

Correlation and Clause Integration in the History of German

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 33th Annual Conference of the DGfS, Göttingen, 23–25 February 2011

Present-Day German argument clauses

Correlative elements in constructions with argument clauses¹: es vs. das

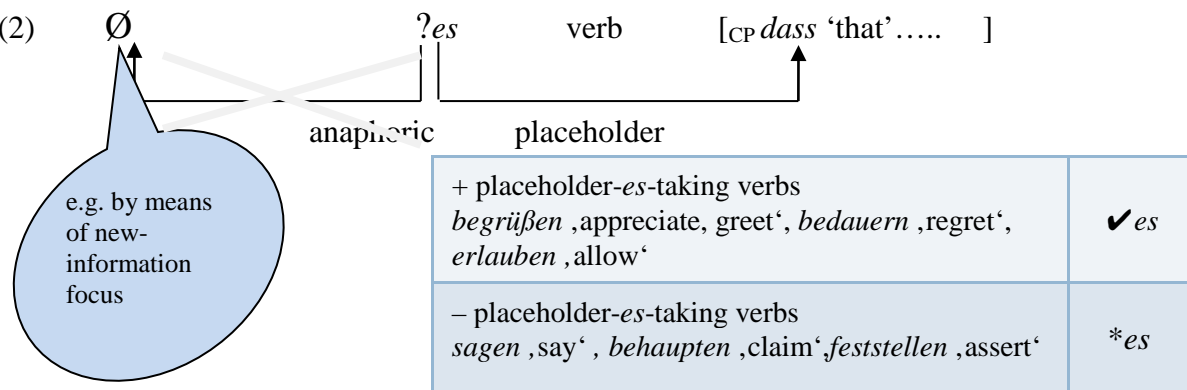
- *Es* is homonymous, *das* not (Pütz 1975, Sudhoff 2003):

(1)

	placeholder	anaphoric pro-form
<i>es</i> 'it'	+	+
<i>das</i> 'that'	–	+

- Two verb/predicate classes (Pütz 1975, Sudhoff 2003):

(2)



- The testing ground: new information focus (Sudhoff 2003, building on Pütz 1975)

- + placeholder-*es*-taking verbs:

(3) Was ist denn passiert? ‘What has happened?’

Die Bürgermeisterin hat ✓ *es* bei der letzten Gemeinderatssitzung begrüßt/ erlaubt/ bewundert, dass die Bürger mehr Verantwortung für den Winterdienst übernehmen.
The mayor appreciated (literally: greeted)/allowed/admired ✓it at the last town council meeting that the citizens assume more responsibility for winter service

- – placeholder-*es*-taking verbs:

(4) Was ist denn passiert? ‘What has happened?’

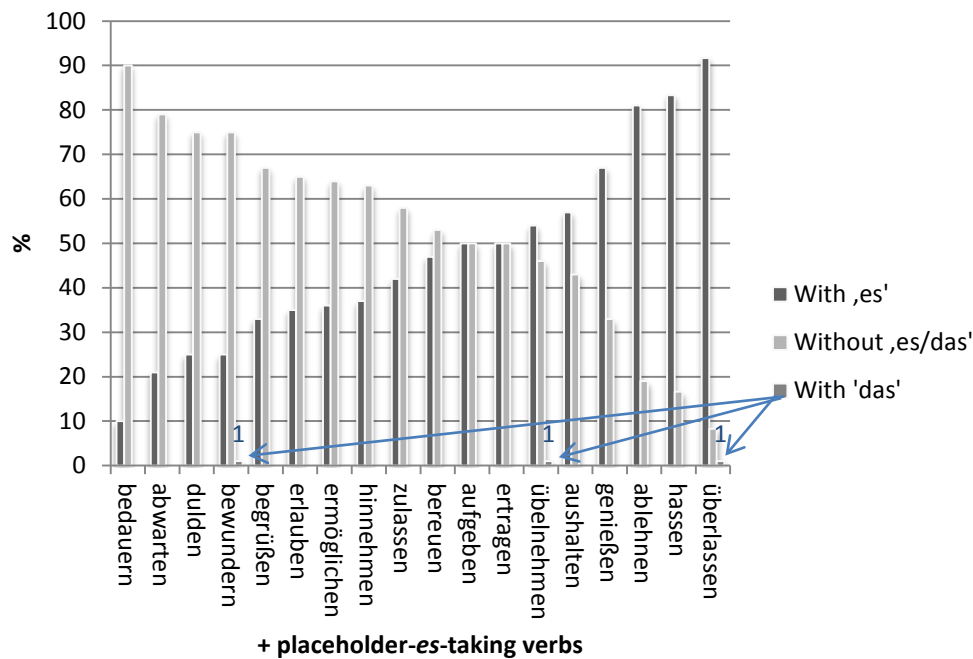
Die Bürgermeisterin hat #*es* bei der letzten Gemeinderatssitzung gesagt/ behauptet/ festgestellt, dass die Bürger mehr Verantwortung für den Winterdienst übernehmen.
The mayor said/stated/asserted #it at the last town council meeting that the citizens assume more responsibility for winter service.

