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Q2 Q3 Werner Abraham\* and Maiko Nishiwaki

Q4 Mood alternation in German: Negation as a specific case of epistemic weakening

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Abstract: This paper is mainly about a unique case of syntactic epistemic weakening, i.e. the present subjunctive mood and its negation trigger in surface coordination. In contrast to modern colloquial German, which limits the use of the present subjunctive quite restrictively to root clauses, the older periods of German, Old and Middle High German, showed an extended use of the subjunctive beyond root, i.e. also in dependent structures. However, the semantically interpreted as well as the grammatical subjunctive got entirely lost in Modern colloquial, albeit not quite in Standard written German. The focus of this paper is the discussion of mood in early complex (subordinated or coordinated) negated sentences. Exploiting mainly the MHG text of the Lay of the Nibelungs, we focus on negated matrix structures, in superficially coordinated, but semantically dependent clauses. This suggests that the ne-particle in co-construction with the subjunctive on the predicate was used to code clausal dependence from the previous (negated) clause. In further course, in specific semantic constructions, the original Middle High German interpretability of paratactic negation and the consequent denotation of non-factual situations were lost and gave way to the pure syntactic coding of dependency. The triangle of triggers contributing to the complex phenomenon consists of 1. negation of different sorts and in various syntactic distributions, 2. dependency marking, and 3. indicative–subjunctive marking on the dependent predicate. The attempt is made to draw comparisons to other epistemicity triggers such as syntactic and lexical nonveridicals.

Keywords: complementizer alternation, mood alternation in the diachrony of German, subjunctive, syntactic types of negation as mood triggers, triggers of epistemic weakening, (non-)veridicals as mood triggers

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Subordination can be expressed in a variety of different forms in the languages of the world

Nordström (2010: 91)

# Introduction:Breakingthegroundforthenotion of epistemic weakening

The path of subjunctive coding from independent non-factuality to purely syntactic, non-interpretable subjunctive marking is a multifarious enterprise. Subjunctive forms and functions were much simpler in the early historical periods of German than in Modern Standard German/MStG as there were only two tenses in the subjunctive mood: present and simple past. Accordingly, there were only two functions if we go by what the subjunctive meant in the first place in the early periods of Indo-European: the optative present and past. Both have in common that they are non-factual irrespective of a narrower designation of mood. What we miss in those historical periods is a clear signal of the irrealis function as in MStG.

1. a. Wenn sie doch geküsst würde/worden wäre!

if she only kissed would/been have

‘If only she would be kissed/would have been kissed!’

* 1. Wenn er sie doch küssen würde/geküsst hätte!

if he her only kiss would/kissed had

‘If he only would kiss her/would have kissed her!’

In OHG, where no periphrastic verb forms had emerged yet, druagi in the next example, (2a), could mean the irrealis depending on the larger context: carried, had carried, might have carried’. See (2b) for a volitional present subjunctive in MHG. Consider also the German correspondences giving credit to the perfective prefix, ge- in (2a), and the present subjunctive, wer MStG ‘wehre’ in (2b), by means of periphrases.[[1]](#footnote-1)

Q1

1. a. Ther gotes geist ther imo anawas, ther gihiaz imo thaz, thaz Krist er druagi in henti

(O. I 15, 5–6; adapted from Schönherr 2016; the author’s (3))

the.GEN lord’s spirit, which in him was, announced (to) him thatChrist he carry.PERF. PRET. SUBJ in hand

MStG: Der Gottes Geist, der in ihm war, verhieß ihm, dass er Christus auf dem Arm tragen würde‘

* 1. daz [lant] muoz ich besorgen mit eim (Iwein 2314-15: from Paul et manne der ez wer al. 1969: 457)

(for) that [country] must I care with a man who it save.PRES.SUBJ ‘for that (country) I have to take care of with the help of a man who can/ could save it’

MStG: ‘dafür muss ich Sorge tragen mithilfe eines Mannes, der es beschützen kann- könn te/soll-sollte’

Given such formally limited clues in OHG and MHG (periods which had not yet developed periphrastic tenses and, consequently, its mood derivations), we may just use one label for what is just one single subjunctive function: eventive nonfactuality. Note that the examples in (2a–b) referred to are in fact both dependent clauses.

# Verbal mood in subordinate clauses in the older periods of German

As pointed out in Coniglio (2017) and Petrova (2013), several authors have expressed their views on mood selections in dependent clauses. Schrodt (2004: 184ff.)takesthestancethatmoodselectioninOHGcomplementclausesdependon the truth validity of the embedded proposition and on specific semantic properties of the selecting verb ((negative) implicative, (non)factive, conditional, etc.; see in particular Schrodt 2004: 185) as well as negation and modalization. A similar view is shared by Petrova (2013), who goes beyond Schrodt’s view by following Giannakidou’s (2009) approach based on (non-)veridicality, who, in turn, reaches back to Hooper/Thompson 1973 (see also Meinunger 2004; van Gelderen 2004; and Salvesen and Walkden 2014). More precisely, Petrova (2013) observes that in OHG, the indicative and the subjunctive alternate in contexts which Giannakidou (1998 and later) classifies as ‘veridical’, while this alternation is missing in so-called ‘non-veridical’ contexts where only the subjunctive appears in OHG (but not in modern German). Given this, there is no contrast to van Gelderen’s (2017) observation thatin OE, the subjunctivecan followalltypes of verbs.The point iswhereit alternates with the indicative and where it doesn’t. We list Giannakidou’s (1995:100; 1998: 77–78, 163, Section 3.3 p. 128–140; 2009; 2014) distinctions as selectionally presented in Petrova (2013: 46) under the designators (non)assertive and extend them by illustrations from Giannakidou (2015) with the aim comparing them with predicates from OHG and MHG in due course.

1. Veridical predicates selecting indicative:
	1. assertives (following Giannakidou’s Greek verbs Greek leo-German sagen-English say-French lire, dhiavazo-lesen-read-lire,isxirizomebehaupten-claim-soutenir)
	2. fiction verbs (onirevome-träumen-dream-rever, fandazome-sichˆ vorstellen-imagine-imaginer)
	3. epistemics, non-factives (pistevo-glauben-believe-croire, nomizodenken-think-penser)
	4. epistemics, factives (sich freuen über-be glad, wissen-know-savoir, bedauern-regret)
	5. semifactives (entdecken-discover, erinnern-remember)
2. Non-veridical predicates selecting subjunctive:
	1. volitionals (German wollen-English want-Greek thelo-Italian volere, hoffen-hope, planen-plan-skopevo-sperare)
	2. directives(anordnen-order-dhiatazo-ordinare,raten-advise-simvulevoconsigliare, vorschlagen-suggest-protino-consigliare)
	3. modals (müssen-must-prepi-e necessario/bisogna, dürfen-may-bori-` e` posssibile)
	4. permissives (zugestehen-allow-epitrepo, verbieten-forbid)
	5. negative (vermeiden-avoid-apagorevo-impedire, zurückweisen-refuse)

Veridicality, or assertiveness (in Hooper’s terminology (1975: 95)), is defined as “the speaker or subject of the sentence has an affirmative opinion regarding the truth value of the complement proposition” (Hooper 1975: 95). This bipartition of verbs on semantic grounds is well motivated for English with clear syntactic distinctions at the bottom (cf. Hooper and Thompson 1973; Hooper 1975; and, more recently, van Gelderen 2017: 6 for Old English; Petrova 2013 has taken up the issue with illustrations from OHG).

