
SUBJECT GAP COORDINATION: A DIACHRONIC VIEW*

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ABSTRACT This paper focuses on the diachrony of Subject Gap Coordination in German, that is, coordination structures with a subject gap in one (or more) conjuncts. Subject Gap Coordination can be attested continuously from Early Old High German until the present day, but so far, it has been addressed almost exclusively in a synchronic perspective. Based on new Old High German and Middle High German data, I argue that the licensing conditions of the subject gap in coordination structures have changed considerably over time, the most fundamental change occurring during the Old High German period. Adopting the assumption that Early Old High German is an (asymmetric) null-subject language, I argue that in this time, Subject Gap Coordination-structures are simply coordinated main clauses and that the null subject is not licensed by the coordinate status of the conjuncts, but by the agreement-features of the finite verb in the C-head. From the Late Old High German period on, referential subject-pronouns become obligatory in all finite clauses, and at the same time, Subject Gap Coordination-structures without an antecedent for the subject gap in the first conjunct and with Verb-Second-order in the second conjunct disappear. This indicates that the omission of the subject pronoun in the second conjunct is now licensed by the coordinate status of the conjuncts in combination with the presence of an antecedent in the first conjunct and that the position of the subject gap has shifted from the middle field to the prefield. However, Middle High German and Early New High German Subject Gap Coordination-structures still differ from their Modern Standard German counterparts in that the subject gap and its antecedent do not yet have to share the same phi-features.

* I would like to thank the audience of the 21st Diachronic Generative Syntax Conference for the helpful and interesting discussion on non-coordinating UND in Middle High German. I would also like to thank all the reviewers and especially Agnes Jäger and Elly van Gelderen for their very helpful comments. Finally, I would like to thank Johanna Wood for her help with the final version of this paper.

1 INTRODUCTION

Subject Gap Coordination (SGC) is one of the most discussed types of Asymmetric Coordination in Modern Standard German (MSG) (see for example [Höhle 1983, 1990](#), [Reich 2009a,b, 2013](#), [Bonitz 2013](#), [Barnickel 2017](#)). It is characterized by (i) a subject gap¹ in the non-first conjunct(s) of a coordination structure, (ii) the presence of an antecedent for the subject gap (with identical phi-features) in the middle field² of the first conjunct and (iii) (overt) Verb-First (V1)-order in the conjunct(s) containing the subject gap, cf. (1), in MSG. The lack of an antecedent in the first conjunct or the antecedent not having the same phi-features as the subject gap leads to ungrammaticality; the same holds true if the second conjunct does not feature V1-order, cf. (1). Since MSG generally does not allow referential subject pronouns to be null, the subject gap in the second conjunct is generally assumed to be licensed by the coordination structure.

- (1) *Tina hatte Peter zum Abendessen eingeladen. Beim Nachtisch sah ihr Mann Peter an und (*wütend) sagte (angrily) sagte*
 T.NOM had.3SG P.ACC to dinner invited At dessert looked.3SG her husband.NOM P.ACC on and
 ‘Tina_j had invited Peter for dinner. During dessert, her husband_i looked at Peter_k and [he_i/*_k/*she_j] said (*angrily)...’

Coordination structures featuring the same surface-structure as in (1) can be attested continuously since the Early Old High German (OHG) period, cf. (2a) (from the *Monsee Fragments*, early 9th century) (see [Volodina & Weiß 2016](#), [Weiß & Volodina 2018](#), [Cognola & Walkden 2019](#); see also Section 4 of this paper). However, in older stages of the German language, we also find coordination constructions featuring one or more subject gap(s) which are no longer grammatical in MSG, such as for example (2b) and (2c). In (2b),

1 I use *subject gap* as a neutral term for the omission of a referential subject pronoun in a coordination structure (see also [Barnickel 2017](#)). As will be made clear below, it is debatable whether the second conjunct contains a phonologically empty element at all or if the subject of the first conjunct is somehow ‘shared’ between the two conjuncts. The term *null subject*, on the other hand, will be used for structures in which a phonologically empty element is assumed to be present.

2 The term *middle field* is henceforth used as English translation of *Mittelfeld*; in the topological model of German, the middle field is the part of the sentence between the position of the finite verb in root clauses and the base-generated position of the verb; the *prefield* (*Vorfeld*) is the position for the element left to the finite verb (SpecCP); see [Grewendorf \(1993\)](#); see also [Weiß & Volodina \(2018: FN 4\)](#).

both conjuncts feature a subject gap and the second conjunct has (overt) Verb-Second (V2)-order and (2 c) features a subject switch between the first and the second conjunct (with the indirect object in the first conjunct functioning as antecedent for the subject gap; see [Volodina & Weiß 2016](#)). Structures like (2) will henceforth be referred to as Subject Gap Coordination (SGC) as well; note, however, that this is a purely descriptive term meant to indicate a coordination structure with a subject gap in one or more conjuncts. As will be made clear below, this paper argues that the syntactic structure has changed considerably over time.

(2) SGC in Early OHG

- (a) *uuntrentiu uurtun elliu dhiu folc enti*
 astonished became.3PL all the.DET people.NOM and
quatun
 said.3PL
 ‘all the people_i were surprised and [they_i] said...’
 (Monseer Fragmente V,17)

- (b) *rorea. ga.faclita ni for.brihhit enti riuhhantan*
 reed.ACC bruised.ACC NEG breaks and smouldering.ACC
flas ni les.chit
 wick.ACC NEG extinguishes
 ‘[He_i] will not break a bruised reed and [He_i] will not extinguish
 a smouldering wick’
 (Monseer Fragmente V,10f.)

- (c) *Duo uuart imo fram.brun.gan der tiubil*
 There was.3SG him.DAT brought who.NOM devil.ACC
hapta[...] enti ga.heilta inan
 had.3SG and healed.3SG him
 ‘A man who was possessed by an evil spirit was brought to him_i,
 [...] and [he_i] healed him’
 (Monseer Fragmente V,14f.)

Up to now, we have hardly any quantitative data on SGC in older stages of the German language (see, however, [Volodina & Weiß 2016](#) for ENHG). In studies on OHG syntax, SGC is mostly addressed in the context of null subject-constructions, but left out of consideration since the omission of the subject pronoun is generally considered to be licensed by the coordination structure (and therefore either in the same or in a similar way as in MSG) (see [Axel 2007](#), [Eggenberger 1961](#), [Volodina 2011](#), [Cognola & Walkden 2019](#)). The only study

addressing SGC in Middle High German (MHG) by Held (1903) provides important descriptive information; however, it does not present any quantitative data and no longer corresponds to modern linguistic standards (see also Volodina 2011). New data regarding SGC in Early New High German (ENHG) is presented by Volodina & Weiß (2016) who examine the *Denkwürdigkeiten* by Helene Kottanerin³; interestingly, they find that even in this time, SGC is not yet subject to the same restrictions as it is in MSG, since case- or number-asymmetries between the subject gap and its antecedent are still quite frequent (at least in this text).

The corpus study presented in this paper (Section 4) focuses on SGC in OHG (beginning of the 9th to the middle of the 11th century) and MHG (middle of the 11th to the middle of the 14th century) prose texts (for ENHG data, I refer to Volodina & Weiß 2016). The data shows that apart from SGC-constructions featuring the same surface-structure as in MSG (cf. (2a)), we find three main types of SGC in Early OHG which are no longer grammatical today, that is: SGC-structures with (i) a subject gap in both conjuncts (= double subject gap), cf. (2b); (ii) a subject switch between the two conjuncts (either without an antecedent in the first conjunct or with an antecedent featuring accusative or dative case, cf. (2c)) and (iii) overt V2 or Verb-Later (= VLater) in the second conjunct, cf. (2b); these types also appear in combination with each other. However, from the 11th century on, SGC-structures with a double subject gap, without an antecedent for the subject gap and/or with V2-/VLater in the second conjunct can be hardly attested anymore, whereas structures like (2a) and (2c) persist during the MHG period (and, judging from the data presented by Volodina & Weiß (2016), also during the ENHG period). Apart from case-asymmetries between the subject gap and its antecedent, cf. (2c), we also find number-asymmetries in some cases (see especially Volodina & Weiß 2016).

This paper is structured as follows. After a brief note on null subjects in the history of German (Section 2), the syntactic properties of SGC-structures in a synchronic and diachronic perspective will be discussed in Section 3. After that, the OHG and MHG data obtained via the corpus-study is presented in Section 4. Section 5 focuses on the licensing conditions of subject gaps in coordination structures over time.

³ 15th century, Bavarian. Volodina & Weiß (2016) also include asyndetic coordination structures (that is, without an overt coordinator). Constructions of this type are excluded in the OHG and MHG data presented in Section 4.

2 NULL SUBJECTS IN THE HISTORY OF GERMAN

The subject gap in SGC-constructions is unexpected considering that (in contrast to ‘canonical’ null subject-languages such as Italian) referential subjects generally cannot be null in MSG finite clauses, cf. (3).

- (3) **sagte wütend*
 said.3SG angrily
 ‘He/She said angrily’

Leaving aside SGC-structures, the omission of referential subject pronouns is only acceptable in two other contexts in MSG, that is: (i) topic drop, mostly in question-answer-pairs (this, however, is not limited to subjects, but direct objects can also be omitted if they are topical), cf. (4), and (ii) diary drop, that is, first and second person pronouns may be omitted in diary style, cf. (5).

- (4) *Was macht Peter am Abend? Geht aus mit den Jungs*
 What does P. at evening Goes out with the boys
 ‘What does Peter_i do in the evening? – [He_i] goes out with the boys.’

(Example from [Weiß & Volodina 2018](#): 263, their example (5))

- (5) *Komme/ Kommst/ *Kommt/ Kommen/ Kommt/ *Kommen*
 come.1SG/ .2SG/ .3SG/ .1PL/ .2PL/ .3PL
 leider immer zu spät
 unfortunately always too late
 ‘[I/ You.sg/ *He, she, it/ We/ You.pl./ *They] come(s)
 unfortunately always too late’

(Example from [Trutkowski 2016](#): 185, her example (6))

Diary drop is referred to as *out of the blue drop* by [Trutkowski \(2016\)](#) who argues that the null subject is licensed by the non-syncretistic verbal inflection in the first and second person (and not by an antecedent, as is the case with topic drop). Both in topic drop- and diary drop/out of the blue drop-constructions, however, the null subject is clearly located in the prefield (as evidenced by the observation that this position may not be filled by another XP if the subject pronoun is left out) (see [Axel-Tober & Weiß 2011](#), [Volodina & Weiß 2016](#), [Trutkowski 2016](#)); therefore, MSG cannot be considered a null-subject language in the narrow sense since it does not allow for null subjects in the middle field.⁴

⁴ However, some present-day German dialects (especially Upper German varieties) also allow

The situation is different in Early OHG. Axel (2005, 2007), based on data from Eggenberger (1961), shows that in Early OHG prose texts (the *Isidor*, the *Monsee Fragments* and the *Tatian*), referential null subjects are much more frequent and also found in contexts no longer grammatical in MSG, cf. (6). Note that in (6a), the prefield is occupied with a PP and that in (6b), a third person subject pronoun is omitted (see Weiß & Volodina 2018). Axel (2007: 313) also notes that null subjects can even be attested in some autochthonous OHG texts, such as for example the *Hildebrandslied* (see also (20b) below for another autochthonous example that was discovered in the corpus-study) and that in yes/no-interrogatives like (6c), overt subject pronouns are never attested in prefinite position (at least in Eggenberger's corpus), leading her to the conclusion that "there is unambiguous evidence that null subjects are allowed in postfinite position".

