

From Parataxis to Hypotaxis — (when) does it ever happen?

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Agenda

1. Origins of subordination: Germanic *that/dass* clauses
2. Against the parataxis-to-hypotaxis analysis
3. Subordination creates more subordination

4. German coordination: parataxis to hypotaxis?
5. Case studies and facts
6. Born as coordinations

7. Further evidence for the case of *dass*
8. Summary

1. Origins of subordination: Germanic *that/dass* clauses

simplest grammars = monoclausal sentences = no embedding

first instances of hypotaxis by reanalysis of parataxis

“a process by which flat, paratactic discourse-pragmatic structures transform over time into tight, hierarchic syntactic structures” (Givón 1979: 82)

for instance: *complementizers*, notably German *dass* (English *that*)

Germanic *that/dass* clauses: Re-bracketing (Weiß 2019)

[I understand *that*_{Dem}] [He will come]

parataxis



[I understand [*that*_{comp} he will come]]

matrix + complement clause

1. Origins of subordination: Germanic *that/dass* clauses

Supporters of the rebracketing analysis:

Erben (1978: 26f), Dal (1966: 19ff), Betten (1987: 84), Hopper & Traugott (2003: 190ff, though nuanced ideas on *that*), Diessel (2019), Lehmann (1988), Heine & Kuteva (2007), Schmidt (2013), Szczepaniak (2011) a.o.

Critics of the rebracketing analysis:

Helmut Weiß (Weiß 2019, 2020)

Katrin Axel-Tober (Axel-Tober 2009, 2012, 2017)

Horaceck (1957)

Bayer (2001) for Bengali

Fritz (2002) for Proto-Indoeuropean

2. Against the parataxis-to-hypotaxis analysis

Criticisms against rebracketing:

- reanalysis too dramatic to be plausible in one step (Axel-Tober 2009)
— but then, what is a measure for plausible one-step reanalysis?
- cannot explain why German subordinate clauses consistently show V-final syntax
Horacek (1957), Axel-Tober (2009 and later)
— which is usually answered by pointing out word order variability in OE, OS, OHG
- violates universal assumptions about phase structure (Weiß 2019)
— theory dependent explanation

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Alternative proposal:

- complement *dass*-clause emerges from former relative clause.

(1) Maria sagt (thaz) thaz Christ uns rettet.
Maria says that that Christ us saves

2. Against the parataxis-to-hypotaxis analysis: Axel-Tober

Crucial for bridging contexts: explicative relative clause

- non-argumental part of clause is relativized
- *e.g. where / in which...* adverbial
- specifies the propositional content of *story, mâre, book, Saga, ...*
- ...which is the argument of propositional attitude predicate

mâre < *where* >

story where

herre Joseph vnd Maria gotez muoter ... mit dem kinde iesu cristo fuoren hinz ierusalem

Herr Joseph and Maria God's mother ... with the child Jesus Christ went to Jerusalem

(after: Mitteldeutsche Predigten 48)

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- specifies the proposition of *story, mâre, book, Saga, ...*
- ...which is the argument of personal attitude predicate