VanGelderen(2017)showsthat,inOldEnglish,allkindsofmatrixverbscanbe complemented by subjunctives. This gives the mood in the subordinate clause independence to express its own assertion (i.e. be speech act autonomous), as Q5 Julien (2005) and Nordström (2010) have argued for Scandinavian. Petrova (2013), by contrast, relates to occurrence of subjunctive predicates in the complements of OHG to non-veridicals. This difference awaits further discussion.

The veridicals appear to be based on the criterion of direct speaker evaluation, henceReichenbach’ss=e.Bycontrast,thenon-veridicalsarebasedonnon-present speech act evaluability, more precisely s<e (as holds for directives, volitions, and modal projection of eventivity). Notice that the class of veridicals share the notion of epistemicity with other evaluators (mainly the epistemic alternants of the modal verbs), while the non-veridicals reflect the speech act status of propositional references expected or to be expected.

German has, and has had throughout its history, only one complementizer irrespective of (non-) factuality in the complement content. Note, however, that the direct complementizer selection can be reflected in the choice of another Cquality:moodonthecomplementpredicateasillustratedbyOHG(5a) (secondary quote from Coniglio 2017; see also Coniglio et al. 2018). The subjunctive mood in the followingOHGexamplecitedin Petrova (2013) may be easily explained by the presence of the non-veridical predicate gibót. Note the subjunctives on the modal verbs, sollten and würde(n), in the MStG correspondences. One could replace them by true subjunctive forms on the lexical predicates, i.e. führen in (5a) and gefiele-verlöre in (5b), but modern German does not use these forms any longer.

They are felt to be odd.

(5) a. gibót thaz sie fuorin ubar then giozon (Tatian 85, 20f, adapted ordered that they travel.SUBJ across the sea from Petrova Petrova

2013: 45) Latin ‘iussit ire trans fretum’

MStG: ‘ordnete an, dass sie übers Meer fahren sollten’

‘he ordered that they travel across the sea.’

b. jo thahta, iz imo sazi, ob er sia firliazi and thought it him comfort.SUBJ when he her left.SUBJ

(Otfrid 2.7.52, adapted from Schrodt 2004: 199)

MStG: ‘und dachte, dass es ihm zustünde, wenn er sie verließe [weil sie bereits schwanger in die Ehe kam])’

“and thought thatit was appropriate for him to leaveher” (und dachte, dass es ihm zustünde, wenn er sie verließe [weil sie bereits schwanger in die Ehe kam])

Schrodt(2004:199)classifiesOHGthenken‘think,assume’togetherwiththunken ‘deem’ and drahton ‘consider, strive for’ as verbs of expectancy and assumption (cf.

‘non-veridicals, non-assertives’) as expected to govern the subjunctive.

Giving credit to the possibility of bridge constructions (without subordinators) as in (5b) thahta, iz imo sazi, complementation in OHG projects as in (5c).

We shall come back to this first structural claim when discussing modern Cimbrian in Section 4.4.

Notice, though, that when discussing relative subordination, the criterion of veridicalityinthematrixclauseplayingthedeterminingroleforfactualvs.non-factual reference in the complement clause has to be reconsidered when it comes to relative clauses (cf. Coniglio 2017). In Schrodt’s (2004) grammar of OHG, relative clause formation is discussed in quite some detail, but there is no mention of systematic mood alternations before the background of whether the referent of the clause is deemed to existinrealityornot.Coniglio(2017)takesthisuppointingoutthatinOldHighGerman (OHG),alternationsbetweentheindicativeandthesubjunctivemoodarequitefrequent in relative clauses. See the subjunctives in (6a,b) (gleaned from Schrodt 2004: 180).

(6) a. […]sprahdruhtinziimosinazwort,thazerfuoriheimort (Otfrid 3.2.21) spoke lord to him his word, that he travel.PRET.SUBJ home

‘[…] spoke the lord words to the extent that he wanted to go home.’

 b. […] tiu unnuzza zala, daz mennisko mennisko si, uuiz uuiz si

(Notker Piper 553.8)

the useless report that man man be.PRES.SUBJ, wise wise be.PRES.SUBJ ‘[…] the superfluous statement that a man should be a man, wise should be wise.’

In (6a, b), these are complement clauses subcategorized by nominal categories (sinaz wort ‘his word’ and zala ‘story’, resp.; the first one expresses embedded request, the second one ‘ordinary’ indirect speech). The subjunctive in both cases relate to the desiderative meaning expressed in the complement clauses: volitional ‘that he wanted to return go home’ and desiderative ‘was meant to/should be’ or evidential ‘was said to be’. Needless to say, since veridicality applicable only to propositions cannot be a property of a nominal referent, there is reason for sidestepping the notion of propositional veridicality and, following Coniglio (2017), replace it by the notion of specificity. Notice that, in mereological terms, clausal veridicality/de re and nominal specificity must be on a par in terms of non-divisibility and non-additivity, i.e., under the strongest generalization of non-homogeneity.

Another aspect, however, is crucial. Given the default epistemic evidence of mood non-factuality in independent structures, MStG has the option to code epistemic weakening in terms of modal verbs. See the following two equally reportive illustrations in (7a, b): ‘A. is said to stand in front of the gates of Rome.’

 (7) a. Alarich stehe vor den Toren Roms

 A. stand.SUBJ in front of the gates of Rom

1. Alarich soll vor den Toren Roms stehen

 A. shall.Evid in front of the gates of Rome stand

1. Hans sucht eine Frau mit blauen Augen/die blaue Augen hat/\*habe

Hans is looking for a woman with blue eyes/who has blue eyes

1. Hans sucht eine Frau mit blauen Augen/ die blaue Augen hat/haben soll(te)/\*habe

Hans is looking for a woman with blue eyes/who should/must have blue eyes

Given that (7a) and (7b) exclude desiderate interpretations (like for food recipes, consider German Man nehme 10g Hefe “Take 10 g baking powder”), they are synonymous in that the speakers do not assume warranty for the factuality of the proposition. The subjunctive in (7a) refers to indirect speech (not directly warranted by the speaker), and the evidential modal soll in (7b) refers to thirds’ warranty for p. Thespeakerofboth(7a,b)takesnotruthresponsibilityforthepropositionalcontent for more than someone else’s responsibility. AsGiannakidou(2013: 34) aptly puts it, By contrast, the the relative clause in (7c, d) is disambiguated by what comes in the indicative (de re reading as in (7c)) as opposed to the MV-format in German, and the subjunctive in Italian in (10b), with the de dicto reading.

“[…] the function of the subjunctive in the relative clause is to bring in the speaker’s subject ivepointofview,in particular,heruncertainty about theexistenceofa valuefor theNP.I will call this epistemic weakening of the subjunctive.”