- (6) (a) *In dhemu druhtines nemin archennemes[...] fater*
 In the.DET Lord's name.DAT recognize.1PL father.ACC
 'In the name of the Lord [we] recognize [...] the Father'
 (Isidor 4,3)

- (b) *steig tho in skifilin*
 stepped.3SG then in boat
 '[He] then stepped into the boat'
 (Tatian 193,1)

- (c) *quidis zi uns these parabola[...]*
 say.2SG to us this parable
 'Are [you] telling this parable to us [...]?'
 (Tatian 529,2)

(Examples from Axel 2007: 293 and 308,
 her examples (1)(b)–(c) and (25)(a))

While null subjects in Early OHG are quite frequent in root clauses, they appear very rarely in subordinate clauses (see Axel 2007). Cognola & Walkden (2019), analysing the OHG *Tatian* (and its Old Italian equivalent) and comparing it with the Latin source, find that the OHG translation only shows a null subject if the Latin original also has no overt subject and that a subject pronoun is inserted against the Latin source in 90% of all subordinate clauses, 69% of all main interrogative clauses and only 8% of all declarative clauses. This asymmetry, in combination with the autochthonous examples, provides strong support for the hypothesis that referential null subjects are a genuine

null subjects in the middle field (see Weiß 2005, Axel-Tober & Weiß 2010, 2011, Weiß & Volodina 2018).

property of (Early) OHG and that therefore, it can be considered (at least) an asymmetric null subject-language (see also [Fleischer 2006](#), [Volodina 2011](#), [Schlachter 2012](#), [Volodina & Weiß 2016](#), [Weiß & Volodina 2018](#), [Cognola & Walkden 2019](#)).

[Axel \(2005, 2007: Ch. 6\)](#) argues that null subjects in Early OHG are structurally licensed by the agreement-features in C^0 and therefore only in configurations in which the finite verb has moved to the C-head (hence the asymmetry between root and subordinate clauses) (see also [Volodina 2011](#), [Axel-Tober & Weiß 2011](#)).⁵ Adopting this assumption, we either have to conclude that the null subject is a weak pronoun (pro) fully specified for phi-features which occupies SpecTP/vP and is subsequently deleted at PF, cf. (7a) or that the agreement features in null-subject languages are interpretable and have the form of an affix, cf. (7b) (see [Barbosa 1995, 2011](#), [Holmberg 2005](#), [Roberts & Holmberg 2010](#)). The latter approach is favored by [Weiß & Volodina \(2018\)](#), who assume that the null subject is a clitic in the *Wackernagel-Position* (= WP) (see also [Weiß 2015](#), [Trutkowski 2016](#)). Either way, the null subject is located in the middle field (see also [Roberts & Holmberg 2010](#)).

(7) (a) $[V + Agr]_i \text{ pro } t_i$

(b) $[V + AGR_i]_k [ec_i \dots t_k \dots]$

(From [Axel 2007: 314](#), her examples (35)–(36);
(36)/(7b) after [Barbosa 1995](#))

From the 11th century on, however, null subjects can hardly be attested anymore; [Axel \(2007: Ch. 6.8\)](#) therefore comes to the conclusion that at this point, the null subject property has been lost. As we will see below, the 11th century also constitutes a turning point for SGC-constructions.

3 SUBJECT GAP COORDINATION

3.1 Subject Gap Coordination in Modern Standard German

Considering that MSG is not a null subject-language in the narrow sense, the most striking characteristic of SGC is the subject gap in the non-first conjunct(s)

⁵ A different approach is proposed by [Cognola & Walkden \(2019\)](#) who, following [Frascarelli \(2007\)](#), assume that discourse plays a crucial role in the licensing of null subjects both in partial and ‘canonical’ null-subject-languages; syntactically, this is captured by an aboutness-shift-topic-projection occupying the highest position in the clause. However, they still assume rich morphology on the verb to be able to act as a ‘repair strategy’ licensing null subjects in contexts in which the agreement-relation would otherwise be blocked (see [Frascarelli 2007, 2018](#); see also [Roberts & Holmberg 2010](#), [Cognola & Casalicchio 2018](#) for an overview on the licensing of null subjects in general). See also Section 5.

of the coordination structure. Compare example (1) (repeated as (9)) with its equivalent (8) where the joint subject of both conjuncts is located in the prefield of the first conjunct.

(8) Verbal coordination/ Left Peripheral Deletion

- (a) *Tina hatte Peter zum Abendessen eingeladen. Ihr Mann sah Peter beim Nachtisch an und sagte*
 T.NOM had.3SG P.ACC to dinner invited Her husband.NOM looked.3SG P.ACC at dessert on and said.3SG
 ‘Tina_j had invited Peter for dinner. During dessert, her husband_i looked at Peter_k and [he_i/*_k/*she_j] said...’
- (b) *Ihr Mann* [[sah Peter beim Nachtisch an] und [sagte...]]
- (c) [[Ihr Mann sah Peter beim Nachtisch an] und [~~ihr Mann~~ sagte...]]

(9) Subject Gap Coordination (SGC)

- Tina hatte Peter zum Abendessen eingeladen. Beim Nachtisch sah ihr Mann Peter an und (*wütend) sagte*
 T.NOM had.3SG P.ACC to dinner invited At dessert looked.3SG her husband.NOM P.ACC on and (*angrily) said.3SG
 ‘Tina_j had invited Peter for dinner. During dessert, her husband_i looked at Peter_k and [he_i/*_k/*she_j] said (*angrily)...’

Depending on the respective analysis, the subject in (8) may be analysed as either being outside of the coordination structure, cf. (8b) (= verbal/C'-coordination; see for example [Hartmann 2000, 2015](#), [Bryant 2014](#))⁶ or as being phonologically elided in the second conjunct, cf. (8c) (Left-Peripheral Deletion/ Conjunction Reduction, see for example [van Oirsouw 1993](#), [Wilder 1994](#)) (see also [Volodina & Weiß 2016](#): 187, FN 2). In contrast to that, in SGC-constructions, the joint subject of both conjuncts is always located in the middle field of the first conjunct. The subject gap and its antecedent share the same phi-features, as also evidenced by the finite verb and reflexives or possessive pronouns in the second conjunct showing agreement in number

⁶ This can be explained either by the subject having moved out of both conjuncts (= Across The Board-movement) or by the subject being base-generated outside the coordination structure and shared by both conjuncts.

and person; [te Velde \(1999\)](#) refers to this as Coordinate Feature Matching (CFM)-Principle (see also [Volodina & Weiß 2016](#)). NP's not bearing nominative case (such as for example *Peter* in (9)) therefore cannot function as an antecedent for the subject gap in MSG. Also, the antecedent needs to be the closest possible referent, that is, no other nominative NP that qualifies as an antecedent may interfere between the subject gap and its antecedent (see [Barnickel 2017](#)), cf. (10). However, in written language, it may be made clear by punctuation that one conjunct is seen as a mere parenthesis and therefore not as part of the SGC-construction.

- (10) *Plötzlich stand Lisa auf, erschrocken sah*
 Suddenly stood.3SG L.NOM up startled looked.3SG
sie Peter an und sagte dann...
 she.ACC P.NOM on and said.3SG then
 'Suddenly, Lisa_k got up, Peter_i looked at her startled and then,
 [he_i/ *she_k] said...'

Apart from the subject gap, SGC-structures are also characterized by the conjunct(s) containing the gap always having (overt) V1-order; any material intervening between the conjunction and the finite verb results in ungrammaticality, cf. (9) and (11 a). Because of this, SGC is also known as SLF-Coordination ('Subject Lacking in F-Structure', F = Fronted Finite Verb, see [Höhle 1990](#)). The first conjunct, on the other hand, may feature V2-order (with an XP other than the subject occupying the prefield), cf. (9), V1-order, cf. (11 a), or even Verb-End-order (these cases, however, are mostly limited to constructions introduced by the complementizer *wenn* ('if')), cf. (11 b).

- (11) (a) *Stehen die da etwa rum und*
 stand.3PL they.NOM there by.any.chance around and
 (*vielleicht) verteilen Flyer?
 (maybe) hand.out.3PL flyers?
 'Are these people really standing around handing out flyers?'
 (Example from [Reich 2009b](#): 211, his example (16)(a))
- (b) *Wenn du nach Hause kommst und siehst den*
 If you to home come.2SG and see.2SG the.DET
Gerichtsvollzieher vor der Tür...
 bailiff.ACC in.front.of the.DET door
 'If you_i arrive at home and [you_i] see the bailiff in front of the door...'

SGC also shows unexpected scope and binding properties⁷ and it seems to violate the Coordinate Structure Constraint which blocks movement out of one conjunct of a coordination structure (see [Ross 1967](#), [Büring & Hartmann 1998](#), [Barnickel 2017](#)). Also, it has been pointed out frequently that SGC forces a ‘fused interpretation’ (that is, the whole construction is seen as complex event rather than the events described in the conjuncts happening separately), whereas ‘canonical’ coordination allows both for a fused and a non-fused interpretation (see [Höhle 1983](#), [Reich 2009a,b, 2013](#), [Bonitz 2013](#)).⁸ Therefore, syntactic accounts for SGC are faced with the problem of explaining (i) the licensing of the subject gap, but also (ii) the fixed position of the finite verb in the second conjunct, (iii) the violation of the CSC in the first conjunct, (iv) the scope and binding properties and (v) the specific semantics of the construction.

Numerous analyses for SGC in MSG have been proposed so far (see for example [Reich 2009a](#), [Bonitz 2013](#), [Barnickel 2017](#) for an overview). These can be divided roughly into (i) accounts deriving the properties of SGC from the nature of coordinate structures in general and (ii) accounts built on the assumption that the syntactic structure of SGC is different from canonical coordination. Analyses of the first type mostly differ in regard to whether SGC is analysed as the coordination of two full CP’s with the subject of the second conjunct being deleted at PF (‘large conjuncts’) (see for example [Wilder 1994](#)) or as the coordination of two conjuncts smaller than full CPs (‘small conjuncts’) (see for example [Höhle 1990](#), [Heycock & Kroch 1993](#)). The second group of accounts mostly analyses the second conjunct as a full clause which is adjoined to a lower projection of the first one (rather than both conjuncts being arguments of an &P) (see [Büring & Hartmann 1998](#), [Bonitz 2013](#)).⁹ Even though it is rarely stated explicitly, this also entails that *und* would have to receive a second lexicon entry in MSG.¹⁰ A third approach (referred to as

7 Quantified subjects in the first conjunct have wide scope over the conjunct(s) containing the subject gap, whereas negation elements can have both narrow and wide scope; also, quantifiers in the first conjunct may bind pronouns in the second (see [Büring & Hartmann 1998](#), [Barnickel 2017](#)).

