: German *denn* vs. *weil*

Thank You.

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Examples of German conjunction types.

subord. conj.	postponers	V2-embedders	coordinating conj.
insofern, dass	als dass	angenommen	das heißt
nachdem	gdw.	für den Fall	entweder ... oder
obwohl	weshalb	gesetzt (den Fall)	oder
während	wobei	im Fall(e)	sondern
weil	wogegen	unterstellt	sowie
wenn	worauf	vorausgesetzt	sowohl ... als (auch)
wie	zumal		und

Possible positions for adverbial discourse connectives in German.

Null- stelle	Vorerst- position	Vor- feld	Nacherst- position	linke SK	Mittel- feld	rechte SK	Nach- feld
✓	✓	✓	✓	–	✓	–	✓

Examples:

(23) Nullstelle.

Aber haben Sie schon mal ihre Disketten überprüft?

‘But did you check your floppy disks yet?’

(24) Vorerstposition

Sogar der Preis ist in Ordnung.

‘Even the price is ok.’

(25) Vorfeld.

Allerdings habe ich das auch so gewollt.

‘Admittedly, I wanted it this way.’

(26) Nacherstposition.

Eine CD-Rom *dagegen* fasst bis zu 800 Megabyte.

‘A cd-rom, on the other hand, can contain up to 800 megabytes.’

(27) Mittelfeld.

Das haben wir *aber* noch nie so gemacht.

‘But we have never done it this way.’

(28) Nachfeld.

Das ist typisch deutsch *allerdings*. (Callhome Training Corpus)

‘Indeed, this is truly German.’