And,inaquitesimilarvein,Marques(2010:153)pointsoutforcomplementclauses in Portuguese:

“Thus,the selectionofindicativeorsubjunctiveforcomplementclausesin Portugueseseems to follow from two factors: nonveridicality and epistemic modality. The indicative is selected for veridical contexts, or if the attitude towards the complement proposition is of epistemic nature.Thesubjunctiveisselectedotherwise.Itdoesnotseemtobeassociatedwithaspecific kind of modality.” (secondary quote from Giannakidou 2015: 9)

Given that for all epistemic-evidential alternants of verbal modality it holds that there are no non-finite representatives (i.e., no infinitives and participles of epistemic verbs; cf. Nishiwaki 2017), we may extend this restriction to the subjunctive as opposed to the indicative. As a consequence, there is a distinct merge status between indicative and subjunctive mood. As the subjunctive occurs only finitely, it merges directly in T (or I), whereas the indicative has unlimited lexical quality including non-finites, which points at merging in VP. Finite indicatives Q6 head-move to T (or I) in due course via probe and agree.

The function of the subjunctive is different cross-linguistically depending on whether it occurs in root or dependent sentences and whether it echoes the type of matrix clause in the sense of (non-)veridicality as (3)–(4). In Old English, it seems that the complement is autonomous with respect to the choice of root mood (Visser 1966: 825). The same has been argued for Scandinavian (Julien 2005). Languages also diverge as to how the subjunctive is interpreted. According to Farkas (1992: 70), in Romanian (8a, b) the indicative “reports an assertion”, whereas the subjunctive “reports a directive”.

1. a. Ion a spus ca Maria a plecat

 Ion has said that Maria has.IND left

`Ion said that Maria left’.

* 1. Ion a spus ca Maria sa plece imediat

 Ion has said That Maria be.SUBJ leave immediately

`Ion said that Maria should leave immediately’ (gleaned from Farkas 1992: 70).

As for the role of the veridical/non-veridical distinction in explaining the selection of indicative vs. subjunctive in OHG subordinate clauses, reference is made also to Coniglio et al. (2018).

1. a. Alarich stehe/stünde vor den Toren Roms

 A. stand.SUBJPRES/PRET in front of the gates of Rom

* 1. Alarich soll vor den Toren Roms stehen
		1. shall.Evid in front of the gates of Rome stand
	2. Alarich sollte vor den Toren Roms stehen

… fate future: e<◊r<s

* + 1. was expected.Evid in front of the gates of Rome stand
	1. Hans sucht eine Frau mit blauen Augen/die blaue Augen hat/\*habe

Hans is looking for a woman with blue eyes/that blue eyes has/have

* 1. Hans sucht eine Frau mit blauen Augen/die blaue Augen hat/haben soll(te)/\*habe…OV

Hans is looking for a woman with blue eyes/that blue eyes has/have should/have

* 1. Hans sucht eine Frau mit blauen Augen/die hat/\*habe/soll(te) blaue Augen haben …VO

Hansislookingforawomanwithblueeyes/thathas/haveshould/have blue eyes

1. a. Gianni cerca una donnache ha gli occhi blu. de re

(specific referent: the woman Gianni looks for a woman that has.IND the eyes blue with blue eyes is known to exist)

 b. Gianni cerca una donna che abbia gli occhi blu. de dicto

(unspecific referent: the G.looksforawomanthathas.SUBJtheeyesbluewomanwithblueeyesis

‘Gianni is looking for a woman that has blue eyes.’ Gianni’s dream girl)

(Catasso and Hinterhölzl 2016: 109)

(9a) presupposes a performative predicate licensing its proposition. Without such a propositional licenser, the present subjunctive in (9a) reads as a desiderative, i.e. “Alarich be standing in front of the gates of Rome.” Two conclusions are remarkable. For one, the licensing proposition must be veridical. Non-veridicals act as delicensers. See (11a).

(11) a. \*Er sei der Ansicht, Alarich stehe/stünde vor den Toren Roms. he be.EPIST of the assumption A. stand.EPIST in front of the gates of Rome.

As speaker and viewer collapse in (9a), the source is the same as that of neutralized (9b) and (11b), i.e. some third party. Evidential soll in (9b)/(11b) is not primed for an MV-paradigmatic alternant, i.e. for (Alarich) kann/mag/will/muss (vor den Toren Roms stehen) “(Alarich) can/ may/will/must (stand in front of the gates of Rome)”.

 (11) b. Alarich soll vor den Toren Roms stehen

 A. shall.Epist in front of the gates of Rome stand

“A. is said to stand in front of the gates of Rome.”

# Relative clauses and mood alternation

Inthissection,thelinkbetweentheroleofmoodanddere/de dicto-interpretation of Italian relative clauses. which is very similar to Giannakidou’s explanation on the use of na next to pu in Greek relative clauses, and the different types of complementizers in Cimbro are presented and analyzed more explicitly. Epistemic weakening in OHG and the explanative background of it was illustrated in (6)–(7). In what follows we merely point out that the mood systematics claimed for OHG carries over to Romance continuing with Cimbrian, a German island language in Northern Italy. We quote Cimbrian because this Germanic enclave language has preserved its original grammar of Old Bavarian (16th–17th centuries).

## Romance languages

It is important to see that there are crucial differences between clausal and attributive complements. While (3)–(4) pertain to mood alternations in complement clauses, non-complement embeddings such as attributive relative clauses determine the choice of mood not in dependence of the matrix predicate, attributive complements such as relative clauses do in terms of the (non-)specificity of the referent in the relative clause (cf. Coniglio 2017, his example (15)).

1. Gianni vuole che una persona che ha/ abbia il libro lo chiami.

Gianni wants that a person that has.IND/ has.SUBJ the book him calls.SUBJ

‘Gianni wants that a person that has the book calls him.’

Mood alternations in Romance can be explained also in terms of the de re (verifiable existence) / de dicto (assumed, unverified existence) interpretation. See Catasso and Hinterhölzl (2016) for Italian.

1. a. Gianni cerca una donna che ha gli occhi blu. de re

(specific referent: the woman with blue eyes is known to exist)

Gianni looks for a woman that has.IND the eyes blue

* 1. Gianni cerca una donna che abbia gli occhi blu. de dicto

(unspecific referent: the woman with blue eyes is Gianni’s dream girl)

G. looks for a woman that has.SUBJ the eyes blue ‘Gianni is looking for a woman that has blue eyes.’

(illustrations from Catasso/Hinterhölzl 2016, 109)

InStandardItalian,theuseofthesubjunctiveisobligatoryintheunspecificcaseas illustrated in (13b). As Catasso and Hinterhölzl (2016: 109) and Coniglio (2017, the author’s (16a)) point out for Italian, this rule is loosened in that generally the subjunctive is replaced by the indicative, at least in colloquial Italian. Note that, in modern German, the non-specific reading would allow for the subjunctive (11b), although this is a stylistic exception.[[2]](#footnote-2)

1. a. Hans sucht eine/jene Frau, die blaue Augen de re (specific referent: the hat/\*hätte.

John looks for a woman that eyes blue woman is known to exists) has.IND / had.SUBJ

* 1. Hans sucht eine (solche) Frau, die blaue dedicto(unspecificreferent:

###  Augen hat/hätte. the

John looks for a woman that eyes blue woman is John’s dream girl) has.IND / had.SUBJ

VO in the relative clause only finds a de re-reading.