8 A reviewer points out that this single-event-interpretation can be blocked by a temporal adverb (such as *später* ‘later’) in one conjunct. Note, however, that a temporal adverb would also block a fused interpretation in canonical coordination structures like (8). We can therefore conclude that SGC forces a fused interpretation if this is not blocked by a temporal adverb.

9 There are also ‘mixed’ accounts, such as for example [Reich \(2009a\)](#). His approach combines the ‘small conjunct’-with an adjunction approach, since he analyses the second conjunct not as a full CP, but as a vP/OccP (= Occurrence) which is adjoined to a projection of the first conjunct (the vP) (this was pointed out by a reviewer).

10 Note that from a cross-linguistic point of view, this is not unexpected, since many languages use different coordinators or different coordination strategies for certain types of coordination; for example, many languages distinguish between coordinators which may only be used for

a ‘derived’ account) has recently been proposed by [Weisser \(2019\)](#): the second conjunct is assumed to be base-generated as a non-finite VP-adjunct in the first conjunct; in the next step of the derivation, the &-head is merged and lastly, the second conjunct moves to the specifier of the &P (see also [Barnickel 2017](#) for a similar account).

Whereas both the large and the small conjunct-approach have the advantage of not having to assume a structure reserved for SGC only, the scope- and binding properties of SGC-structures pose an unsolvable problem if we assume the conjuncts to be full CP’s with the subject being simply deleted in the second conjunct and a ‘small conjunct’-approach has to explain why the Coordinate Structure Constraint can be violated in SGC, but not in any other coordinate structure (see [Büring & Hartmann 1998](#), [Bonitz 2013](#)). An adjunction approach can explain the scope and binding properties of SGC and it also accounts for its specific semantic interpretation (the second conjunct has a quasi-subordinate status). However, a problem these accounts face is that the second conjunct does not behave like a regular adjunct (it cannot be topicalised and multiple conjuncts with a subject gap (‘stacking’) should also not be possible) (see [Barnickel 2017](#)). The derived approach by [Weisser \(2019\)](#), while explaining the specific properties of SGC in MSG rather neatly and also not having to assume a second lexicon entry for *und* in MSG, comes at the cost of a very complex derivation.

The diachrony of SGC-structures may shed new light on the problem of their underlying structure. For example, subject switch-constructions (which are attested from Early OHG to ENHG, see Section 3.2 and 4 below) pose a problem both for a ‘small-conjunct-’ and for a derived account, but can be explained if we assume the second conjunct to be an adjunct (see Section 5 below).

3.2 Subject Gap Coordination in the history of German

As mentioned above, SGC-constructions featuring the same surface-structure as in MSG can be attested in the oldest OHG texts already, cf. (2a) (repeated as (12a)) (see [Volodina & Weiß 2016](#), [Cognola & Walkden 2019](#)). Just as is the case in MSG, the joint subject of both conjuncts is located in the middle field of the first conjunct, but a subject pronoun is missing in the second one; the second conjunct features overt V1-order, while the first conjunct has V2-order. Considering that V1-order is still attested in OHG declarative clauses (see [Axel 2007](#)), it comes as no surprise that we also find SGC-structures with V1-order in the first conjunct in OHG declarative clauses, cf. (12b). Constructions of

the coordination of nominal elements and coordinators which are reserved for the coordination of predicates (see [Haspelmath 2004](#)).

this type can be attested consistently throughout the MHG and the ENHG period until today (see Section 4 below for OHG and MHG and Volodina & Weiß 2016 for ENHG). I will henceforth refer to this as *regular SGC*.

(12) Regular SGC in OHG

- (a) *uuntrentiu uurtun elliu dhiu folc enti*
 astonished became.3PL all the.DET people.NOM and
quatun
 said.3PL
 ‘all the people_i were surprised and [they_i] said...’
 (Monseer Fragmente V,17)
- (b) *Enti genc er insceffilin ubar ferita dhen*
 And went.3SG he.NOM in.boat over went.3SG the.DET
geozun enti quam in sina burc.
 river.ACC and came.3SG in his town
 ‘And he_i [Jesus] boarded the boat, [he_i] crossed the river and
 [he_i] arrived in his town’
 (Monseer Fragmente I,5f.)

However, apart from regular SGC, we find a number of other types of SGC-structures in older stages of the German language which are no longer grammatical in MSG. The first difference concerns the overt position of the finite verb in the conjunct(s) containing the subject gap. As pointed out above, the prefield of the second conjunct needs to remain empty in MSG SGC-structures. However, in the oldest OHG prose texts, constructions with one (or even more) XP(s) intervening between the coordinator and the finite verb in the conjunct containing the subject gap can be attested, cf. (13).¹¹ These constructions will henceforth be referred to as SGC-V2/VLater. After the 10th century, constructions of this type disappear almost completely.

(13) SGC-V2/VLater in OHG

- Umbi diz quad der forasago[...] enti dar after*
 On that said.3SG the.DET prophet.NOM and there after
quad[...]
 said.3SG
 ‘regarding this, the prophet_i said: [“...”] and thereafter, [he_i]
 said: ...’
 (Isidor 1,8)

11 A reviewer points out that this also may be due to OHG still allowing V3-order in main clauses (see Axel 2007, Axel-Tober 2018).

Secondly, in the oldest OHG prose texts, we also find SGC-constructions with a subject gap in both conjuncts (= double (subject) gap), cf. (14).

(14) SGC with double subject gap in OHG

Uuart im gnadic· ihs hruorta iro
 Became.3SG them.DAT gracious J.NOM touched.3SG their
augun enti see saar kasahhun enti folgetun
 eyes and see immediately saw.3PL and followed.3PL
 ‘Jesus became gracious towards them_i and touched their eyes;
 and behold, [they_i] immediately became able to see and [they_i]
 followed [him]’

(Monseer Fragmente XIV,26f.)

In some rare cases, the null subject of the first conjunct may even have another referent than the null subject of the second conjunct in OHG, cf. (15) (= double gap + subject switch).

(15) SGC with double subject gap + subject switch

Thanne sentit sine engila mit trumbun[...] inti
 Then sends his angels.ACC with trumpets and
gisamanont sine gicoranon
 gather.3PL his chosen.ones.ACC
 ‘Then, [He] sends his angels_i with trumpets and [they_i] gather
 his chosen-ones’

(Tatian 145,19)

Much more often, however, we find subject switch in constructions where the first conjunct features an overt subject (which is not the antecedent for the subject gap in the second conjunct), cf. (2c) (repeated as (16a)) and (16b); structures of this type can still be found in the MHG and ENHG period.

(16) SGC with subject switch

- (a) *Duo uuart imo fram.brun.gan der tiubil*
 There was him brought who.NOM devil.ACC
hapta[...] enti ga.heilta inan
 had.3SG and healed.3SG him

‘Someone who was possessed by an evil spirit was brought to
 him_i [...] and [he_i] healed him’

(Monseer Fragmente V,14f.)

- (b) *Enti genc er insceffilin ubar ferita dhen*
 And went.3SG he.NOM in.boat over went.3SG the.DET
geozun enti quam in sina burc. Enti see saar
 river.ACC and came.3SG in his town. And see now
butun imo bifora laman
 brought.3PL him before lame.one.ACC
 ‘And he boarded the boat, crossed the river and arrived in his
 town; and behold, [they] brought him a man who was a
 paralytic before...’

(Monseer Fragmente I,5–7)

Both in constructions like (15) and (16a), the antecedent of the subject gap functions as an object in the first conjunct (see also Held 1903 for these constructions in MHG). Since (15) and (16a) would violate the CFM-Principle in MSG, Volodina & Weiß (2016) refer to this as case-asymmetry between the antecedent and the subject gap in the second conjunct. However, since we also find some cases in which the first conjunct does not contain an antecedent for the subject gap in the second conjunct at all in Early OHG, cf. (16b), I refer to this as subject switch in a wider sense.

The CFM-Principle may also be violated by a number-asymmetry between the subject gap and its antecedent(s), cf. (17); this includes both constructions with a split antecedent, cf. (17)¹² and *constructiones ad sensum* (mostly with a mass noun in the first conjunct) (see Volodina & Weiß 2016). As will be shown in Section 4, however, constructions of this type are extremely rare in OHG. Considering the data from Volodina & Weiß (2016), we can conclude that number-asymmetries become more frequent during the ENHG period.

12 While (17) is a clear example for a split antecedent, Volodina & Weiß (2016) also include ambiguous constructions such as:

- (i) *Same tet adam joh sîn wîb lussam, muosen[...]*
 So did.3SG A.NOM and his wife.NOM agreeably had.to.3PL
 ‘So did Adam_i and his wife_k agreeably, [they_{i+k}] had to ...’
 (Genesis 597f, example from Volodina & Weiß 2016: 193, their example (8a))

Here, however, it is not clear whether the first conjunct is a coordination of two full clauses with Left Peripheral Deletion in the second conjunct or if this is an NP-coordination ([*adam*] *joh* [*sîn wîb*]) with partial agreement on the finite verb in the first conjunct (or with the finite verb bearing default singular). As pointed out by Dammel (2015), singular-agreement with coordinated NP’s is quite frequent if the finite verb is fronted in OHG. I therefore exclude constructions of this type.

- (17) SGC with number-asymmetry (between the antecedent and the subject gap)

do stund meiner frau gnad auf, vnd
There stood.3SG my mistress's grace.NOM up and
ich nam ain Windtlicht, vnd giengen[...]
I.NOM took.1SG a.DET lantern.ACC and went.1PL
'Then, my mistress_i stood up and I_k took a lantern and [we_{i+k}]
went...'

(Helene Kottanerin 23,14; example from
[Volodina & Weiß 2016](#): 193, their example (8b))

To sum up, we find a number of SGC-constructions in older stages of the German language which are no longer grammatical in MSG, most notably constructions with (i) a subject gap in both conjuncts (= double subject gap); (ii) a subject switch between the two conjuncts; (iii) a number-asymmetry between the subject gap and its antecedent(s) and (iv) overt V2/VLater in the second conjunct. These types also appear in combination with each other.