mâre < *where* >
story *where*

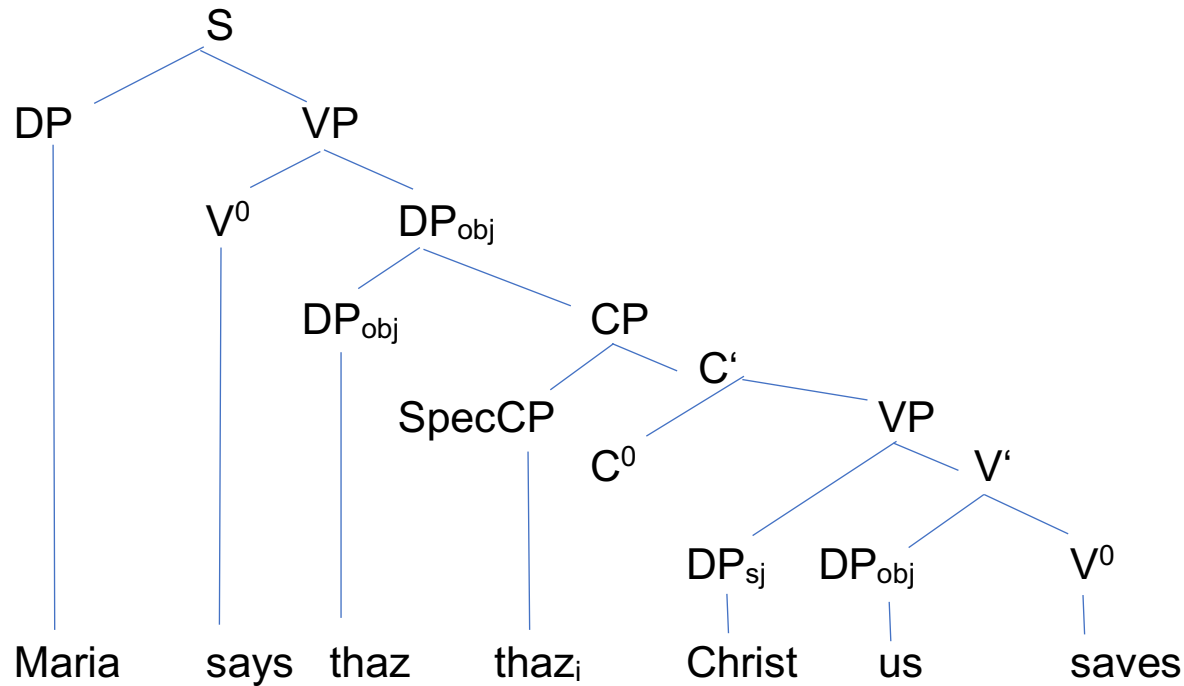
herre Joseph vnd Maria gotez muoter ... mit dem kinde iesu cristo fuoren hinz ierusalem
Herr Joseph and Maria God's mother ... with the child Jesus Christ went to Jerusalem
(after: Mitteldeutsche Predigten 48)

that /thaz



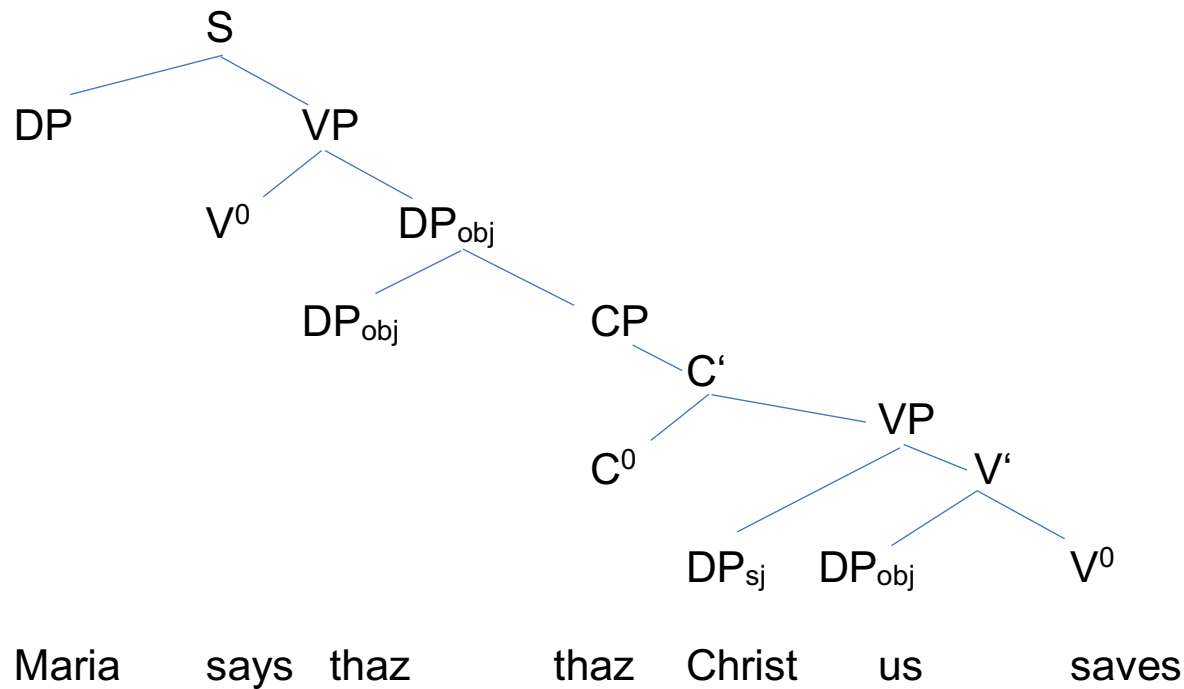
2. Against the parataxis-to-hypotaxis analysis: Axel-Tober