(15) Hans sucht eine Frau, die hat/\*habe/\*soll(te) blaue Augen …VO/de re haben

Hans is looking for a woman that has/\*have/\*should have blue eyes

## Relative wh in Germanic Cimbrian

While so far cases of epistemic weakening were clearly identified by illocutive autonomy carrying over to mood alternation on the complement predicate, the hybrid system of relative clauses restricts alternations to the choice of complementizers: the autochthonous Upper German bo ‘wo’ and the allochthonous ke (calqued (borrowed) from Italian que) (adapted from Bidese 2017, the author’s (1) and (6)). For more details see Bidese et al. (2012) (structure marks added here).

 (16) a. Dar libar, [FINP bo=da [FIN‘=V2 redet vo Lusern,] iz vil interessånt´

 das Buch wo=da spricht von L. ist sehr interessant

 ‘The book where=he speaks of Lusern, is very interesting.´ ’

b. Dar Mario, [FORCEP ke [FINP z’ [FIN‘=V3 iz a guatz mentsch,] khint pitt üs der Mario KE es ist ein guter Mensch kommt mit uns the Mario ke is a decent human being comes with us

‘Mario, who (by the way) is a good human being, will come with us.’

(16a) illustrates the restrictive (the “lower”) type, while (16b) stands for the nonrestrictive, appositive (the “higher”) alternation. We will take this up in the following section, which is devoted to complementizer choice. The crucial question will be whether the criterion of epistemicity in terms of propositional (non) veridicality and, as we shall see, the criterion of (non)specificity for attributive modifiers of nominals can be brought under one common denominator. Only the lower type (Standard German) implies the asymmetrical root–non-root order as in (16a), while the higher type (Cimbiran) does not (Grewendorf 2015: 667) as in (16b).

As will be seen in Section 4, both Modern Greek and Slavic (Russian and Polish) use subordinators as factuality alternatives thus reflecting in word categorial terms the lexical distinction illustrated in (3) vs. (4). Given that, due to accompanyingspeechactqualities,the(epistemicallyweakened)subjunctivemay be taken to merge in FORCE (and not in FIN like the epistemically stronger indicative), we will assume that epistemic strength will also separate factual subordinators from non-factual subordinators in Greek and Slavic.

# Mood alternation by force of types of subordinators

This section presents cross-linguistic data on complementizer doubling and complementizer split, i.e. there is different lexical types of complementizers, depending on the semantic and illocutionary properties of the selecting governing category,which arelocated indifferent positionsin the leftperiphery of the clause. As Grewendorf (2013) and others have shown, our issue and evidence relate to which OHG/MHG thaz/daz is seen as two homonymous complementizers located both high and low in historical German, and that each of these complementizers governs the choice of the verbal mood. This leads to conclusive statements on how the cross-linguistic parallels count for understanding the MHG situation. In addition, we refer to literature on complementizer doubling and complementizer split, both in Italian and in Germanic contact varieties in Italy (Grewendorf 2013: 659–567), where che ‘that’ is situated higher (leading to a ‘V3-language’), while az ‘that’ is located deeper (of the ‘lower V2-language type’). Our expectation is that this plays a role in explaining the inconsistencies in the last part of Section 4.

Meinunger (2017) has drawn attention to the phenomenon that in Slavic languages desiderative verbs require a specific complementizer. This C-element as a complex formative consisting of the regular complementizer element čto ‘that’ and a particle that is found in the formation of irrealis or subjunctive mood by yields čtoby, which must co-occur with past morphology on the verb. Meinunger concluded that the presence of this specific epistemicity-weakening complementizer is related to the use of subjunctive mood under desiderative predicates in Greek and Romance. For example, the complementizer that the verb for hope (= nadevatsya) selects for is not the one that all the other verbs of wanting and demanding subcategorize for (i.e. čtoby in Russian), but it is the neutral C-element čto, the complementizer which isfound also underdumat’‘think’, znat’‘know’and skazat’ ‘say’.

## Slavic: Russian

See the following illustrations.

 (17) a. Ya nadeyus’ čto on spit/spal.

 I hope indicative-C° he sleeps/slept

 b. \*Ya nadeyus’ čtoby on spit/spal.

 I hope subjunctive-C° he sleeps/slept

 Both intended: ‘I hope that he’s sleeping/he slept.’ (slightly adapted

from Meinunger

2017: 19–20)

Meinunger 2017: 19–20) draws a direct link between the subordinators čto≠ čtoby and the mood functions indicative-C°≠ subjunctive-C°. Recall that hope is not a desiderative, but that it classifies as a performative along with say and know.

ThemorphemebyinRussian(andPolish)isthegeneralmarkerfortheoptative and non-factual functions. It is a particle with affix status attached both pre- and post-nuclear. In Russian orthography, it is separated from the conjugated verb, while in Polish enclitically it is one word, whereas proclitically it is separate. There are very specific additional orthographical standards once by and the finite form of the verb are linked or when by occurs as an enclitic of the subjunction. All along in both languages, the temporal form of the verb is independent of the respective temporal interpretation as it is always past tense. Tense, thus, is disambiguated independently of other time referents. See the following illustrations, (14)–(16).

### Russian

 (18) a. Ya by k tebe segodnya/zavtra/vchera prishyol.

 I BY to you Today tomorrow yesterday come-1SG.PRET.M.PERF

‘I would (have) come to you today/tomorrow/yesterday.’

 b. Petya poyechal by v Moskvu, jesli by u nego bylo vremja.

 Peter go-3SG.PRET.M.PERF BY to Moscow if BY with him was time

‘Peter would to Moscow go/would have gone to Moscow if he had (had) the time.’

### Polish

1. c. Ya bym dzisiay /yutro/ wczoray do ciebie przyszedł.

 I BY-1.SG today tomorrow yesterday to you come-SG.PRET.M.PERF

‘I would come to you today/tomorrow/would have come yesterday.’

As in the previous Polish illustration, the personal ending is sometimes not appended to the verb, but to the grammatical morpheme BY.

1. Piotrek poyechałby do Moskwy, gdyby miał czas.

Peter 3.SG.PRET.M.PERF+BY to Moscow if-BY had time ‘Peter would go/would have gone to Moscow if he had/had had the time.’

Note that historically, the grammatical morpheme BY(-) is derived from the verb BYT’‘tobe’bygrammaticalizationandformalreduction.BothinthePolishandthe Russian pattern, a non-factual mood of the verbum substantivum TO BE is hidden. In the corresponding English and German conditional versions, the irrealis subjunctive (cf. would/würde) encodes what in the indicative Polish and Russian logical (non-complemental) subordinates is activated by the subjunctions, gdyby and jesli by, both conditional ‘if’.

Does čtoby, in contrast to čto, provide an expression of non-factuality? In an interpretive way, it does. Note that the subjunction čto C-embeds a complement (either object or subject clause), while čtoby C-embeds desiderative purpose clauses indicating a totally different speech act type. Both sentences use the verbal mood of factuality (indicative mood): See (17)-(22):

### Russian vs. Slovak

 (21) Ya znayu, čto Petya uyechal.

 I know that Peter left-3.SG.PRET.M.PERF

‘I know that Peter has left.’

### Slovak

(22) Ya viem že Peter odišiel. I know that Peter left

### Russian

1. čto Petya uyechal, davno ne sekret. that Peter left-3.SG.PRET.M.PERF for quite some time not secret

‘That Peter has left has not been a secret for quite some time.” Slovak

1. (To) že Peter odišiel nebolo tajomstvom už neyaký čas.