4 CORPUS DATA

4.1 Overview

In the corpus study presented below, the following types of SGC will be distinguished:

- (18) Types of SGC attested in the history of German
- (a) Regular SGC, cf. (12) (= the first conjunct features an overt subject in its middle field which functions as an antecedent for the subject gap (as is the case in MSG))
 - (b) Double subject gap, cf. (14) (= both conjuncts feature a subject gap with the same referent)
 - (c) Subject switch, cf. (16) (= the first conjunct features an overt subject which is NOT the antecedent of the subject gap)
 - (d) Double subject gap + subject switch, cf. (15) (= both conjuncts feature a subject gap with different referents)
 - (e) Number-asymmetry, cf. (17)

Apart from that, I will also give the number of SGC-constructions featuring V2 (or VLater) in the conjunct(s) containing the subject gap, cf. (13), and

(16b). This second distinction, however, is only relevant for the OHG period, since after that time, SGC-V2/VLater can hardly be attested anymore. As for subject switch-constructions ((18c) and (18d)), potential antecedents for the subject gap will be discussed in Section 4.4.2.

The corpus analysed consists of 15 OHG and 44 MHG prose texts dating from the early 9th to the middle of the 14th century and covering (as far as possible) all major High German dialect areas.¹³ Until the 11th century, periods of 100 years each are covered; since the number and variety of texts handed down increases strongly from the 12th century on, it is possible to cover time-periods of 50 years each from this time on. For the second half of the 13th (= 13_2) and the first half of the 14th century (14_1), at least one prose-text and one legal document are included for each dialect-area. Only syndetic coordination structures (that is, with an overt coordinator) are considered.¹⁴

The corpus contains a total of 673 SGC-structures, that is, about 12% of all syndetic coordination structures (N = 5632).¹⁵ As illustrated by Figure 1, a strong shift is visible during the OHG era: whereas about 31% (N = 27) of all SGC-structures dating from the 9th century still show V2 or VLater in the second conjunct, constructions of this type are hardly attested anymore from the 11th century on.

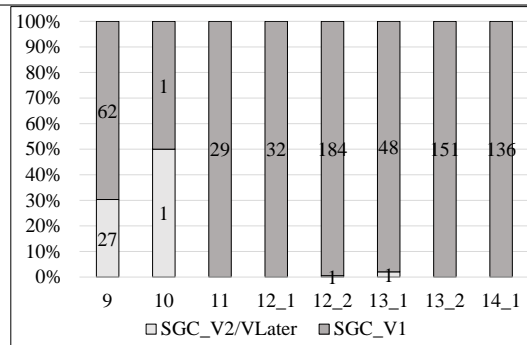


Figure 1: SGC-V2/VLater vs. SGC-V1

13 The texts were retrieved from the Old German Reference Corpus (= ReA) (Donhauser, Gippert & Lühr 2017) and the Reference Corpus of Middle High German (= ReM) (Klein, Wegera, Dipper & Wich-Reif 2016). Both corpora can be accessed via the corpus-search-tool ANNIS (see Krause & Zeldes 2016). While most OHG texts were analysed in full, the majority of the MHG texts was analysed only partially (the first 100 syndetic coordination structures). See the list of sources for the number of tokens per text or text-excerpt.

14 Note that Volodina & Weiß (2016) also include asyndetic coordination structures.

15 The share of SGC in syndetic coordination structures varies considerably per time-frame, but also per individual text. This is possibly due to text-type (for example, legal documents tend to contain a lot of NP-coordination, e.g. lists of names) and individual style.

Also, only 45% of all SGC-structures dating from the 9th century are regular SGCs (= type 18a); 26% (N = 23) feature a subject switch (= 18c) and 24% (N = 21) a subject gap in both conjuncts (= 18b), whereas double gap + subject switch (= 18d) is rare even in this time (4%, N = 4) (see Table 1). However, in the 11th century, the vast majority (97%, N = 28) of all SGC-constructions already feature an overt subject in the middle field of the first conjunct which serves as antecedent for the subject gap (as is the case in MSG) and SGC-V2/VLater-constructions are hardly attested anymore from this time on. Note that the disappearance of SGC-V2/VLater and double gap-constructions is exactly what to expect if we assume that Early OHG is still a null subject-language and that this feature is lost in Late OHG. Subject switch-constructions, however, do not die out completely, but their share in SGC rises again from the 12th/13th century on (see Table 1). Number-asymmetries, on the other hand, are hardly attested at all in OHG and are still not very frequent in MHG¹⁶, at least in the texts analysed.

Time	Regular	Double Gap	Doub. Gap + Subj. Sw.	Subj. Switch	Number-Asymm.	Total
9	40 (45%)	21 (24%)	4 (4%)	23 (26%)	1 (1%)	89
10	0	1 (50%)	0	1 (50%)	0	2
11	28 (97%)	0	0	1 (3%)	0	29
12_1	30 (94%)	1 (3%)	0	1 (3%)	0	32
12_2	177 (96%)	0	0	3 (2%)	5 (3%)	185
13_1	44 (90%)	0	0	5 (10%)	0	49
13_2	137 (91%)	0	1 (1%)	11 (7%)	2 (1%)	151
14_1	121 (89%)	0	0	14 (10%)	1 (1%)	136
Total	577 (86%)	23 (3%)	5 (0.7%)	59 (9%)	9 (1.3%)	673

Table 1: Types of SGC in OHG and MHG (Total numbers and share in SGC total)

4.2 Regular subject gap coordination

As already mentioned above, SGC-constructions with the subject of the first conjunct functioning as antecedent for the subject gap can be attested continuously from Early OHG until today. Whereas in the 9th century, the share of this type of SGC in all SGC-constructions is only 45% (40 out of 89, including both V1 and V2/VLater in the second conjunct) it rises to almost 97% in the 11th

¹⁶ Most examples of this type were found in the *Frankfurter Predigtfragmente*, second half of the 12th century (N = 5).

century (see Table 1). From the 13th century on, however, the share of regular SGC in SGC total declines again (mostly because of the increasing number of subject switch-constructions). In the first half of the 14th century, only 89% of all SGC-structures are ‘regular’ SGC (121 out of 136). Judging from the data presented by Volodina & Weiß (2016), this trend seems to continue in the first half of the 15th century (the *Denkwürdigkeiten* contain a total of 73 SGC-structures, only 56% (N = 41) showing the same surface-structure as in MSG).¹⁷ At some point, however, SGC-structures of any other type must have become ungrammatical in standard German since they are no longer attested today.

Regarding the position of the finite verb in the second conjunct, the majority of all SGC-structures of this type shows V1, as is the case in MSG. In the 9th century, however, 23% (N = 9) of all regular SGC-constructions still have VLater in the second conjunct. 8 of these examples show V2, whereas in only one example, two constituents appear in front of the finite verb in the conjunct containing the subject gap, cf. (19). Note that (19) is actually a tripartite SGC with the second conjunct having overt V2 and the third conjunct having V3.¹⁸ After the 9th century, we find only two more examples for V2/VLater (see Figure 1 above).

- (19) *Erino portun ih firchnussu, iisnine grindila*
 Iron gates.ACC I.NOM destroy.1SG iron locks.ACC
firbrihu endi dhiu chiborgonun hort dhir
 break.1SG and the.DET hidden treasures.ACC you.DAT
ghibu
 give.1SG
 ‘I_i break iron gates, [I_i] destroy iron locks and [I_i] shall give you
 the hidden treasures’
 (Isidor 3,2)

4.3 Double subject gap (same referent)

SGC-constructions with a double subject gap (same referent) are attested almost exclusively in the 9th century (N = 21, that is 24% of all SGC structures). In this time, they appear both in SGC-V1 and SGC-V2/VLater-structures (12 V1 vs. 9 VLater), cf. (14) (above) and (2b) (repeated as (20a)). A particularly interesting example was found in the OHG *Würzburger Markbeschreibung* (end

¹⁷ 19 examples show a number-asymmetry between the subject gap and its antecedent(s) and 13 a case-asymmetry / subject switch.

¹⁸ Since only syndetic coordination structures were considered, this is counted as one example in Table 1.

of the 10th century), an early autochthonous legal document that contains a description of the boundaries of the march of Würzburg, cf. (20b). This is a unambiguous example of a syndetic coordination structure featuring an empty subject in both conjuncts, providing further evidence that subject gaps cannot be explained solely by loan-syntax. The most recent example for this type of SGC found in the corpus dates from the first half of the 12th century, cf. (20c).

- (20) (a) *rorea. ga.faclita ni for.brihhit enti riuhhantan*
 reed.ACC bruised.ACC NEG breaks and smouldering.ACC
flas ni les.chit
 wick.ACC NEG extinguishes
 '[He_i] will not break a bruised reed and [He_i] will not extinguish
 a smouldering wick'

(Monseer Fragmente V,10f.)

- (b) *In Rabanesbrunnon, nidarun halba Uuirziburg[...] danan in*
 In R. down half W. then in
mitten Moin, auur in Rabanesbrunnon. So sagant, daz
 Middle M. again in R so say.3PL that
so si Vuirziburgo marcha[...], vnte quedent,
 so be.3SG.SUBJ Würzburg's march and say.3PL
daz[...]. Diz sageta Marcuuart, Nanduuin,[...]
 that[...] This said.3SG. M.NOM N.NOM
 'From the *Rabensbrunnen*, below Würzburg, [...] from there
 through the middle of the (river) Main back to the
Rabensbrunnen. So, [they_i] say, is the march of Würzburg, and
 [they_i] [also] say, that [...]. This said Marquart, Nanduin, [...] [list of names].'

(Würzburger Markbeschreibung II)

- (c) *Scamen sih sament mina fianda[...] daz*
 Feel.ashamed REFL all.together my enemies.NOM that
ouh sie got kehore. pecheren sih[...]
 also them.ACC god.NOM hear.3SG.SUBJ repent.3PL REFL
unde scamen sih sa uilo sliemo
 and feel.ashamed.3PL REFL immediately very fast
 'All my enemies_i are ashamed of themselves[...]. So that God
 may also hear them_i, [they_i] repent themselves[...]. and [they_i]
 feel ashamed of themselves very fast'

(Wiener Notker 9ra,23–9rb, 3)

While in (20c), the subject gaps may be licensed by the higher topic in the first clause or the antecedent in the preposed subordinate (see Cognola & Walkden 2019), the same licensing mechanism cannot be applied to (20b) where the referents of the null subjects in the two conjuncts have not been mentioned at all before. After the 12th century, double gap constructions with the same subject-referent can no longer be attested in the corpus.

4.4 Subject switch

Overall, the corpus contains 64 examples for subject switch (that is about 10% of all SGC structures, including the five examples for double gap + subject switch). As illustrated by Figure 2, subject switch (both with and without an overt subject in the first conjunct) is especially frequent in the 9th century (N = 27, that is 30% of all SGC-structures).¹⁹ Both subject switch and double gap + subject switch-constructions are attested with V1 and V2/VLater in the second conjunct in the 9th century (9 V2/VLater vs. 18 V1); after that, we find almost exclusively V1 in the second conjunct. Whereas SGC-constructions with a subject gap in both conjuncts disappear almost completely after the Early OHG time-period (see Section 4.4.1 below), surprisingly, subject switch-constructions with an overt subject in the first conjunct do not die out completely. Their share in SGC declines strongly in the Late OHG/Early MHG era (only one example dating from the 11th and one each from the first and the second half of the 12th century), but it rises again from the first half of the 13th century on (see Figure 2).