(i) Dummy-NP and explicative relative clause



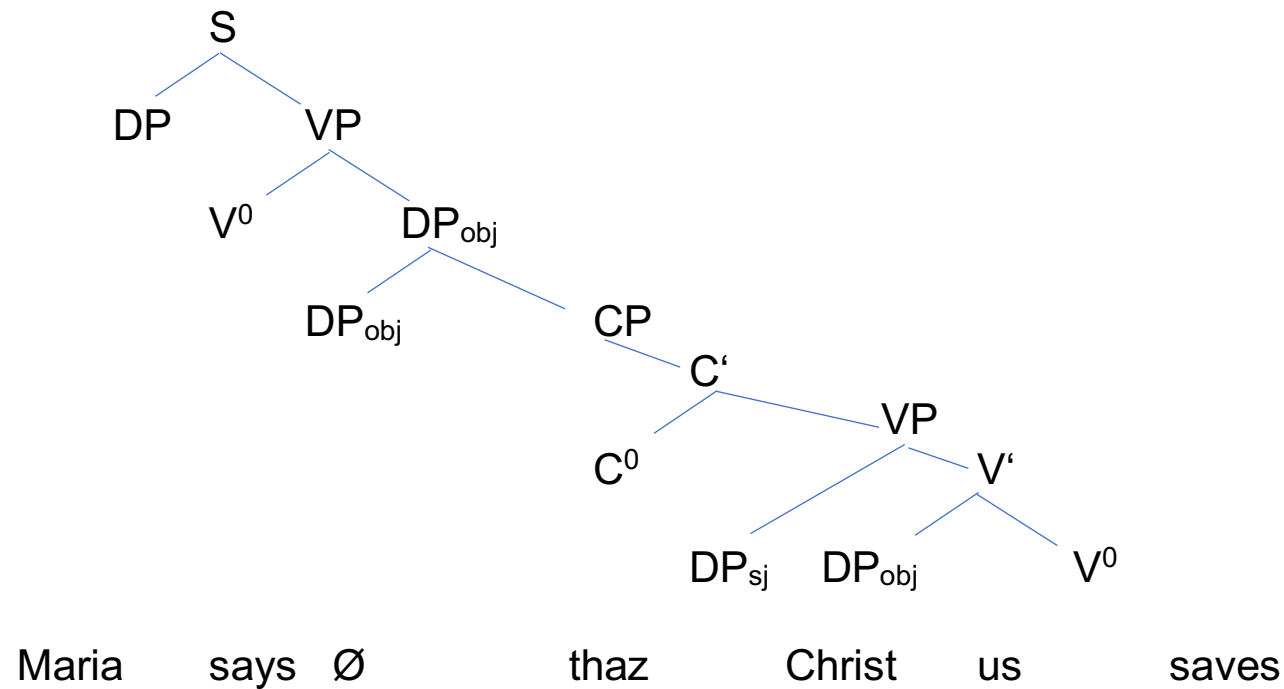
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(ii) Dummy-NP, relative particle as head of embedded CP



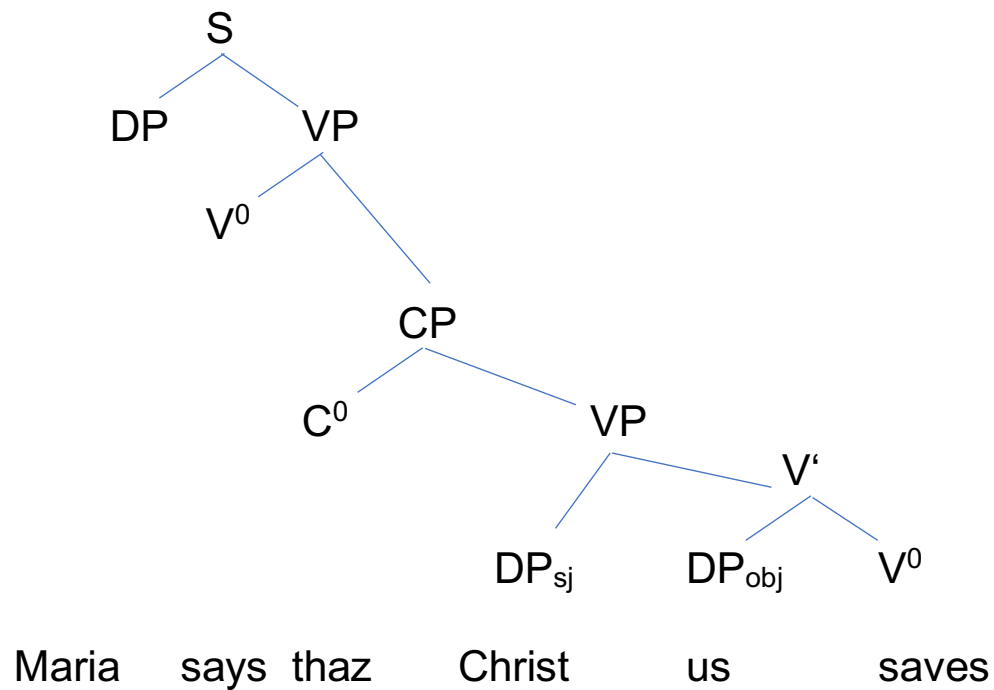
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(iii) Dummy NP not phonetically spelled out, modified by rel.clause