(5) {Die Stadt kommt mit den Räumarbeiten nicht mehr hinterher. *Es* wird sogar erzählt, dass die Bürger hierbei nun mehr Eigeninitiative zeigen wollen} .

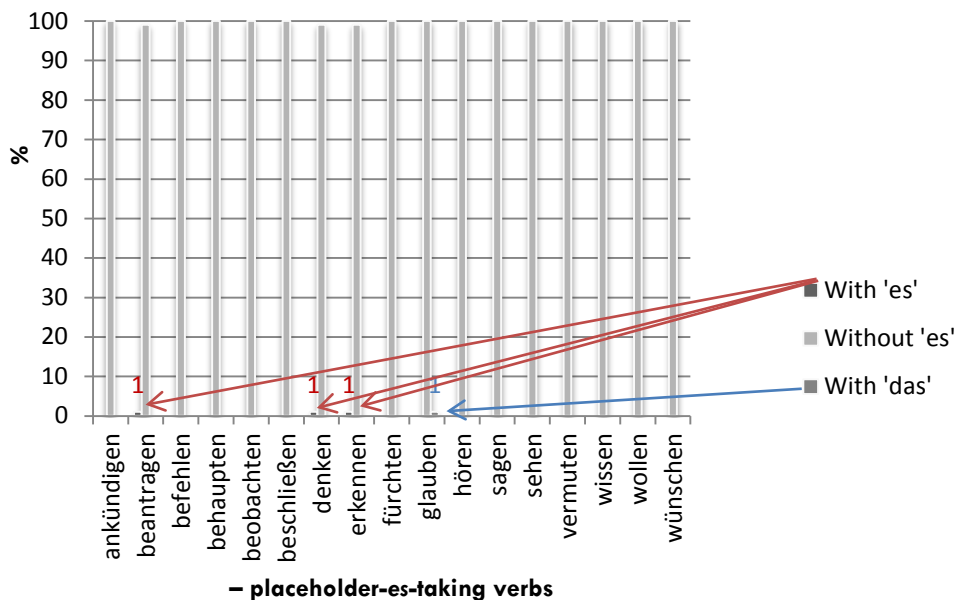
Die Bürgermeisterin hat ✓ *es*/ ✓ *das* schon bei der letzten Gemeinderatssitzung gesagt/ behauptet/ festgestellt, dass die Bürger mehr Verantwortung für den Winterdienst übernehmen.
 anaphoric

¹ joint work with Anke Holler and Helena Trompelt (Göttingen)

- corpus study (COSMAS): distribution of *es* and *das* with +/–placeholder-taking verbs:
- With + placeholder-*es*-taking verbs, *das* is only attested very rarely. Explanation: unlike *es* it has special discourse requirement (= accessible left context).