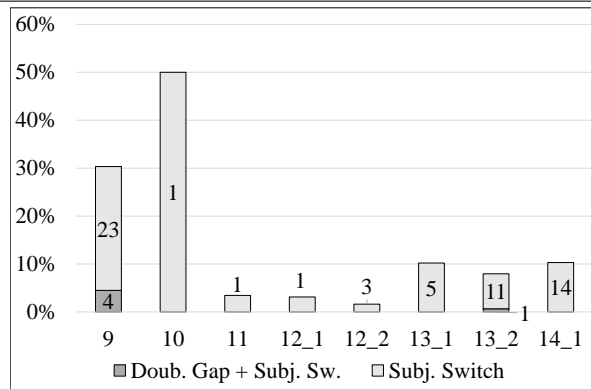


Figure 2: Subject switch-constructions (share in SGC)

¹⁹ Due to the low number of examples dating from the 10th century, the high percentage in this time-frame may be a mere coincidence.

Volodina & Weiß (2016) find 13 examples for subject switch in the ENHG *Denkwürdigkeiten* (18% of all SGC-structures in this text). This indicates that subject switch possibly becomes even more frequent in the ENHG period (or at least in some texts). However, more ENHG data is needed to determine how frequent the phenomenon is in this time-frame and at which point it becomes ungrammatical.

4.4.1 Double subject gap + subject switch

Double subject gaps with different referents are rare even in Early OHG; still, four of 89 SGC-examples dating from the 9th century (that is 4% of all SGC) belong to this type, cf. (15) (above). In two of these four cases, the second conjunct features V2/VLater. Surprisingly, we find one more example for this type of SGC in a legal document dating from the second half of the 13th century, cf. (21).²⁰

- (21) *Vnde habe wir danne herm Marq(ua)rde[...]/*
 And have.1PL we.NOM then mister.DAT M.DAT
Vnde herm Hartmanne dem langenmantel/ vnde
 And mister.DAT H.DAT the.DET Longcoat.DAT and
sinen brodern[...] *daz selbe lehen*
 his.DAT brothers.DAT the.DET same fiefdom.ACC
geliehen[...]. Vnde soln da mit thvon allez
 lent And shall.3PL there with do.INF all
daz/ des er vns ermant[...]/ ez si
 that.ACC that.GEN he.NOM us.DAT tells.3SG it be.SUBJ
iezv oder her nach. Vnde haben im darvmb
 now or there after and have.1PL him.DAT therefore
geben disen brief
 given this document.ACC
 ‘And we_i [the brothers Degenhart von Gundolfingen and Sibot,
 being tenants of a fiefdom which they received from the abbot of
 Ellwangen previously] have lent this fiefdom to Marquart von
 Lauingen_j, Hartmann the Longcoat_k and his brothers_l[...] and
 [they_j + k + l] shall do with this fiefdom everything, that he [the
 abbot] tells us to [...] whether now or later, and [we_i] have
 therefore given him [the abbot] this document’
 (Augsburger Urkunden I 2,5–9)

²⁰ Still, this is only one of 151 examples dating from this time-frame; also, note that the verb in the second conjunct is inflected for first plural. See also Section 5.

4.4.2 Subject-antecedents in subject switch constructions

As mentioned above, Volodina & Weiß (2016) refer to subject switch as case-asymmetry between the null subject and its antecedent, since in many cases, we find an antecedent (which does not feature nominative case) in the first conjunct. Potential antecedents for the subject gap(s) in SGC-constructions featuring subject switch (types (18c) and (18d)) are listed in Table (2).

Time	Arg. Vfin	Arg. Prep.	Poss. Pron.	Without/ Insert.	Without	Other	Total
9	13 (46%)	3 (11%)	1 (4%)	1 (4%)	5 (19%)	4 (4%)	28
10	0	0	0	0	0	1 (100%)	1
11	0	0	0	1 (100%)	0	0	1
12_1	0	0	0	1 (100%)	0	0	1
12_2	1 (33%)	0	0	2 (67%)	0	0	3
13_1	2 (40%)	1 (20%)	0	2 (40%)	0	0	5
13_2	7 (58%)	0	1 (8%)	2 (17%)	2 (17%)	0	12
14_1	8 (57%)	1 (7%)	1 (7%)	2 (14%)	2 (14%)	0	14
Total	31 (48%)	5 (8%)	3 (5%)	11 (17%)	9 (14%)	5 (8%)	64

Table 2: Antecedents in subject switch-constructions (Total and share in subject switch total)

In almost 48% (N = 31) of all subject switch-examples found in the corpus, the antecedent of the subject gap is an argument of the finite verb in the first conjunct (a direct or an indirect object), cf. (15), (16a) (above) and (22a). In 5 more examples, it is the argument of a preposition, cf. (22b). Note that in (22a)–(22b) the antecedent is also located at the right edge of the first conjunct and thus directly adjacent to the conjunct containing the subject gap. These cases can be seen as clear examples for a case-asymmetry between the subject gap and its antecedent in the first conjunct. In three more examples, a possessive pronoun that is co-referential with the subject gap is to be found in the first conjunct, cf. (22c).

(22) Subject switch with an antecedent in the first conjunct

- (a) *Sentit mannes sunu sine. angila enti samnont*
 Sends man's son.NOM his angels.ACC and gather.3PL
fona sinemo rihhe alle dea suuihi. enti
 from his kingdom all the.DET bad.things.ACC and
dea ubiltatun
 the.DET sinners.ACC

‘The son of man shall send his angels_i, and [they_i] shall collect all the bad things and the sinners from his kingdom’

(Monseer Fragmente X,3–5)

- (b) *Seczu ih minan gheist ubar inan. Enti miin*
 Set.1SG I.NOM my spirit over him.DAT and my
urteili chundit deotom
 judgement.ACC announces.3SG people.DAT
 ‘I set my spirit over him_i, and [he_i] will announce my judgement to the people’

(Monseer Fragmente V,7f)

- (c) *Gioffonota sih thô sliumo sîn mund inti sîn*
 Opened.3SG REFL there fast his mouth.NOM and his
zunga, inti sprah got uuihenti.
 tongue.NOM and spoke.3SG god.DAT praising
 ‘His_i mouth and his_i tongue were opened, and [he_i] spoke, praising God.’

(Tatian 4,12)

The remaining 25 examples do not contain an antecedent for the null subject in the left-adjacent conjunct. However, 11 of these examples also allow for an analysis as a tripartite SGC-construction with an insertion between the conjunct containing the antecedent and the one containing the subject gap, cf. (23a) (listed under *Without/Insertion* in Table 2). Constructions of this type are ungrammatical in MSG (because another subject that qualifies as antecedent intervenes between the antecedent and the subject gap), but can be marginally acceptable if it is made clear by punctuation that the insertion is not seen as part of the coordination structure (as indicated by putting the insertion in brackets in the translation below).

Apart from that, we find one example for a double gap + subject switch-construction where the antecedent for both gaps is the subject of a preposed subordinate clause (cf. (20c) above, 10th century) and four Early OHG examples (9th century) where the antecedent for the subject gap is located in the conjunct containing the subject gap (it functions as the subject of a preposed subordinate clause in three cases, cf. (23b) and in one example, it’s a genitive attribute inside a PP, cf. (23c)); the conjunction seems to have a mere discourse-connective function in these contexts. These five cases were subsumed under *Other* in Table 2.

- (23) (a) *andemo triten tage dorstun er uon dien*
 at.the.DET third day rose.3SG he.NOM from the.DET
toton. Vnde uuard daz[...] gehorit uber alle
 dead.ones and became.3SG this.NOM heard.PTCL over all
disa uuerilt Unde uberuuand den drachin
 this world and defeated.3SG the dragon
 ‘at the third day, he_i rose from the dead (and this became known
 all over the world) and [he_i] defeated the dragon’

(Physiologus 2)

- (b) *enti see· saar ein.huuelihhe· scribera*
 and behold immediately some scribes.NOM
quhat.tun untar· im· Dhese lastrot enti so
 spoke.3PL under them.DAT This.NOM blasphemes and as
ihs· gasah iro gadancha quhat
 J.NOM saw.3SG their thoughts.ACC said.3SG
 ‘and behold, some of the scribes said to each other: ‘this one
 blasphemes’; and as Jesus_i saw their thoughts, [he_i] said...’

(Monseer Fragmente I,10–13)

- (c) *Inu huuazs andres zeihnit dhar dhea dhri*
 PTCL what other denotes there the.DET three
sanctus chiquhedan, nibu dhera selbun
 sanctus.NOM said.PTCP.NOM if.not the.DET.GEN same.GEN
almahtigun dhrinissa guotliihhin ist araughit? endi
 almighty.GEN trinity.GEN glory.NOM is shown and
dhoh.dhiu.huuedheru in dhemu bauhnnunge dhero
 still in the.DET designation.DAT the.GEN
dhrio heido gotes ni sindun zi chilaubanne
 three.GEN forms.GEN god.GEN NEG are.3PL to believe.INF
dhazs sii dhrii goda sn[...]
 that they.NOM three.NOM gods.NOM be.3PL.SUBJ
 ‘What else do the three calls of ‘sanctus’ denote, if not the glory
 of the same almighty trinity? And yet, despite the denotation of
 God’s three forms_i, [they_i] are not to be believed to be three
 [different] gods...’

(Isidor 4,11)

This leaves us with 9 examples which unambiguously lack an antecedent for the subject gap, cf. (20b), repeated as (24). Not surprisingly, these examples mostly date from the 9th or 10th century. The 4 more recent examples (dating from the second half of the 13th and the first half of the 14th century) are exclusively first person (singular or plural) subject gaps, cf. (24b).

(24) Subject switch without antecedent

- (a) *In Rabanesbrunnon, nidarun halba Uuirzburg[...]* *danan in*
 In R. down half W. then in
mitten Moin, auur in Rabanesbrunnon. So sagant, daz
 Middle M. again in R so say.3PL that
so si Vuirziburgo marcha[...], vnte quedent,
 so be.3SG.SUBJ Würzburg's march and say.3PL
daz[...]. Diz sageta Marcuuart, Nanduuin,[...]
 that[...] This said.3SG M.NOM N.NOM
 'From the *Rabensbrunnen*, below Würzburg, [...] from there
 through the middle of the (river) Main back to the
Rabensbrunnen. So, [they_i] say, is the march of Würzburg, and
 [they_i] [also] say, that [...]. This said Marquart, Nanduin, [...] [list of names].'