2. Against the parataxis-to-hypotaxis analysis: Axel-Tober

(iv) Forget all empty elements; RA as complement clause (replacing former object)



2. Against the parataxis-to-hypotaxis analysis: Weiß

„In *all* cases where we can reconstruct this development (...), it becomes obvious that the source structure already exhibits hypotaxis“ (Weiß 2020, 36, referring to other complementizers in other languages. My emphasis).

- Problem 1: where do relative clauses come from? (internal pathway; but eventual circular explanation, see Weiß 2020, sect. 3)
- Problem 2: Blurs comp and RC meanings („the relative clause was mostly introduced by the complementizer *dass* ‚that‘...“, p. 38). Semantically, complementizers are void, relative pronouns serve to derive a property
- Problem 3: Blurs sentence complementizer and complementizer = subordinating conjunction
(„adverbial complementizers“ like *affinché* ‚in order to‘, *donicum* ‚as long as‘, *als* ‚when/as‘, *weil* ‚because‘, pp. 37f)

2. Against the parataxis-to-hypotaxis analysis: Weiß

- aims to argue that parataxis-to-hypotaxis *never* happens
(as opposed to: did not lead to GR of *dass*-clauses in German)
- therefore, loss of main point in German:
Former V2 (main) clauses grammaticalize into V-final (subordinate) clauses
- attempt to merge complement and adverbial clauses into one class, leads to semantic flaws
- leads to chicken-and-egg problem (= where can subordination *even* start?)

3. Subordination creates more subordination

German subordinating coordinations

als, als dass / als ob / als wenn; anstatt das; außer wenn; bevor; bis;
da, damit, dass (= damit)
ehe; falls; indem; insofern, insoweit; soweit;
nachdem; ob, obgleich, obschon, obwohl, obzwar
ohne dass; seit, seitdem
sobald, so, sofern solange, sooft, sosehr soweit, sowenig
trotzdem; zumal, während, währenddem; weil
wenn, wenn nicht, wenngleich, wenschön,
wie, wiewohl, wo, wobei, wofern, wohingegen

(umso ... desto, ungeachtet ... dass)

3. Subordination creates more subordination

A frequency argument:

German subordinating coordinations **that derive from earlier subordinating constructions**

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(umso ... desto, ungeachtet ... dass) — I disregard bipartite constructions in the following

3. Subordination creates more subordination

trotzdèm

(a) Noun Trotz_N = ‘defiance’

A herd of modifiers with complements:

(b) PP with complement DP: DP_{dative} zum Trotz = ‘defying DP’ / ‘in spite of DP’

(c) PP with complement PRO dem_{Deictic.dat} zum Trotz = ‘defying this’ / ‘in spite of this’

(d) PRO **with explicative clause** (zum) Trotz dèm, dass [explicative S]_{verb-final}

leads to

(e) **subordination** T/trotz dèm Ø S_{verb-final}

3. Subordination creates more subordination

trotzdèm

(e) **subordination** T/trotz dèm Ø S_{verb-final}

(2) *Hans gewinnt das Rennen, trozdzèm er nichttrainiert hat.*
Hans wins the race trozdzèm he not trained has

‘Hans wins the race although he didn’t train.’

See also *weil* (Weiß 2019, Szczepaniak 2011:175ff), *seit*, *unz*, *bis (dass)* (Weiß 2019); etymological dictionaries.

3. Subordination creates more subordination

Frequency version of Weiß' generalization:

„In *very many* cases where we can reconstruct the development of a subordinating element (...), it becomes obvious that the source structure already exhibits hypotaxis“
(after Weiß 2020, 36).