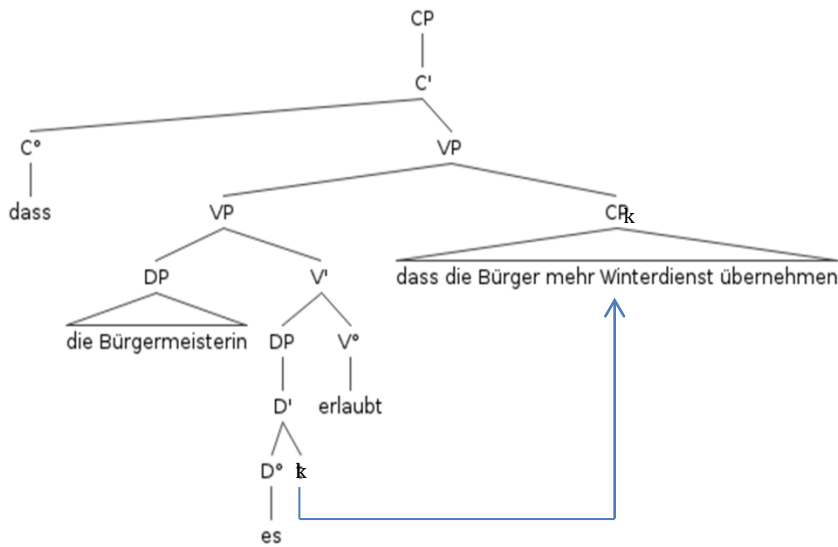


- With – placeholder-*es*-taking verbs, both *es* and *das* are attested very rarely. Explanation: both have special discourse requirements (= accessible left context).



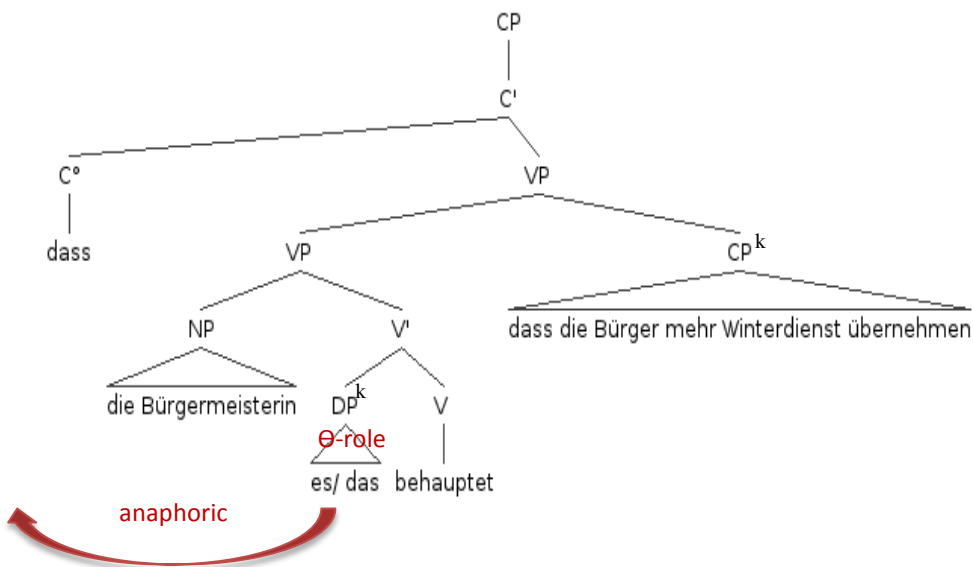
- (simplified) sentence structure with placeholder-*es* (adapted from Sudhoff 2003, building on Zimmermann 1993)

(6)



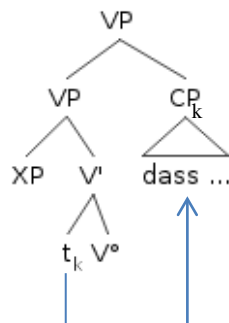
- (simplified) sentence structure with pro-form-*es/das* (adapted from Pütz 1975, Sudhoff 2003)

(7)



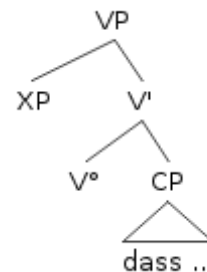
- the V-complementation construction: movement vs. base-generation analysis

(8) a.



similar analyses in Stechow & Sternefeld (1988: 398), Büring (1995), Büring & Hartmann (1995), Müller (1996), Sternefeld (2006, vol. I: 410–416)

b.



similar analyses in Haider (1994, 1996), Bayer (1995, 1996), Reis (1997), Webelhuth (1992), Inaba (2007)

Historical German argument clauses

Diachronic Hypotheses

- In argument-clause constructions (an archaic form of) the correlative construction is older than the V-complementation construction.
- This archaic correlative construction is similar, but not identical to the pro-form-construction in Present-Day German.
- The V-complementation construction (base-generation) arose out of a reanalysis of the archaic correlative construction.