(Würzburger Markbeschreibung II)

- (b) *Ioseph wart weinent vnd sprach. wider got*
 J.NOM became.3SG crying and said.3SG against god.ACC
svln wir niht tvn.[...] dar.vmb si iv
 shall.1PL we NEG do therefore be.3SG.SUBJ you.DAT.PL
vergeben vnd bit ivch daz ir mir
 forgiven and beg.1SG you.DAT.PL that you.NOM.PL me.DAT
vergebt
 forgive.2PL
 'Joseph started to cry and said: ,we shall not do against God's
 will; therefore, you shall be forgiven, and [I] beg you to forgive
 me, [too]'

(Buch der Könige 3va, 29–33)

4.5 Number-Asymmetry

Only 9 examples feature a number-asymmetry between the subject gap and its antecedent in the first conjunct (1% of all SGC), see Table 1. In 7 of these examples, the antecedent is a mass noun, cf. (25a), but we also find one example for a comitative construction, cf. (25b) and one construction with *je* ('each'), cf. (25c²¹). The five examples from the second half of the 12th century all hail from the *Frankfurter Predigtfragmente*. As indicated by the data from Volodina & Weiß (2016), number-asymmetries become more frequent in ENHG, at least in some texts.

21 This example could also be analysed as a case-asymmetry (between the NP *ir* and the subject gap).

- (25) (a) *thanne uuoufit sih allu erdcunnu, inti gisehen*
 then cry.3SG REFL all earth.folk.NOM.SG and see.3PL
mannes sun comentan in himiles uuolkanon
 man's son coming in heaven's clouds
 'Then all earth folk_i will wail and [they_i] will see the son of man
 descending from heaven's clouds'

(Tatian 145,19)

- (b) *Do dit allez ergienk do hub sich decius*
 As this all.NOM happened there lifted.3SG REFL D.NOM
uf mit valeriano un solten faren[...]
 up with V.DAT and should.3PL go.INF
 'While all this was happening, Decius_i left [together] with
 Valerian_k, and [they_i + k] would go [...]'

(Frankfurter Predigtfragmente 5,6–8)

- (c) *so waz selten daz mal ezz wurde ie*
 so was.3SG rarely the.DET time.NOM it became.3SG each
ir etlichew sinnelos. vnd lagen als
 they.GEN someone.NOM unconscious and lay.3PL as
die toten.
 the.DET dead.ones

'Sometimes it would happen that someone_i of them fell
 unconscious, and [they_i] lay like the dead'

(Christine Ebner: Engelthaler Schwesternbuch 4a,19–21)

5 SUBJECT GAP COORDINATION FROM OLD HIGH GERMAN TO MODERN STANDARD GERMAN

As we have seen above, SGC-constructions with the same surface-structure as in MSG can be attested continuously since the begin of the written tradition. However, this does not necessarily indicate that the underlying syntactic structure has not changed over time and that the subject gap is always licensed in the same way as it is in MSG.

In MSG, SGC-structures are only grammatical if (i) the conjunct containing the gap features overt V1-order and (ii) an antecedent with the same phi-features as the subject gap is present in the first conjunct. This entails that the overt subject of the first conjunct is always interpreted as co-referential with the subject gap and that double gap-constructions are ungrammatical. The omission of the subject pronoun in the second conjunct is clearly licensed

by the coordinate status of the conjuncts in MSG²² (in combination with the conditions (i) and (ii) above being met).

The OHG data discussed above shows that in the 9th century, more than half of all SGC-structures violate one (or even both) of the conditions (i) and (ii) above, since we still find constructions with V2/VLater in the second conjunct, with a subject gap in both conjuncts, and/or with a subject switch between the two conjuncts. Interestingly, we even find constructions in which the first conjunct does not contain an antecedent for the subject gap at all, cf. (20b) and (16b). However, considering that Early OHG is still an (asymmetric) null subject language which allows referential null subjects in the middle field (at least in root clauses) (see Axel 2005; see also Section 2), subject gaps in syndetically coordinated clauses come as no surprise at all. If we assume that null subjects in OHG are structurally licensed by the agreement features in the C-head (see Axel 2007, Volodina 2011, Axel-Tober & Weiß 2010, 2011, Weiß & Volodina 2018) (regardless whether the null subject is analysed as an empty pronoun or a clitic in the WP-position) the same licensing mechanism will also apply if two or more root clauses are conjoined with an overt coordinator.²³ Therefore, we have no reason to assume that Early OHG SGC-structures should be anything more than simple coordinated main clauses with a null subject located in the middle field of the second conjunct (or even in both conjuncts), cf. (26) (see Axel 2007: 314). If we are to assume a structure like (26) for all SGC-constructions in Early OHG, the existence of double gap- and subject switch-constructions is not unexpected. There is also no reason why the prefield of the second conjunct should need to remain empty.

- (26) [CP (XP) C[V+AGR]_i] [_k [(pro_i/ec_i)... t_k...]] **und** [CP (XP) C[V+AGR]_i] [_k [pro_i/ec_i... t_k...]]

From the 11th century on, however, referential null subjects in (non-coordinated) root clauses disappear, indicating that the null subject property has been lost (see Axel 2007). At the same time, SGC-V2/VLater- and double gap-constructions cease to exist as well (as to be expected in a language which does no longer allow referential null subjects in the middle field). However, regular SGC-structures (that is, with V1 in the second conjunct and a subject gap that is co-referential with the overt subject of the first conjunct), as well as subject switch-constructions (with an antecedent not featuring nominative case in

²² As indicated by the observation that referential subject pronouns cannot be left out in non-coordinated root clauses in MSG, cf. (3) (above).

²³ On the other hand, if we are to assume that null subjects in OHG are (exclusively) licensed by discourse, constructions in which there is no antecedent for the subject gap(s) at all pose a problem.

the first conjunct) do not die out; the share of subject switch-constructions in SGC even rises again in the 13th century (after a decline in the 11th and 12th century; see Figure 2). Subject switch constructions without an antecedent for the subject gap in the first conjunct, on the other hand, can hardly be attested anymore from the Late OHG period on. The only exceptions to this are examples with an inserted clause between the conjunct containing the antecedent and the one containing the subject gap, cf. (23a), repeated as (27a), or with the finite verb in the second conjunct being inflected for first person, cf. (24b), repeated as (27b).

- (27) (a) *andemo triten tage dorstun er uon dien*
 at.the.DET third day rose.3SG he.NOM from the.DET
toton. Vnde uuard daz[...] gehorit uber alle
 dead.ones and became.3SG this.NOM heard.PTCP over all
*disa uuerilt **Unde** uberuuand den drachin*
 this world and defeated.3SG the dragon
 ‘at the third day, he_i rose from the dead (and this became known
 all over the world) and [he_i] defeated the dragon’

(Physiologus 2)

- (b) *Ioseph wart weinent vnd sprach. wider got*
 J.NOM became.3SG crying and said.3SG against god.ACC
svln wir niht tvn.[...] dar.vmb si iv
 shall.1PL we NEG do therefore be.3SG.SUBJ you.DAT.PL
ver.geben vnd bit ivch daz ir mir
 forgiven and beg.1SG you.DAT.PL that you.NOM.PL me.DAT
vergebt
 forgive.2PL
 ‘Joseph started to cry and said: ,we shall not do against God’s
 will; therefore, you shall be forgiven, and [I] beg you to forgive
 me, [too]’

(Buch der Könige 3va, 29–33)

Following Trutkowski (2016), I analyse constructions like (27b) as out of the blue drop, with the null subject located in the prefield and licensed by the non-syncretistic verbal inflection (see also Weiß & Volodina 2018). Adopting this assumption, the null subject in (27b) is not licensed by the coordinated status of the conjuncts, but by the finite verb inflected for first person. As for examples like (27a), constructions of this type are also marginally possible in written language in MSG, provided that the intervening conjunct is clearly marked as an insertion by punctuation. We can therefore conclude that from the 11th century on, the omission of referential subject pronouns is subject to

(almost) the same licensing conditions as in MSG, that is: apart from out of the blue drop/diary drop and topic drop, subject gaps are only allowed in the non-first conjunct(s) of a coordinate structure if the conjunct containing the subject gap features overt V1-order and if the first conjunct contains an antecedent for the subject gap; however, in contrast to MSG, the subject gap and its antecedent may still have different phi-features (as is the case in SGC-structures with a number-asymmetry between the subject gap and its antecedent and in subject switch constructions with an NP other than the subject of the first conjunct functioning as antecedent for the subject gap).

This leaves us with two possibilities regarding the syntactic structure of SGC-constructions in Late OHG and MHG: either the conjunct containing the gap has been reanalysed as a smaller verbal projection, possibly (but not necessarily) with the subject being shared between the two conjuncts, or the second conjunct is still a full CP with an empty element located in the prefield²⁴ which is deleted at PF. The second option is compatible both with a clausal account for SGC (with both conjuncts still being full coordinated clauses and the subject pronoun being deleted in the second one, cf. [Wilder 1994](#)) and with an adjunction-account (with the second conjunct being a full CP which is adjoined to a lower projection of the first conjunct, cf. [Büring & Hartmann 1998](#), [Bonitz 2013](#)).

However, considering that the verbal coordination approach has to stipulate that the Coordinate Structure Constraint can be violated in SGC-structures (but not in any other coordinate structure), the first option seems less plausible (see Section 3.1). Also, case- and number-asymmetries between the subject gap and its antecedent are impossible to account for if we were to assume a small conjunct-approach with a shared element between both conjuncts. I therefore conclude that at least in Late OHG, MHG and ENHG, it is very likely that the second conjunct is still a full CP (and not a smaller verbal element)²⁵ and that the subject gap has been reanalysed as being located in the prefield of the respective conjunct. This reanalysis is triggered by the change regarding the licensing conditions of null subjects in Late OHG (that is, referential null subjects can no longer be licensed in the middle field).²⁶ Note that an adjunction-approach can quite easily explain case-asymmetries between the subject gap and its antecedent: if the second conjunct is an adjunct, it is

24 As evidenced by the observation that this position may no longer be filled with any overt material.

25 As pointed out by a reviewer, the hypothesis that SGC-structures emerged from CP-coordination-structures also points to the assumption of a more elaborate functional projection in the second conjunct, cf. [Büring & Hartmann \(1998\)](#), [Weisser \(2019\)](#).

26 As pointed out by a reviewer, the loss of V3 and V1-order in declarative clauses also may have played an important role.

simply adjoined to a lower projection level in these constructions or even (in some cases) to the antecedent itself (in the latter case, the second conjunct would have a status similar to a V2-relative clause).²⁷ Number-asymmetries, however, can also pose a problem for an adjunction-approach.²⁸

A second change regarding the licensing conditions of subject gaps in coordination structures takes place at some point in Late ENHG (or even Early Modern German) with case- and number-asymmetries between the subject gap and its antecedent becoming ungrammatical (CFM-principle, see [te Velde 1999](#)). However, more ENHG data is necessary to determine at which point the CFM-principle emerges.