 (that/it) that Peter left not=was surprise for some time

### Russian

 (25) Petya uyechal, čto nas udivlyayet.

 Peter left-3SG.PRET.M.PERF which us surprises

‘Peter has left, which surprises us.’

### Slovak

(26) Peter odišiel, čo nás prekvapilo Peter left what us surprised

By the same token, simple Russian čto C-complementizes the performative verbs dumat’ ‘think’, skazat’ ‘say’, and znat’ ‘know’ (cf. Meinunger 2017), likewise for Slovak myslieť, povedať, vedieť.

as opposed to desiderative subordinates:

### Russian

(27) Petya uyechal v Moskvu, čtoby yego ne nashla policiya Peter left-M.PERF to Moscow in order that him not found police.

‘Peter went to Moscow with the purpose to not be found by the police.’

### Slovak

1. Peter odišiel do Moskvy (za účelom) aby ho nenašla políciya.

‘Peter went to Moscow (to the end) that him not=found police.’ Russian

1. Ya yedu v Moskvu, čtoby zabyt’ Peterburg.

I go to Moscow in order forget-INFINITIVE Petersburg ‘I go to Moscow in order to forget Petersburg.’

|  |  |  |  |
| --- | --- | --- | --- |
| Slovak |  |  |  |
| (30) a. | Ya idem do Moskvy | s ciel’om | zabudnúť na Petrohrad. |
|  | I go to Moscow | with end | forget about Petersburg |
| b. | Ya idem do Moskvy | aby vom | zabudol na Petrohrad. |
|  | I go to Moscow | for to | forget about Petersburg |

#### Old Church Slavonic

Vaillant (1948: §258) reports that Old Church Slavonic distinguished complementizersonthecriteriaofassertiveness(declarative)reflectedbyuakoasopposed to volition represented by da.

## Modern Greek

As for Slavic, it has been shown that Greek employs the special indicative complementizers oti and pu dependent from veridical predicates (Giannakidou 1989, 2009,2013,2015).Thedistributionisbetweenthecomplementizersnaandoti,both ‘that’ (see Giannakidou 2015: the author’s (2)–(4); see also Giannakidou 1998: 167). The na clause contains the so-called verbal dependent form ‘perfective non-past’/ PRF-NONPST.

|  |  |  |
| --- | --- | --- |
| (31) | Thelo na | kerdisi o Janis. |
|  | want.1sg SBJV win-PRF-NONPST-3SG ‘I want John to win.’ | the John |
| (32) | O Pavlos kseri oti efije | i Roxani. |
|  | the Paul knows-3SG that-IND‘Paul knows that Roxanne left.’ |  left-3SG the Roxani |
| (33) | Efije/ Fevgi/ | \*fiji i Ariadne. |
|  | left.3SG/ leave-IPFV-NONPST-3SG/‘Ariadne left.’‘Ariadne is leaving.’ | PRF-PST-3SG the Ariadne |

The complement sentence in (27) is in the subjunctive mood. The verbal form used is glossed as ‘perfective non-past’. It is a form that cannot occur without na as shown in (29). The form designates future orientation.

Ledgeway (1998, 2005) reports similar phenomena to hold in Southern Italian dialects (Salentino in Apulia and in southern Calabria), which were strongly influenced by Greek: ca + indicative vs. cu + subjunctive.

## Propositional alternations in Cimbrian

Cimbrian is a Germanic language spoken by several communities in Northern Italy going back to Old Bavarian (settling periods in the various places 16th to 17th century). It is well-known (Padovan 2011) that Cimbrian loaned the complement subjunctionke‘that’fromtheadministrativerooflanguageItalianyieldingabifold system of assertive complement sentences of the following distribution (Bidese 2017):

1. predicates taking the complementizer az + subjunctive without any exception (az derived from OHG thaz, MStG dass): non-factive (volitional) verbs such as bölln ‘German wollen-English will’ and non-assertive (affective) verbs as speràrn/hoffn‘hoffen-hope’and,inaddition,negative-polarexpressionssuch

as nicht verstehen dass-not understand that / nicht glauben dass-not believe that as well as predicatively used adjectives introducing a complement clause (es ist schön-it is nice that/wichtig dass-important that).

1. predicates selecting ke + indicative (calqued from Italian que): assertive verbs such as khön (deriving from OHG quedan) ‘sagen-say’ and bizzan ‘wissenknow’ (scil. whit(ness)), verba sentiendilike seng‘sehen-see’, weak-assertives like pensàrn ‘meinen-think’ (scil. Italian pensare).

We cite just one attesting pair (from Bidese 2017, the author’s (17)–(18)).

(34) I speràr azz=ar net` gea ka Roma mòrng

 Ich hoffe C=er.clit nicht gehe.SUBJ nach (gegen) Rom morgen

|  |  |  |
| --- | --- | --- |
|  | I hope that=he not go.SUBJ | to Rome tomorrow |
| (35) | I boaz Ke dar geat | net` ka Roma mòrng |
|  | Ich weiß, C er geht.IND | nicht nach Rom morgen |
|  | I know that he goes.IND | not to Rome tomorrow |

Neither the subjunctive in the complement nor the indicative are semantically interpreted. In other words, the matrix predicate determines the choice of both complementizer and mood in the complement. Bidese (2017: 17) concludes:

1. ke + SUBJ was produced by a speaker during an interview with translation tasks. The grammaticality judgment was confirmed in later interviews without a translation task,
2. keoccurswiththesamespeakeralsoinothercontexts,wherenon-assertivity is available, for example, in the context of negation on the matrix verb. Like inthe previouscase,the Italiansetofinputcontainsthe sequenceche+Subj.

See (32a,b) (Bidese’s 2017: ex. (28)).

(36) a. ’Z iz net khött` ke dar Gianni khemm pit üs ke +SUBJ

es ist nicht gesagt dass Gianni komme.SUBJ.mit uns it is not said that John come SUBJ. with us

Input sentence for the translation to Cimbrian:

b. Non e detto` che Gianni venga con noi” che + SUBJ it is not said that John come SUBJ. with us

The contexts in which the subjunctive appears in the dependent clause, are very similar to those in Italian. Undoubtedly also, it is the veridicality condition that leads to the effects observed in Cimbrian.

The comparison between Italian and Cimbrian is quite relevant. It seems quite plausible to assume that Cimbrian has retained its old, original status it inherited from OHG and MHG. Although the contexts with Italian are very similar, it is obvious that Cimbrian retains the subjunctive in connection with the complementizer az ‘that’. In contrast, the calque from Italian, ke’, covers both contexts in Italian and is used primarily with the indicative. Hence, despite occasional similar contexts, ke has not penetrated into non-veridical contexts (scil. (4)), even though the roof language Italian would have offered this possibility. Italian-borrowed ke stayed in veridical contexts. This shows once again (i.e. in line with Bidese 2008; Padovan 2011; Abraham 2012; Cognola 2012; among others) that Cimbrian has pursued its own diachronic path, i.e. does not simply calque its dominant linguistic environment, Italian. See (33) (adapted from Bidese 2017: ex. (27)) and compare with OHG (5c) copied here as (33d).