The corpus

- Old High German (c. 750-1050) corpus:
 - prose: Isidor , Monsee Fragments, Tatian, Notker's *Consolatio*
 - verse: Otfrid's Gospel Harmony
- Middle High German (c. 1050-1350) corpus: c. 40-page sections of 21 prose texts

Finite object clauses in Old and Middle High German: the correlative construction

Quantitative perspective

- Compared to Present-Day German, in Old and Middle High German the use of an (overt) correlative element in finite object-clause constructions was much more frequent than today – especially with the ancestors of class II/–placeholder-*es*-taking verbs (= verbs of saying etc.) – and the by far most frequent correlate was *thaz/daz* instead of *iz/es*
 - Otfrids Gospel Harmony: c. 30% of *thaz*-clauses associated with correlative element in superordinate clause (Fleischmann 1973: 164, fn. 132). Johnk (1979: 362) counts 271 attestations.
 - Otfrid and in Notker's work: correlative construction attested with every matrix verb category (Johnk 1979: 362)
 - Middle High German prose: a correlative element is used 'very often' Prell (2001: 34)
- infrequency of the *iz/es*-correlate (associated with a *thaz*-object clause)
 - Old High German Isidor and Tatian: only one attestation of *iz*-correlate
 - (9) thanne furstant& ir **iz** . thaz ih iz bin.
,then you will understand that it is me'
tunc cognosc&is. quia ego sum.
(Tatian 216, 28)
 - Old High German Otfrid: correlative *iz* less frequent than correlative *thaz*
 - in the entire Middle High German corpus only five attestations of *es* with object-clauses.
 - (10) a. und raden wir **iz**, daz in dissen virzig dagen iren lib huden mit aller reinikeide
,and our advice is (lit. 'we advice it') that during these forty days they diligently keep their bodies clean'
(Oxforder Benediktinerregel 27, 9)
 - b. Dô gebôt her sînen jungeren daz si **iz** nîmant sagiten, daz her Jhêsus Christus wêre.
'Then he instructed his disciples that they tell it to nobody that he was Jesus Christ' (Evangelienbuch Beheim 40; Mt 17, 20)

Qualitative perspective

- In contrast to Present-Day German, correlative *thaz/daz* is not restricted to anaphoric uses in Old and Middle High German.
- Correlative *thaz/daz* is attested at the beginning of discourse sections:
 - (11) Zû deme eirsteme so sez wir inde willen **dat**, dat man zwene meystere, die vorderere genant sind, alre yairliis keysen sal
'Firstly, we decree and want that that every year one should elect two masters who will be called 'vorderere' (lit. 'priors')'
(Amtleutebuch St. Brigiden 49)
- There are many instances of correlative *thaz/daz* in which the content of the associated argument clause is entirely discourse-new:
 - (12) Er tháhta odowila **tház**, \ thaz er ther dúriwart wás,
,maybe he thought that that he was the gate-keeper'
(Otfrid II 4, 7)
 - (13) a. **Das** sagt uns die historia das Galaads mutter were ein die schonst frauw
'the historical record tells us that that Galaad's mother was the most beautiful woman' (Lancelot 29,7)
'Die Historie berichtet uns, daß Galaafs Mutter die schönste Frau war' (Steinhoff 1995: 87)
 - b. vñ fátzte **daz** daz man siebin wochin vastit vor ostirn.
'and (he) decreed that that one should fast for seven weeks before Easter'
(Jenaer Martyrologium 1)
 - c. vnd do verstvont er **daz** daz er daran keinen zwifel wolt haben.
and he then understood that that he didn't want to doubt it at all'
(Mitteldeutsche Predigten 46)
 - d. Wæistu **daz**, daz ez niht ein chlæin dinch si,
'do you know that that it is not a small thing?'
(Baumgarten geistlicher Herzen 191, 2)
 - e. Ir sönt **daz** wizzen, daz man lôn verdienet mit allen den dingen
'you must know that that one can earn a reward with all the things'
(Nikolaus von Straßburg: Predigten 280, 25)
- The use of correlative *thaz/daz* is not obligatory. With most verbs, one finds alternations of (accusative) *thaz/daz* and no correlative even within individual texts:
 - (14) a. und [sie] **bekenne daz** daz sie sorge intfangen hat
'and she should acknowledge that that she has received sorrow'
(Oxforder Benediktinerregel 16, 19)
 - b. und die ebdissen wol **bekennet** __ daz iz also ist ...
'and the abbes really acknowledges that this is the case'
(Oxforder Benediktinerregel 27, 25)
- Correlative *thaz/daz* is also attested with verbs/predicates that subcategorize for an oblique case (= genitive *dhes/des*):
 - (15) a. Oh **dhes** sindun unchilaubun iudeoliudi dhazs sunu endi heilac gheist got sii,
,but the Jews were unbelieving about that that the Son and the Holy Spirit are God' (Isidor 253)
 - b. Wir geren aber **def.** daz vnf div mennifgin vnder tan fin.
'but we seek that that we subdue people'
(Züricher Predigten 15, 62)