6 CONCLUSION

This paper has argued that even though coordination structures with a subject gap in the second conjunct (= SGC) can be attested continuously from Early OHG until the present day, the licensing conditions of the subject gap have changed drastically over time, the most fundamental change occurring during the OHG period.

Since MSG is not a canonical null subject language, referential subject pronouns generally may not be omitted; the only other contexts (besides SGC) that allow this are topic drop and diary drop/ out of the blue drop (with the subject gap located in the prefield) (see [Axel-Tober & Weiß 2011](#), [Volodina & Weiß 2016](#), [Trutkowski 2016](#)). In SGC-structures, the subject gap is licensed by the coordinate status of the conjuncts in combination with the presence of an antecedent with identical phi-features in the first conjunct; also, the conjunct containing the gap needs to feature (overt) V1-order.

In contrast to that, in Early OHG, subject pronouns may also be omitted in the middle field (at least in root clauses). The corpus-study presented in Section 4 shows that in this time, SGC-structures are not yet subject to the same restrictions as they are in MSG. The second conjunct may still have V2 or even VLater-order, a subject gap may appear in both conjuncts and the overt or empty subject of the first conjunct may have another referent than the subject gap in the second conjunct. Also, an antecedent for the subject

²⁷ Subject switch-constructions of this type (especially constructions where the antecedent is immediately adjacent to the second conjunct) may also be linked to another type of construction introduced by the conjunction *und* in the history of German, that is, so-called ‘non-coordinating *und*’ (see [Schröbler 1966](#), [Ferraresi & Weiß 2011](#), [Oppermann t.a.](#)). This term refers to the conjunction *und* appearing in positions in which we would expect a relative or equative particle or even a temporal or general subordinating conjunction.

²⁸ A derived account in the spirit of [Barnickel \(2017\)](#) and [Weisser \(2019\)](#) also can neither explain subject switch-constructions nor number-asymmetries; however, it is a possibility that a second fundamental reanalysis has taken place in the late ENHG time.

gap is not obligatory in Early OHG. Adopting the hypothesis that Early OHG is an asymmetric null subject-language in which null subjects are licensed by the agreement features of the finite verb in C (see [Axel 2007](#), [Volodina 2011](#), [Axel-Tober & Weiß 2010, 2011](#), [Weiß & Volodina 2018](#)), there is no reason to assume that SGC-structures are any different from non-coordinated root clauses with a null subject. Early OHG SGC-structures are therefore syndetically coordinated CPs with a null subject located in the middle field of the respective conjunct(s).

With referential subjects becoming obligatory in non-coordinated finite clauses in Late OHG, SGC structures without an antecedent for the subject gap and SGC-V2/VLater-constructions disappear.²⁹ I therefore conclude that in Late OHG SGC-constructions, the subject gap has already been reanalyzed as being licensed by the coordinate status of the conjuncts in combination with the presence of an antecedent for the subject gap in the first conjunct. The subject gap is now located in the prefield of the first conjunct (as also indicated by the observation that this position may no longer be filled). A small conjunct-analysis with an NP being shared between the two conjuncts is ruled out, since the subject gap and its antecedent do not yet need to share the same phi-features in MHG and ENHG. An adjunction-account (with the second conjunct being adjoined to a lower projection of the first one), on the other hand, can explain case-asymmetries between the subject gap and its antecedent. Further research on SGC in ENHG and Modern German is necessary to determine at which point SGC-structures with a case- or a number-asymmetry between the subject gap and its antecedent become ungrammatical.

²⁹ A reviewer points out that the existence of structures which lack an antecedent for the subject gap in the first conjunct in Early OHG provides a particularly strong argument for the hypothesis presented here, while on the other hand, the existence of overt V2-order in Early OHG is not as conclusive, since Early OHG still allows V3-order in declarative clauses (and therefore, SGC-structures with overt V2-order in the second conjunct could also be V3-clauses with the subject gap in the prefield).

SOURCES

The table below lists the sources used in the study (Section 4). It presents the estimated time-frame, the dialect area³⁰, the source-corpus, the file name(s) in the respective corpus, a more conventional text name and the number of tokens contained in the text or text-excerpt.

Time	Dialect	Corpus	File	Text Name	Token
9	Ic	ReA	E_Exhortatio	Exhortatio	259
9	Ic	ReA	MF_* ³¹	Monseer Fragmente	3833
9	II	ReA	Tatian_1.1	Tatian	2085
9	II	ReA	WB_Wzb.Beichte	Würzburger Beichte	385
9	IIIb	ReA	Isidor_1.1	Isidor	4982
10	Ic	ReA	PE_Priestereid	Priestereid	37
10	Ic	ReA	BB_* ³²	Vorauer Beichte	250
10	IIIa	ReA	TC_* ³³	Trierer Capitulare	289
10	II	ReA	WM2_* ³⁴	Würzburger Markbeschreibung II	162
10	IIIb	ReA	MB_Mainzer- Beichte	Mainzer Beichte	241
10	IIIb	ReA	RB_* ³⁵	Reichenauer Beichte	369
11	Ia	ReA	N_Mart_Cap.I.2– 9	Notker: Martianus Capella	929
11	Ia	ReA	Notker_Kleinere- De_Musica_1.1	Notker: De Musica	1748
11	Ia	ReA	Physiologus_1.1	Physiologus	1536
11	Ic	ReA	OG_Otlohs_Gebet	Othlos Gebet	760
12_1	IIIb	ReM	M048P-N1	Contra caducum mor- bum (P)	81
12_1	Ic	ReA	WGB_Wess.Glaub	Wessobrunner Glauben und Beichte	1655

30 I = Upper German, including: Ia = Alemannic Ib = Bavarian/Alemannic and Ic = Bavarian texts; II = East Franconian; III = Central German including: IIIa = Middle Franconian, IIIb = Rhine-Franconian, IIIc = Rhine-Franconian/Hessian or Hessian/Thuringian and IIId = Thuringian and other East Central German dialects.

31 MF_1_M.I, IV-VII, X, XIV, XV, XVII-XXI, XXIII, XXV; MF_2_M.XXVII, XXIX, XXX; MF_4_AS_M.XXXVII, XL, XXXIX.

32 BB_BruchstueckeinerBeichte.

33 TC_Trierer_Capitulare.

34 WM_Wuerzburger_Markbeschreibung_2.

35 RB_Reichenauer Beichte.

Subject Gap Coordination

12_1	Ic	ReM	M242-G1	Wiener Notker	7961
12_1	II	ReA	HiH_ ^{*36}	Himmel und Hölle	604
12_1	II	ReA	BamGB1_ ^{*37}	Bamberger Glaube und Beichte	2629
12_1	IIIb	ReA	VPfS_ ^{*38}	Vatikan. Pferdesegen	53
12_2	IIIc	ReM	M177-G1	Frankfurter Predigtfragmente	2410
12_2	IIIa/b	ReM	M187-N1	Schleizer Psalmenfragmente	1977
12_2	Ia	ReM	M171-G1	Züricher Predigten	6562
12_2	Ib	ReM	M214-G1	Speculum Ecclesiae	6762
12_2	Ic	ReM	M157-G1	Wiener Physiologus	5862
13_1	IIIb	ReM	M543-N1	Hamburger Beichte	530
13_1	IIIb	ReM	M118-N1	Pfälzer Judeneid	198
13_1	IIIc	ReM	M330-G1	Mitteldeutsche Predigten (K)	2006
13_1	IIIb	ReM	M082-G1	Vatikanische Gebete	640
13_1	Ib	ReM	M165-G1	Hoffmannsche Predigten	3701
13_1	Ia	ReM	M132G-G1	Lucidarius	6540
13_1	Ic	ReM	M409-G1	St Pauler Predigten	1678
13_2	IIIa	ReM	M303-G1	Amtleutebuch St Brigiden	1826
13_2	IIId	ReM	M408-G1	Jenaer Martyrologium	1185
13_2	IIId	ReM	M320-G1	Mühlhäuser Rechtsbuch (N)	2553
13_2	IIIc	ReM	M328-G1	Mitteldt. Predigten (Fr/G/H1)	2040
13_2	IIIc	ReM	M337-G1	Salomonis Hus	1503
13_2	Ib	ReM	M344-G1	Augsburger Urkunden I	2830
13_2	Ic	ReM	M302-G1	Bartholomäus	2274
13_2	Ib	ReM	M405-G1	David von Augsburg	2405
13_2	Ic	ReM	M403-G1	Buch der Könige	2813
13_2	Ib	ReM	M411-G1	Augsb. Stadtbuch	2215
13_2	Ia	ReM	M346-G1	Freiburger Urkunden I	1581
13_2	Ia	ReM	M332-G1	Schwarzwälder Predigten (Gr)	1935
13_2	IIIa	ReM	M349-G1	Kölner Urkunden I	2321

36 HiH_HimmelundHoelle.

37 BamGB1_Bamberger_Glaube_und_Beichte.

38 VPfS_Vatikanische_Pferdesegen.

14_1	IIIa	ReM	M350-G1	Köln II	1213
14_1	IIIc	ReM	M352-G1	Mainzer Urkunden I	1432
14_1	IIIc	ReM	M324-G1	Oxfordener Benediktin- erregel	2180
14_1	IIIa	ReM	M340-G1	Johannes Tauler: Predigten (W2)	1881
14_1	Ib	ReM	M345-G1	Augsburger Urkunden II	1184
14_1	Ib	ReM	M401-G1	Baumgarten geistlicher Herzen	2475
14_1	Ia	ReM	M347-G1	Freiburger Urkunden II	1413
14_1	Ic	ReM	M351-G1	Landshuter Urkunden	1247
14_1	Ia	ReM	M322-G1	Nikolaus von Straßburg: Predigten (C)	1795
14_1	Ic	ReM	M323-G1	Oberaltaicher Evangelis- tar	1383
14_1	II	ReM	M406-G1	Christine Ebner: En- gelthaler Schwestern- buch	2419
14_1	II	ReM	M353-G1	Nürnberger Urkunden	1493
14_1	IIId	ReM	M348-G1	Jena-Weidaer Urkunden	1757
14_1	IIId	ReM	M318-G1	Evangelienbuch des Matthias von Beheim	1607

ABBREVIATIONS

CFM-Principle	Coordinate Feature Matching Principle
ENHG	Early New High German
MHG	Middle High German
MSG	Modern Standard German
OHG	Old High German
SGC	Subject Gap Coordination
SLF	Subject Lacking in F-Structure
V1	Verb-First
V2	Verb-Second
Ve	Verb-End
VLater	Verb-Later
WP	Wackernagel Position