In sum, one may say in the spirit of Bidese (2017) that the Cimbrian system of assertive complementizer and mood selection exhibits a dichotomy which is clearly different from Italian. Despite the fact that ke was calqued from Italian, Cimbrian ke is not comparable to the position of che in Italian. In addition, as Bidese has pointed out in detail, other fundamental distributional changes are not available to a takeover of the Italian che-structure. The Cimbrian complement structure az+Subjunctive has retained its original OHG structural status. This diachronically inert status is in line with that of restrictive relative clauses, as will be shown presently in Section 4.4.[[3]](#footnote-3)

## Attributive alternations in Cimbrian

This takes up our introductory words to Section 4.3. In contrast to Italian and the older stages of German, OHG and MHG, where mood can alternate in the dependent relative clause (Coniglio 2017), Old-Bavarian-derived Cimbrian exhibits a choice between two relative pronominals: bo and ke, both for ‘which, who’ and their case modifications. Since Coniglio (2017) has found out that both OHG and MHG, the predecessors of MStG and its dialects, provide mood alternations dependent on the feature of (non)specificity of the relative referent, relativization in any other language such as Cimbrian will have to face the following pertinent question: Is the interpretation of the formal distribution, mood in the nominal specific between propositional veridicality and complement or complementizer alternation, or both, based on veridicality or on specificity? And if so, what is the commonality between propositional veridicality and mood, on the one hand, and nominal specificity, on the other. Is there such a common ground across two different syntactic categories in the first place? Clearly, a lot depends on such a common ground in the interest of any abstract solution.

As mentioned already, Cimbrian exhibits a restrictive relative pronoun, the German autochthonous bo, and the non-restrictive, appositive calque from Italian, ke. Non-restrictive relativity adds an extra set of properties to those of its head, while restrictive relativity designates a subset to the properties of the head. Examples (38a,b) are due to Bidese (2017: 6).

 (38) a. ‘Z baibe, bo=bar håm gegrüazt, iz di muatar von Mario

die Frau wo=wir.clit haben gegrüßt ist die Mutter vom M. the woman where=we have greeted is the mother of M.

‘The woman we said hello to is Mario’s mother.’

b. Dar Mario, ke dar vorsitzar hatt=\*(en) gett vil g` elt, khint pitt üs` der Mario, C der Vorsitzende hat(=ihm) gegeben viel Geld, kommt mit uns the Mario whom the chairman has(=him) given much money comes with us

‘Mario who had been given much money will come with us.’

Asimilardichotomy ofcomplementizers hasbeenreported forpresent daydialects of German (Fleischer 2005: especially 181–182; see also Georgi and Salzmann 2014: esp. 352–353). Notice that Cimbrian bo can be inflected by virtue of the resumptive clitic pronominal as bo=bar ‘where-we’ in (34a). In contrast, ke is inflexible, a fact which restricts the usability when it comes to oblique cases.

## Wrap-up

We argued above that given that, due to accompanying speech act qualities, the (epistemically weakened) subjunctive may be taken to merge in FORCE (and not in FIN like the epistemically stronger indicative), we will assume that epistemic strength will also separate factual subordinators from non-factual subordinators in Greek and Slavic. Hence, Russian čtoby and Greek na are projected higher, i.e. in FORCEo,whilečtoandotiresideinFIN(orT).RecallthatRomanian(8)showedthat finite predicate in the complement and the lexical variant of the complementizer, a ‘has.IND’ (auxiliary in the periphrastic predicate) and sa ‘that.SUBJ’ (complementizer before the syntactic finite predicate) obtain the same position in the clause.

Returning to German and its older stages, we may conclude that there never was any complementizer split – except for Cimbrian. The same is claimed for Old English/OE that lacks a split subordinate CP (van Gelderen 2004: 51; 65). Neither OHG nor MHG or OE were exposed to an influence of foreign languages as was the case for Old Bavarian-Cimbrian with Italian.

# Negation and mood in dependent sentences

## Non-factuality in dependents typologically

As it is the common conclusion of the historical grammars (Behaghel 1918, 1924; Jäger 2008, 2013; Paul 1969, 2007; Penzl 1984; Schrodt 1983, 2004: 136; 181–182; Witzenhausen 2016, 2019, 2020; among others), that negation is among the selectors of nonfactuality, we expect that specific types of negation surface either as subordinators or as triggers of the subjunctive. See especially Giannakidou’s (1998: 177, Section 4 ‘Manifestations of negative concord’). The present section follows Nishiwaki (2017) in focusing on the specific syntax and semantic scope of that type of negation, which surfaces either as a subordinator (and what its word order consequences – root order or embedded order). The predicative subjunctive gives expression to uncertainty on thespeaker’s(orsubject’s)sideastothepropositionalcontent.Furthermore,itisasked what the conditions are under which negation surfaces as predicative subjunctive.

From a typological view, this link with negation is confirmed by Spanish (39a).

Compare with OHG (39b).

 (39) a No creo [ que Pedro haya traido nada]

not I think [ that Pedro has.PRES.SUBJ brought nothing] ‘I don’t think that Peter has brought (from Uribe-Etxebarria 1996:

 anything.’ 309)

b. ni ist eo so listic man [der dar iouuiht [,,,] [niz al foran demo dar arliugan megi, not is ever so man who there something that not before the there belie can.PRES.SUBJ

 khuninge kichundit uuerde]] (Muspilli 95; adapted from

Schrodt 2004: 182)

king announced would.PRES.SUBJ

‘There is no human who could keep a secret before the king such that it could not become public to the king.’

Following Uribe-Etxebarria (1996: 312), the subjunctive form haya and the negation pronoun nada in the subordinated sentence in (39a) are triggered by the negation of thematrixsentence.IntheOHGillustration(39b),likewise,thesubjunctiveistriggered in the OHG illustration by negation in the matrix clause followed by indefinite pronounsinthecomplementsentence.Thisimpliesthatthesententialnegationismarked invariousdifferentwaysinthedependentclause.Whereandwherebythescopeofthe negation is marked differs in the individual languages (see Nordström 2010).

Another case to be investigated for similarity with older German is modern French. See (40)–(41) for what has been called paratactic negation/PN. According to van der Wouden (1997: 196, 204), the PN may be active beyond the matrix clause in the sense that the redundant negative expression in the subordinate clause is triggered by an operator in the matrix clause: some verb (or another category) expressinganimplicitnegativemeaning.Giventhisassumption,thePNinGerman could be triggered by the implicitly negating predicates.

However, there is the alternative explanation that the PN as a subordinator is triggeredby the negation capturing the overall sentence structure rather than by the negative implicative verbs in the matrix clause. This stance is supported by the followingFrenchexamples(gleanedfromvander Wouden 1997: 196,198,203–204).

1. a. Je crains quʼil ne vienne.

 I fear that=he not come.SUBJ

‘I am afraid that he might come.’

* 1. Je ne crains pas quʼil (\*ne) fasse cette faute.
		1. not fear NEG that=he not make.SUBJ this mistake

‘I am not afraid that he might make this mistake.’[[4]](#footnote-4)

1. a. Je doute fort que cela soit.

 I doubt very much that this be.SUBJ

‘I doubt that this is so.’

* 1. Je ne doute point que la vraie la source du repos. devotion (ne) soit
		1. not doubt NEG that the true belief not be.SUBJ the source of quiescence

‘I do not doubt at all that the real belief is the source of quiescence.’