Finite object clauses in Old and Middle High German: the V-complementation construction

- According to standard assumptions, in Present-Day German a (non-oblique/non prepositional) *dass*-clause may also occur as the direct complement of the verb without the ‘support’ of a correlative DP.²
- Did this construction already exist in Old and Middle High German? How can we rule out a silent correlative DP in constructions without an overt correlative element (cf. b’/b)?

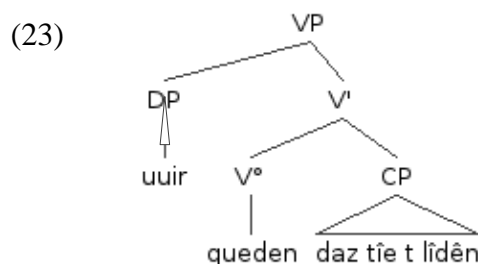
- (19) a. Sliumo ságeta er mo **tház**, \ tház er mo er kúnd was,
suddenly said he him that that he him before known was
‘He (= Jesus) told him (= Natanaël) at once that he knew him already’
(Otfrid II 7, 61)
- b. Sie ímo sar tho ságetun , \ tház sies wiht ni hábetun;
they him quickly then said that they-of-it nothing NEG had
‘They told him then quickly that they had nothing (to eat)’
(Otfrid V 13, 12)
- b.’ Sie ímo sar tho ságetun, [DP Ø] \ tház sies wiht ni hábetun;

- In Present-Day German long extraction of *wh*-phrases/long topicalizations is ungrammatical in constructions with correlatives:

- (21) a. ***Wen_i** hat Peter **es/das** behauptet, dass er **t_i** gesehen hat?
‘Whom has Peter it/that claimed that he has seen?’
- b. **Wen_i** hat Peter behauptet, dass er **t_i** gesehen hat? (=> no silent correlative DP, V-complementation-construction)

- Long extraction constructions provide evidence for the existence of the V-complementation construction already in Old High German:

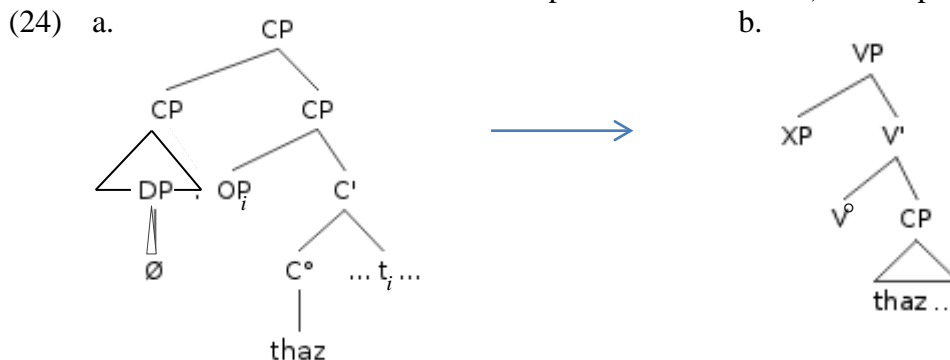
- (22) a. inti **uuemo_i** uuanu íh [tház íz **t_i** gilih sí]
and whom-DAT believe I that it alike be
‘and with whom do I believe that it (= the kingdom of God) can be compared?’
& cui simile esse existimabo illud.
(Tatian 72, 6)
- b. **wer_i** quédent sie [theih sculi **t_i** sín]
who-NOM say they that-I should be
‘who do they say that I ought to be?’
(Otfrid III 12, 8)
- c. [**uuélên uuéhsel**]_i múgen uuír chéden . [dáz tîe **t_i** lîdên.?
which transition-ACC may we say that they undergo-CONJ
‘which transition do they say that they undergo?’ (Notker *Boethius* IV 216, 1)



² See, however, Webelhuth (1989) for a different view. – Sudhoff (2003) argues that the V-complementation structure is only possible with – placeholder-*es*-taking verbs. In his analysis, + placeholder-*es*-taking verbs obligatorily select a correlative DP, which, however, is not always realized overtly.

The reanalysis: from correlation to complementation

- Lühr (2008: 156): „that-clauses in Proto-Indo-European [...] were adjoined and not embedded [...] they were apparently originally relative clauses connected to a reference word.“ (Lühr 2008: 156)
- The frequency of the correlative pattern in constructions with finite *thaz*-clauses in Old and Middle High German might suggest that this construction is of older origin than the V-complementation construction (cf. also Johnk 1979: 362):. There is a large consensus in the literature that *that*-type complementizers were not of Proto-Germanic origin, but evolved via convergent developments in the West Germanic daughter languages.
- In Axel (2009a) it is argued that in Old High German there also existed a relative complementizer *thaz* (just like in English), which had evolved from the relative pronoun via a Spec-to-Head-reanalysis (just like North-Bavarian *wos*, Jiddish *vos* etc.).
- from correlation (silent DP correlate + explicative *thaz*-clause) to complementation:



„Ein wichtiger Schritt zur Erzeugung komplizierter Gebilde war, daß das Objektverhältnis auf einen Satz übertragen wurde. (Paul ¹⁰1995: 145)

Summary

- With *dass*-argument-clauses in Present-Day German three constructions have to be distinguished:
 - (i) a correlative construction, in which the correlative element (*es*) is a true placeholder. (Verbs/predicates can be grouped into two classes wrt question whether they subcategorize for placeholder-*es* or not.)
 - (ii) a ‘correlative’ construction, in which the correlative element is an anaphoric pro-form (*es/das*) theta-marked by the matrix verb/predicate and the associated *dass*-clause is an explicative adjunct clause.
 - (iii) the V-complementation construction. Here the *dass*-clause is the complement of the matrix verb. Two variants have been proposed for ‘extraposed’ *dass*-clauses: 1. base-generation of the *dass*-clause to the left of the verb in the canonical object position and subsequent rightward movement (movement analysis). 2. base-generation to the right of the verb (base-generation analysis).
- In Old and Middle High German, *thaz/daz* was the predominant correlative element in constructions with finite object clauses. At first glance, this construction looks identical to the pro-form construction today (= ii), but closer inspection revealed that the semanto-pragmatic licensing conditions were different: *thaz/daz* was not necessarily anaphoric.

There is inner Old High German and historical/comparative evidence that originally the finite adjunct clause associated with the correlative was an explicative relative clause introduced by the relative complementizer *thaz*.

- In Old and Middle High German *iz/es* is only attested very sporadically in constructions with finite object clauses. The historical origins of the placeholder construction (= i) are therefore unclear.
- Long extraction data provide evidence that the V-complementation construction (= iii) can be traced back to Old High German times.
- The V-complementation construction (= iii) probably arose out of a re-analysis of the archaic correlative construction with a silent correlative (= ii). Our modern complementizer *dass* evolved from the relative particle *thaz*, which has died out in Standard German.³ In the target construction after the reanalysis, the *thaz*-clause is base-generated as a left complement of the governing verb (= iii, base-generation analysis). The proposed diachronic scenario is thus compatible with the base-generation analysis of German ‘extraposed’ *dass*-clauses, but not with the movement analysis.