Frequency version of Axel-Tober's (2009) warning:

rebracketing requires steps in reanalysis that are too *infrequent* to be plausible

never assume a single-step reanalysis of which you lack evidence

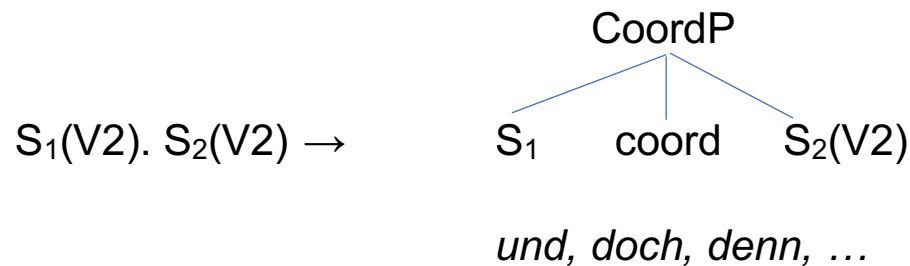
= of which only cases without a dense data record are known

= of which all assumed cases date back to the dark past

→ where does parataxis-to-hypotaxis happen with a dense data record?

4. German coordination: parataxis to hypotaxis?

- a. much less coordinations than subordinations:
und (and), *plus* (and), *oder* (or)
aber (but), *doch* (\approx yet-ish), *denn* (because-ish)
außer, *ausgenommen* (except)¹
- b. conjoin two sentences with V2-syntax (parataxis)
- c. build recursive sentential structures (hypotaxis)



¹ leaving aside the parenthetical *beziehungsweise* (respectively) and bipartite *nicht ... sondern* (not ... but instead)

4. German coordination: parataxis to hypotaxis?

- a. much less coordinations than subordinations:
und (and), *plus* (and), *oder* (or) **unrecorded origin**
aber (but), *doch* (\approx yet-ish), *denn* (because-ish)
außer, *ausgenommen* (except)
- b. conjoin two sentences with V2-syntax (parataxis)
- c. build recursive sentential structures (hypotaxis)
- d. Origin?

4. German coordination: parataxis to hypotaxis?

a. much less coordinations than subordinations:

und (and), *plus* (and), *oder* (or)

aber (but), *doch* (\approx yet-ish), *denn* (because-ish)

außer, *ausgenommen* (except) between 1665 and 1682 (DTA search)

b. conjoin two sentences with V2-syntax (parataxis)

c. build recursive sentential structures (hypotaxis)

d. Origin?

4. German coordination: parataxis to hypotaxis?

a. much less coordinations than subordinations:

und (and), *plus* (and), *oder* (or)

aber 'but', *doch* 'yet'.ish (800 – 1000), *denn* 'because'-ish (1400-1500)

außer, *ausgenommen* (except)

b. conjoin two sentences with V2-syntax (parataxis)

c. build recursive sentential structures (hypotaxis)

d. Origin?

5. Case studies and facts: *aber*

- adverbial sense: *again, once more*:

Adam **aver** einen sun gewan “Adam won a son again” (AHD Genesis)
inti fruo **abur** quam in thaz tempal (Tatian, 9. Jh)

- with verbs of saying: talk back — possible bridging contexts

duo sprach **ave** got “God said back...” (AHD Genesis)
Druhtin **ávur** zi imo sprah, thaz man ér ni gisah (Otfrid, 9. Jh.)

- coordination attested since c.1000

Auur auh umbi dhazs selba quhad dauid in psalmom: »Druhtines...
aber also about the same said David in psalter: „Des Herrn...
(Isidor, c. 8/9 century, sole use)

Áber dû bûest in dinemo heiligen sune... (Notker, c.1000, extremely frequent)

5. Case studies and facts: *doch*

attested since OHG in concessive use, sentence internal (V_{fin})

ih **nemag doh** nîo uuóla getuôn âne dîna hélfa (Notker, 11. Jh)
I not-**can** doch never well do without your help

subordinate uses (verb-final clausal complement)

doh si mih in gelêrt **hât**, / si newaiz selbe wiez umbe in stât (Kaiserchronik)

doh du sîna béta ne- **gehôrest** (Notker, 11. Jh.)
yet you his beads not **hear**

coordinate uses

doh er wære ain kindelîn, / si muosen alle under im sîn (Kaiserchronik)

toh ir **chomint** alle von einiman / ir bint iedoch geskeiden / mit manicvalten listen
though you **come** all from one / you are yet separated with many tricks
Noker Zwiefalten (c. 1080)

5. Case studies and facts: *denn* (all quotes in DTA, 1488 onward)

Temporal adverb *dann* 'then', strong vowel / geographical variation

Item er hat den iungen **dann** gefangen vnd hat im ein grab lasen machen (1488)
(item) he has the young then caught and has him a grave let make

Temporal adverb *dann* is still in use.