The verb craindre ‘fear’ in (40a) triggers the PN in its dependent clause (van der Wouden 1997: 196). The words that may license the PN lose this effect under negation (van der Wouden 1997: 203) rendering the selection of the negations in the dependent clause ungrammatical as in in (40b). However, there are also verbs that have the reverse effect. Verbs like douter ‘doubt’ unable to trigger PN in their dependent clause may retain this property under negation (van der Wouden 1997:

203) as shown in (41a) vs. (41b).

## Exceptive negation and the subjunctive mood as epistemic weakeners in the older stages of German

Section 5.1 prepared the ground for a more detailed discussion of negation typing in MHG. Recall that we are interested in negation for the purpose of finding out what lies at the bottom of epistemic weakening. In other words, it will be crucial that we keep turning back to our questions regarding what we called the architecture of epistemic weakening by force of different grammatical categories. In this section, we conclude that the single preverbal particle ne/en in MHG became a marker of negation which is located syntactically higher, i.e. above the clause boundary, than the clause in which ne/en appears. This analysis is based on a corpus study investigating MHG exceptive clauses (English unless-clauses). Following Witzenhausen’s (2005) discussion on Middle Low German, it is evidenced both on semantic and syntactic grounds, that exceptive negative clauses with the subjunctive in the predicate can be explained as being complements of an operator that subtracts the proposition in the exceptive clause from the modal domain of a universal quantifier.

### The expressions of sentential negation in MHG

Negation by the preverbal particle (OHG: ni, MHG: ne) is the regular expression means to mark negation in the oldest periods of German. However, early enough there are elements occurring independent of the predicative verb either in its place orinadditiontoit,thus,inaway,doublingup(Behaghel1918:229):Theadditional verb-independent negation elements originally served to reinforce negation and came later to be used as independent negation elements. Going by their source lexemes, they can be classified typologically in three types, all of which are found in OHG and MHG (Jäger 2013: 156–157).

The first type refers to negative indefinites. The match in OHG is the complex niwiht ‘not-something’ or niowiht ‘not-anything’. The first component ni acts mainly as pronouns in subject or object function, i.e. meaning modern German nichts ‘nothing’, not, however, simply nicht ‘not’ (Donhauser 1996: 204): In the later OHG, niwiht/niowiht is used also generally as negation adverbial (Jäger 2013: 156):InMHG,nihtgoingbacktoniwiht/niowiht,isfullygrammaticalizedasthenew negationadverbialalthough usedalsointheoldsenseasnegativeindefinite(Jäger 2013: 161).

The second type refers to non-negative indefinites (Jäger 2013:161), which originally served to reinforce negation and, in the further course, was used to denote direct negation. An example is OHG wiht ‘something’ and its follower-up MHG iht (Jäger 2013: 157, 164): In the dependent clause, iht was used to mean also negation without reinforcement by another negation lexeme in both the independent and the dependent clause (Paul 2007: § S 129):

The third type of negation, the so-called minimizer, is cited in both OHG and MHG. Minimizers are nominal expressions reinforcing something minimal as is illustratedby OHGdrof(derivingfromTropfen ‘drop’):In MHG,thereareminimizer variants such as ein bast ‘bast’, ein blat ‘a leaf ‘, eine bone ‘a bean’ etc. Minimizers may stand for usual negation particles, but are always ‘a stylistic […] occurrence’ (Paul 2007: § S 143).

The most striking difference of the older periods of German to modern Standard German is (paratactic) negation/PN congruence or multiple negation. In the OHG and MHG, for the multiple occurrence of negation there is no cancellation yielding normal simple clausal negation. Diachronically, this phenomenon is seen as a specific phase of a type of circular language change, the Jespersen cycle.According to theliterature, theJespersen cycleis dividedin three to seven phases (see Donhauser 1996; Jäger 2008; Lenz 1996; van der Auwera 2009; among others): Essentially, there is a transition from the old to the new negator and there is a language period in between where both negators are used (see Table 1): Whether multiple negation in the history of the negation in German has to be seen as an optional syntactic construction, or whether in fact it represents a phase within the cycle in its own right is still being disputed (see Donhauser 1996: 200, 213; Elspaß and Langer 2012: 289; Fleischer and Schallert 2011:

234; Willis et al. 2013: 9).

Table : Schematic Jespersen-cycle (following Jäger : ).

|  |  |  |
| --- | --- | --- |
| Phase | Morphological features | illustrated in: ich sage nicht I-say-not |
| I | Clitic | Nisagu |
| II | clitic + free morpheme | ih ensage niht |
| III | free morpheme | ich sage nicht |

The three phases in Table 1 do not follow each other, but are there simultaneously in one single period next to each other (see Jäger 2008: 139): In the NL, the three types have the frequencies shown in Table 2.

As in MStG, there is constituent negation with sentence scope in MHG. Negative indefinites and adverbs may extend negation scope over the entire sentence (cf. Harbert 2007: Section 6.2.5): The means to do that embrace MHG niemen ‘nobody’, nie ‘never’, niemer ‘never again’, dehein ‘no (one)’ etc. The negation wordsmaystandbythemselvestonegatethesentenceortheyco-occurinthesame function with another negation word or together with the ‘old’ negator.

For the time being, I am not concerned with constituent negation, but restrict the investigation to the negation particle relating to Jespersen’s cycle: ne; ne … niht; and niht. Table 2 shows that ne occurs much more rarely than ne … niht and niht. It is plausible to ask whether there are specific contextual factors favoring mono- or multiple-negation and, if that is the case, what the criteria are for the use of the different types of negation. In the following sections, the corpus analysis of the NL will show how the negation variants ne, ne … niht and niht behave syntactically. It will be seen which semantic component plays the determining role for the choice of the negation particle ne.

Table : Types of Negative Expressions and Citations in NL.

|  |  |  |
| --- | --- | --- |
| Type of negation | Citations | Illustration |
| Ne |  | (a) |
| ne … niht |  | (b) |
| Niht |  | () |

The corpus investigation is based on the Nibelungenlied after the St. Galler manuscript B edited by Reichert (2005: 19): The focus of the investigation is on the preverbalnegationparticlenedisregarding,though,thedifferencebetweentheenclitic and the proclitic form, -ne and en-. Importantly, however, as the syntactic behavior of ne and ne … niht as well as the new particle niht will be seen to differ fundamentally.

This will be crucial for our observations where the subjunctive will be employed.

### Negation next to other means of epistemic weakening

As we shall see the type of double negation in the dependent clause as in Spanish (cf.(35))doesnotexhaustthetypesofnegationwitheffectsofepistemicweakening in the pre-modern stages of German. Hence, the following discussion aims at extending our preliminary hints at the influence of negation for either dependent

Q7 marking of clauses or its link with predicative subjunctive as a token of nonfactuality in the broadest sense. We investigate the preverbal negation particles -ne/en- (briefly ne hereafter) in the historical stages before MStG and work out its function in the periods of Old High, Middle High, and Modern Standard German/ OHG, MHG, MStG. The observation we will focus on is the change from the earlier verb affix –ne/en- to the additional, etymologically younger occurrence of the adverbial niht to its total replacement of the verb-affixal negation. The intriguing fact, as viewed from modern standard (though not dialectal) German, is that the two negators did not cancel themselves out to result in an emphatic positive assertive value. This development forms an excellent example for Jespersen’s negation cycle (Jespersen 1917a, 1917b; van Gelderen 2009, 2011). We point out in passing that the appearance in several languages has also met with controversial stances (Willis etal.2013:13):See (42a)from MHGforthe particularinterplay ofthe two negators and (42c–e) for further variants without negation following (42b) (adapted from Witzenhausen 2019: 26 – gloss marking is ours; see also (42)).