Case study II: adverbial *da*-clauses –from correlation to embedding

Historical da-clauses as correlative relative clauses

- The correlative pattern with preposed *da*-clauses in historical German
 - *da*-clause to the left of matrix SpecC + corr. adverb in matrix SpecC/± postfinite overt corr. adverb (in the middle field); modern German paraphrases:
- (25) a. [**Da** sie das hörten], **da/dann** wurden sie froh. *correl. adv. in matrix SpecC*
 ‘When they heard that, then became they happy’
- b. [**Da** sie das hörten], sie wurden **da/dann/ Ø** froh
 when they that heard they became then/Ø happy

Internal syntax

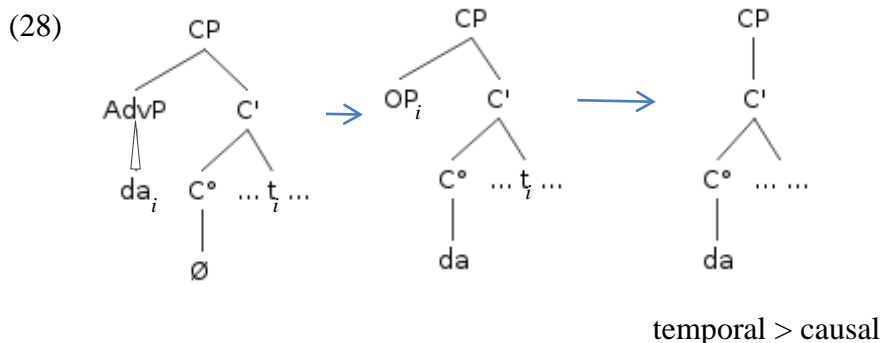
- *da* (> OHG *thō/dhuo*, MHG *dô*) as a relative adverb
 - in Old High German
- (26) a. ío unz then tagi [**thodo** ingieng In thia arca noe]
 ever until the day then-REL.PART. entered in the ark Noah
 ‘until the day when Noah entered into the ark’
 usque ad eum diem | quo Introiuit In arcam noe
 (Tatian 257, 5)
- b. *the, de* = optional relative particle in C^o: [CP *thō*_i [C *the/ Ø*] ... t_i ...]

³ This scenario has many empirical and conceptual advantages over the traditional scenario according to which the complementizer *thaz* evolved directly from a demonstrative pronoun, cf. the discussion in Axel (2009a).

- relics in Present-Day German

(27) Die Stunde, [**da** wir nichts voneinander wußten]
 ‘the hour when we knew nothing of each other’
 (title of a play by Peter Handke)

- from relative adverb to adverbial subjunction:

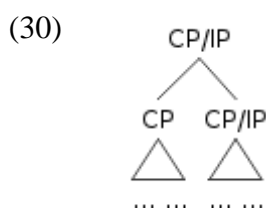


- (causal) adverbial subjunction:

(29) **Da** die Dahlien ganz schwarz sind, muss es Frost gegeben haben.
 ‘Since the dahlias are all black, it must have freezed’

External syntax

- the correlative diptych (head-internal relative clause adjoined to matrix CP/IP) (Haudry 1973, Lehmann 1995, Bianchi 1999)



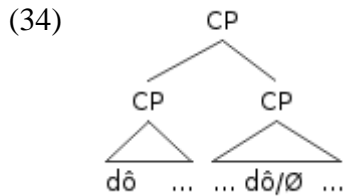
- adverbial correlative relative clause in Latin, Old and Middle High German:

(31) [IP [CP [**Quibus diebus**]_i Cumae liberatae sunt obsidione]
 which days-ABL Cumae released are from.the.siege -
 [IP [**isdem diebus**]_i Ti. Sempronius prospere pugnata]
 the.same days ABL Ti. Sempronius victory wins
 ,T. S. wins a victory in the days in which Cuma is released from the siege’
 (Livius 23, 37, 10; cit. in Haudry 1973, Bianchi 1999:86)