➔ Between 1400 and 1500:

A particle-like use with weak vowel *denn* appears

5. Case studies and facts: *denn* (Corpus: DTA)

In postponed reason/cause clauses (often theological) since 1500. Bridging contexts.

Man tzundt auch nicht eyn liecht an vnd setzt es vnter eynen scheffell / sondern auff eynen leuchter / so leuchtet es **denn** allen / die ym hawse sind / (Luther, New Testament)

- a. You put your light on a candlestick / so it lights then (= after putting it up) for all those in the house.
- b. You put your light on a candlestick / (reason, motivation: this is good because) then it lights for all those in the house.

Datzu / des menschen son soll viel leyden vnd verachtet werden / wie **denn** geschrieben stehet. (Luther, New Testament)

- a. Moreover the son of man (=Jesus) will suffer much, as it is written (later).
- b. Moreover the son of man (=Jesus) will suffer much, (reason, motivation:) as it is prophesized in the bible.

5. Case studies and facts: *denn*

Frequent: coordination of two V2 clauses (by 1500)

Darumb **ift** auffs erste zu wissen/ das abtzu thun ist der wahn/ das vier Euangelia vnd nur vier
Euangelisten find/ ... **Denn** Euangelion **ift** eyn kriechisch woꝛtt/ vñ heyft auff deutsch/
gute botschafft/ (Luther, 1522)

“Therefore we should first give up the illusion that there are four xx and only four Evangelisten — *Denn*
(because) Evangelion is a Greek word, meaning “good news” in German.

Rare subordination (main clause *denn* sub.clause)

Darumb **mus** alleyn der glawbe / die gnade Abrahe verheyssen / erlangen / **Denn** auch solch Exempel
vmb vnser willen geschrieben sind / das wyr auch glewben sollen. (Luther, 1522)

= Reason, Motivation: „because such examples were only written for us,
so that we believe.“

5. Case studies and facts: *denn*

In contemporary German, *denn*-clauses cannot answer why-questions.

(4) *Why are your roses blooming so nicely?*
(Sie blühen schön,) weil sie in der Sonne stehen.
(they bloom nicely) because they in the sun stand

(5) *Why are your roses blooming so nicely?*
*Sie blühen schön, denn sie stehen in der Sonne.
*Denn sie stehen in der Sonne.

→ *denn* is not a synonym of *because* / *weil*.

→ *denn* “Speaker aims to motivate an earlier assertion”

→ *denn* maintained use-conditional content when turning into coordination.

5. An outlier: *außer*, DTA results (<https://www.deutschestextarchiv.de/>)

First attested coordinations (“*ausser*” + Subject + Verb + ...)
by 1682, used by author Hohberg. Later authors follow.

First attested uses of string *ausser, wenn*
by 1686

First attested string *ausser, dass*
by 1665

before 1665: highly frequent uses of *ausser* + XP, where XP subsentential phrase

→ Actualization?

6. Born as coordination

Particle α in main clause S_2 relates assertion to preceding assertion S_1
Link by anaphor

Integration at syntax-semantics interface: α as binary operator, combining with S_2 and S_1 .
Syntax of coordination provides two arguments.

denn, doch: Speaker intuition varies as to whether subordination or coordination (V_{fin} & V2)

majority intuition: settles on V2 coord V2 syntax (why?)

8. Putting things together

- There is no particle-to-coordination GR in German, where speakers converged on the intuition that linked clauses require verb-final syntax.
(Proof: otherwise we'd find a subordination that does not build on earlier hypotaxis)
 - This challenges philological claims that verb-final word order in German complement (dass) clauses emerged from variable sentence patterns by chance.
 - Whenever we saw variable sentence patterns (today), they resulted in V2-syntax.
 - In languages with syntactically different subordinate/main clause word orders, *word order persists grammaticalization*.
- ➔ A further argument for the Axel-Tober grammaticalization.

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Adverbial Clauses between Subordination
and Coordination
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