REFERENCES

- Axel, Katrin. 2005. Null subjects and verb placement in Old High German. In Stephan Kepser & Marga Reis (eds.), *Linguistic evidence: Empirical, theoretical and computational perspectives*, 27–48. Berlin, New York: De Gruyter Mouton.
- Axel, Katrin. 2007. *Studies on Old High German syntax: Left sentence periphery, verb placement and verb-second*. Amsterdam: John Benjamins.
- Axel-Tober, Katrin. 2018. Origins of verb-second in Old High German. In Agnes Jäger, Gisella Ferraresi & Helmut Weiß (eds.), *Clause structure and word order in the history of German*, 22–47. Oxford: Oxford University Press.
- Axel-Tober, Katrin & Helmut Weiß. 2010. What changed where? A plea for the re-evaluation of dialectal evidence. In Anne Breitbarth, Christopher Lucas, Sheila Watts & David Willis (eds.), *Continuity and change in grammar*, 13–34. Philadelphia, Amsterdam: John Benjamins.
- Axel-Tober, Katrin & Helmut Weiß. 2011. Pro-drop in the history of German: From Old High German to the modern dialects. In Melani Wratil & Peter Gallmann (eds.), *Null pronouns*, 21–52. Berlin: de Gruyter.
- Barbosa, Pilar. 1995. *Null subjects*: MIT Doctoral dissertation. <http://www.ai.mit.edu/projects/dm/theses/barbosa95.pdf>.
- Barbosa, Pilar. 2011. Pro-drop and theories of pro in the minimalist program part 2: Pronoun deletion analyses of null subjects and partial, discourse and semi pro-drop. *Language and Linguistics Compass* 5. 571–587. doi:<https://doi.org/10.1111/j.1749-818X.2011.00292.x>.
- Barnickel, Katja. 2017. *Deriving asymmetric coordination in German: A non-monotonic approach*: Universität Leipzig Doctoral dissertation. <https://docplayer.org/181975131-Deriving-asymmetric-coordination-in-german-a-non-monotonic-approach.html>.
- Bonitz, Petra-Kristin. 2013. *Subjektellipsen in Koordinationsstrukturen. Theoretische Fundierung und empirische Erkenntnisse*: Georg-August-Universität Göttingen Doctoral dissertation. https://ediss.uni-goettingen.de/bitstream/handle/11858/00-1735-0000-0022-5F79-8/dissertation_bonitz_slf-koordination.pdf.
- Bryant, Doreen. 2014. *Koordinationsellipsen im Spracherwerb: Die Verarbeitung potentieller Gapping-Strukturen*. Berlin: de Gruyter.
- Büiring, Daniel & Katharina Hartmann. 1998. Asymmetrische Koordination. *Linguistische Berichte* 204. 441–476.
- Cognola, Federica & Jan Casalicchio. 2018. On the null-subject phenomenon. In Federica Cognola & Jan Casalicchio (eds.), *Null subjects in generative grammar*, 1–28. Oxford: Oxford University Press.
- Cognola, Federica & George Lee Walkden. 2019. Pro-drop in interrogatives

- and declaratives: A parallel study of Old High German and Old Italian. *Linguistik Online* 100(7). 95–140.
- Dammel, Antje. 2015. One plus one make(s) – what? Determinants of verb agreement in German noun phrase coordination: A diachronic approach. In Jürg Fleischer, Elisabeth Rieken & Paul Widmer (eds.), *Agreement from a diachronic perspective*, Berlin, München, Boston: de Gruyter.
- Donhauser, Karin, Jost Gippert & Rosemarie Lühr. 2017. Deutsch Diachron Digital - Referenzkorpus Altdeutsch/ Old German Reference Corpus (Version 1.0). <http://www.deutschdiachrondigital.de/>.
- Eggenberger, Jakob. 1961. *Das Subjektpronomen im Althochdeutschen. Ein syntaktischer Beitrag zur Frühgeschichte des deutschen Schrifttums*. Chur: Sulser.
- Ferraresi, Gisella & Helmut Weiß. 2011. >Al die wîle und ich lebe<. Und nicht nur koordinierend. In Eva Breindl, Gisella Ferraresi & Anna Volodina (eds.), *Satzverknüpfungen. Zur Interaktion von Form, Bedeutung und Diskursfunktion* LA, 79–106. Berlin: de Gruyter.
- Fleischer, Jürg. 2006. Zur Methodologie althochdeutscher Syntaxforschung. *Beiträge zur Geschichte der deutschen Sprache und Literatur* 128(1). 25–69.
- Frascarelli, Mara. 2007. Subjects, topics and the interpretation of referential pro: An interface approach to the linking of (null) pronouns. *Natural Language and Linguistic Theory* 25. 691–734.
- Frascarelli, Mara. 2018. The interpretation of pro in consistent and partial null-subject languages: A comparative interface analysis. In Federica Cognola & Jan Casalicchio (eds.), *Null subjects in generative grammar*, 211–239. Oxford: Oxford University Press.
- Grewendorf, Günther. 1993. German: A grammatical sketch. In Joachim Jacobs, Arnim von Stechow, Wolfgang Sternefeld & Theo Vennemann (eds.), *Syntax: Ein internationales Handbuch zeitgenössischer Forschung*, vol. 2, 1288–1319. Berlin/NewYork: de Gruyter.
- Hartmann, Katharina. 2000. *Right node raising and gapping: Interface conditions on prosodic deletion*. Philadelphia, PA; Amsterdam: Benjamins.
- Hartmann, Katharina. 2015. Coordination. In Tabor Kiss & Alexiadou Artemis (eds.), *Handbücher zur Sprach- und Kommunikationswissenschaft / Handbooks of linguistics and communication science (HSK)* 42/1, vol. 1, 478–514. Berlin [u.a.]: de Gruyter Mouton.
- Haspelmath, Martin. 2004. *Coordinating constructions*. Amsterdam, Philadelphia: John Benjamins.
- Held, Karl. 1903. *Das Verbum ohne pronominales Subjekt in der älteren deutschen Sprache*. Berlin: Mayer & Müller.
- Heycock, Caroline & Anthony Kroch. 1993. Verb movement and the status of subjects: Implications for the theory of licensing. *Groninger Arbeiten zur*

- germanistischen Linguistik* 36. 75–102.
- Holmberg, Anders. 2005. Is there a little pro? Evidence from Finnish. *Linguistic Inquiry* 36. 533–564.
- Höhle, Tilman N. 1983. Subjektlücken in Koordinationen. Ms., Universität Köln. <https://www.ling.uni-potsdam.de/~thiersch/Hoehle83.pdf>.
- Höhle, Tilman N. 1990. Assumptions about asymmetric coordination in German. In Joao Mascaró & Marina Nespó (eds.), *Grammar in progress*, 221–235. Dordrecht: Foris.
- Klein, Thomas, Klaus-Peter Wegera, Stefanie Dipper & Claudia Wich-Reif. 2016. Referenzkorpus Mittelhochdeutsch/ Reference Corpus of Middle High German (1050–1350) (Version 1.0).
- Krause, Thomas & Amir Zeldes. 2016. Annis3: A new architecture for generic corpus query and visualization. *Digital Scholarship in the Humanities* 31(1). 118–139.
- van Oirsouw, Robert R. 1993. Coordination. In Joachim Jacobs, Arnim von Stechow, Wolfgang Sternefeld & Theo Vennemann (eds.), *Syntax: An international handbook of contemporary research* Handbücher zur Sprach- und Kommunikationswissenschaft / Handbooks of Linguistics and Communication Science (HSK), 748–763. Berlin/ New York: de Gruyter.
- Oppermann, Sophia J. t.a. ‘Non-coordinating *und*’ in Middle and Early New High German. *Journal of Historical Linguistics*.
- Reich, Ingo. 2009a. *Asymmetrische Koordination im Deutschen*. Tübingen: Stauffenburg.
- Reich, Ingo. 2009b. Ist asymmetrische Koordination wirklich ein Fall asymmetrischer Koordination? In Veronika Ehrich, Christian Fortmann, Ingo Reich & Marga Reis (eds.), *Koordination und Subordination im Deutschen* Linguistische Berichte, 203–222. Hamburg: Buske.
- Reich, Ingo. 2013. Asymmetrische Koordination. In Jörg Meibauer, Markus Steinbach & Hans Altmann (eds.), *Satztypen des Deutschen*, 356–371. Berlin: de Gruyter.
- Roberts, Ian & Anders Holmberg. 2010. Introduction: Parameters in minimalist theory. In Anders Holmberg, Ian Roberts, Michelle Sheehan & Theresa Biberauer (eds.), *Parametric variation: Null subjects in minimalist theory*, 1–57. Cambridge: Cambridge University Press.
- Ross, John R. 1967. *Constraints on variables in syntax*. Bloomington, Ind.: Indiana Univ. Linguistics Club.
- Schlachter, Eva. 2012. *Syntax und Informationsstruktur im Althochdeutschen: Untersuchungen am Beispiel der Isidor-Gruppe*. Heidelberg: Winter.
- Schröbler, Ingeborg. 1966. Vergleichendes und relatives UND im Mittelhochdeutschen. In *Festschrift für Helmut de Boor zum 75. Geburtstag am 24.*

- März 1966, 136–149. Tübingen: Niemeyer.
- Trutkowski, Ewa. 2016. *Topic drop and null subjects in German*. Berlin: de Gruyter.
- te Velde, John. 1999. Asymmetrische Koordination? Jain! Another look at subject and object gaps in coordinate structures. *Groninger Arbeiten zur Germanistischen Linguistik* 43. 155–172.
- Volodina, Anna. 2011. Null ist nicht gleich Null: Zur diachronen Entwicklung von Nullsubjekten im Deutschen. *Jahrbuch für Germanistische Sprachgeschichte* 2(2011).
- Volodina, Anna & Helmut Weiß. 2016. Diachronic development of null subjects in German. In Sam Featherston & Yannick Versley (eds.), *Quantitative approaches to grammar and grammatical change: Perspectives from Germanic*, 187–205. Berlin: De Gruyter Mouton.
- Weisser, Philipp. 2019. Implicational complement coordination and beyond: Towards a coherent theory of asymmetric coordination in German. *Zeitschrift für Sprachwissenschaft* 38(1). 81–121.
- Weiß, Helmut. 2005. Inflected complementizers in Continental West Germanic Dialects. *Zeitschrift für Dialektologie und Linguistik* 72(2). 148–166.
- Weiß, Helmut. 2015. When the subject follows the object: On a curiosity in the syntax of personal pronouns in some German dialects. *Journal of Comparative Germanic Linguistics* 18. 65–92.
- Weiß, Helmut & Anna Volodina. 2018. Referential null subjects in German: Dialects and diachronic continuity. In Federica Cognola & Jan Casalicchio (eds.), *Null subjects in generative grammar*, 261–284. Oxford: Oxford University Press.
- Wilder, C. 1994. Coordination, ATB and ellipsis. In C. Jan-Wouter Zwart (ed.), *Minimalism and Kayne's asymmetry hypothesis*, Groningen: Rijksuniv., Germanist. Inst.

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