(32) [IP [CP [**quibus diebus**] ...] ... [IP ... [**isdem diebus**]]]

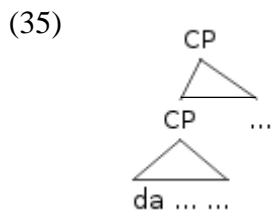
(33) a. [CP [CP **dhuo** ir ęrdha stedila uuac.] [CP mit imu uuas ich **dhanne**
 when he earth’s fundaments balanced with him was I then
 al dhiz frumendi]]
 all this making
 ‘Quando praeparabat cęlos, aderam’
 ‘When he balanced the earth’s fundaments, I was with him making all that’
 (Isidor 98)

- b. wan an dem lesen wir also. [_{CP} [_{CP} **Do** daz kind iesus cristus zwelf iâr alt wart.] [_{CP} daz **do** herre Joseph vnd Maria gotez muoter ... mit de kinde iesu ... cristo fuoren hinz ierusalem]].
 ‚because here we can also read when the child Jesus Christ turned twelve years old that then Joseph and Mary, the mother of God, went to Jerusalem with the child Jesus Christ‘
 (Mitteldeutsche Predigten 48)



From correlation to embedding in Early New High German

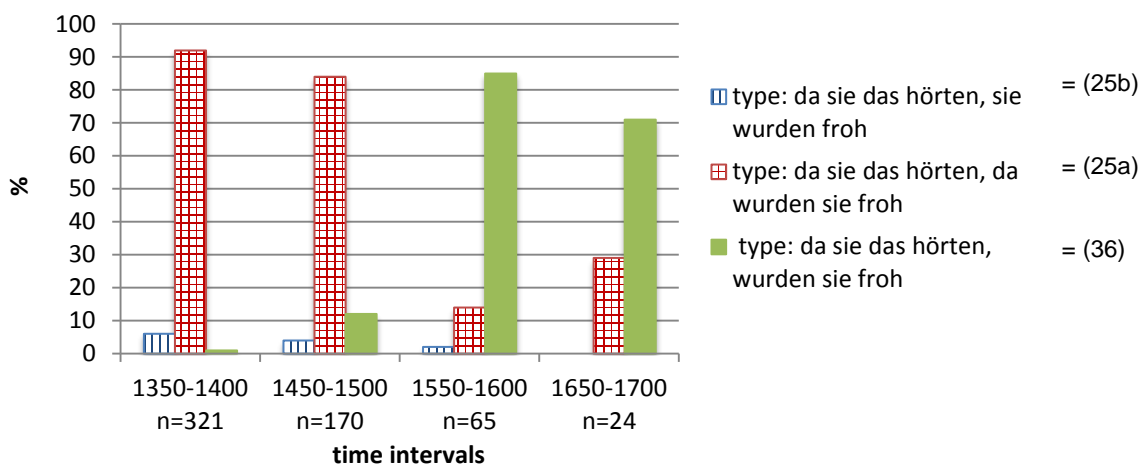
- new structure: embedded adverbial clause



- embedding: positioning in matrix prefield (or in other matrix-internal adjunct positions)

(36) **Da** sie das h reten / wurden sie fro /
 when/ because they that heard became they happy
 ‘When they heard that, they became happy’
 (Luther: bible 1545; Mk 14, 11)

- development of the three (surface) word-order patterns in the Bonn Early New High German corpus:



- critical construction:

(37) [**Da** sie das hörten], **da/dann** wurden sie froh. = (25)-a

- surface ambiguity: (i) archaic correlative (adverbial) relative clause
(ii) left-dislocated embedded adverbial clause of the modern type (cf. *Als sie das hörten, da wurden sie froh*).
- Keenan (1985: 165): „in practice the distinction between correlatives and (dislocated) internal RCs [= relative clauses] is not always easy to make.“

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⁴ Text selection was inspired by the 'Bochumer Mittelhochdeutschkorpus': http://www.ruhr-uni-bochum.de/wegera/archiv_1.htm

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