(42) a. jâne ruoche ich, ob ez zürne des künec Etzelen wîp! (NL 1883.4) yes.NEG worry I whether it get-angry.SUBJ.PRES the king Etzel.GEN wife ‘Yes, I am not concerned whether King Etzel’s wife might get angry about it.’

1. den [līp] wil ich verliesen the [life] will I lose
2. si=ne werde mīn wīb (ms. A, B and C) she=NEG become my wife
3. si en werde danne mīn wīb (ms. D) she NEG become than my wife
4. si werde mīn wīb (ms. d) she become my wife

›Das Leben will ich verlieren, esseidenn, sie werde/wird meine Frau‹ (NLd, 326–327)

Three variants from versions of the Nibelungenlied show that denne and even ne/en canbeleft out.In (42)appearseither ne/enwithclausescopeasin (42c),ne/enwith clause scope in combination with denne as in (42d), or neither of the two particles as in (42e) linked with just the subjunctive.

The fall-out of both particles in (c) could be explained by the late creation time of the codex. However, this example raises the general question why ne/en disappears towards Early New High German/ENHG and the domain subtraction is only expressed by comparative denne. In the changing period from MHG to ENHG, the dummy matrix set of the biclausal structure became grammaticalized as the connector außer ‘excpet for, unless’ It can be assumed that various factors play a role. One reason may be the disappearance of the particles ne/en from the two-part proposition. Added to this is the growing syncretism of the subjunctive and the indictive. This makes the selection of the exceptional operator increasingly unstressed or unmarked. The particle denne, on the other hand, is more salient. The monoclausal and biclausal structure coexist with denne until moder German. The present analysis is aimed at explaining this variance in lexicalization and the identifying the meaning components of exceptive semantics.

Strikingly, the ne-particle drops its negative force once the sentence in question is subordinated to the preceding negated sentence. See (43).

(43) und saget ouch mîner swester, daz si niht lâze daz, and tell mysisterthatshenotleaveoutsinerîtezuozirvriunden(NL733.3f.) also

that she.NEG ride.SUBJ.PRES. to her kinfolk

‘And also tell my sister that she should not forget to visit her kinfolk.’

The second sentential part, sine rîte zuo zir vriunden (argument of lâzen either as a root embedded (bridge) or as a root coordinated construction), contains the neparticle, but the clause receives a positive interpretation. For a speaker of modern German, negation in this text is ‘pleonastic’ (Paul 2007: 147) in the sense that it is redundant. Referring to Jespersen (1917: 75), van der Wouden (1997; Sections 2.6– 2.8) calls his kind of negation ‘PN’ (for details, see Section 5.2.2. below): PN may be seen asnegation congruence, because the negation isexpressedin different places inthesentencestructurewithoutcancellingouteachother(cf.Paul2007:147):The main question is in which specific environments and why the preverbal particle loses its negative function in cliticization.

One may follow Witzenhausen (2016: 26) in deducing from (42) that various factors play a role in the semantics of exceptional conditionality. The list of variantsislikelytoleadthroughthediachronyofGermanuptoMStG.Onemainreason may be the disappearance of the separate particles ne/s as well ass the growing syncretism of subjunctive and indicative (Abraham 2019, 2020). In particular, the exceptive operator becomes more and more unmarked. The particle denne, on the otherhand,remainsmoresalient.Themonoclausalandbiclausal structurecoexist with denne until ModStG (Witzenhausen 2016: 26). The syntactic variants of the exclusivity construction, especially the absence of full sentence negation, and the subjunctive on the verb as the only mark of subordination, also show that a simple dichotomy of main and secondary structure is not tenable in historical German (Tophinke 2012, 23; Witzenhausen 2016: 26).

### Results and evaluation of the corpus search

At the first glance it is quite striking that the frequency of occurrence of the three variants of negation in the independent and dependent sentences is very different: ne occurs primarily in dependent clauses, while ne … niht shows up mainly in independent clauses, and niht is evenly distributed across independent and dependent structures.

Table : Citations of the Three TypesofNegation in Dependent andIndependent Clauses in the NL.

|  |  |  |
| --- | --- | --- |
| Negation types | In independent sentences | In dependent sentences |
| Ne |  (%) |  (%) |
| ne … niht |  (%) |  (%) |
| Niht |  (%) |  (%) |

In the following sections, those sentences will be investigated which are negated by ne both independent and dependent.

## Independent clause types negated by ne

All 21 citations of ne-negated independent sentences in the NL (see Table 3) are declaratives except one, which is desiderative. The negation particle co-occurs very often with the verb ruochen ’worry, be concerned with’, see (30a), and wizzen ’know’, especially with an eye on the two classes of matrix predicates in (3)–(4): See Table 4. In most cases, the two verbs are linked with a wh- or an if-sentence (Behaghel 1924: 71f.): Interestingly, ruochen in the NL is only negated by ne.

Different ways of negation go along with the matrix verb wizzen.

The negation particle connects several times with wellen ’will, want’. In (44), it appears highly idiomatically.

(44) “Nûne welle got von himele”, sprach dô Gernôtˆ (NL 2102.1) now=not will.PRES.SUBJ lord of heaven, said then Gernot

‘Es möge das nicht wollen der Gott vom Himmel, sprach Gernot darauf.’

(‚Gott im Himmel möge das verhüten, sagte da Gernot.‘ Translation by

Brackert 2008)

‘May the lord in heaven prevent that.’

Overall, it should be noted that the ne-particle in the independent movement very often occurs with very specific verbs, as is shown in Table 4. It seems that their expressions are formulaic.

Table : Preverbal ne in the Independent Clause with Specific Verbs.

|  |  |
| --- | --- |
|  | Citations |
| with ruochen |  |
| with wizen |  |
| ne welle got |  |
| with other verbs |  |
| Σ |  |

## Types of subordinates negated by ne

The preverbal negation particle enters the NL almost twice as much in subordinate clauses such as in independent sentences before (see Table 3): It is striking that all the concerned subordinate clauses with one exception are without subordinators. The finite verb stands in second place. In addition, almost all examples represent either conditional sentences in the broader sense (27 examples) or sets with PN (11 examples).

### Insubordinate conditional clauses with ne

The negated conditional sentences without a complementizer can be divided into two types. In type one, the conditional sentence precedes the matrix clause: ‘if ¬A then B/¬ B’, where ‘¬’ stands for negation and A and B for each a proposition. An example of this is (45).

1. er envliehe dann vil sere, er enkan sich es nimmˆ er bewaren.ˆ (NL 944.4) he not-flee.SUBJ then with determination, he not-can REFL that.GEN never save

‘If he is not quickly on the flight, he will not be able to save himself.’

On the other hand, the conditional clause is following the matrix clause. In contrast to the first type, the trailing conditional sentence does not indicate the condition,underwhichsomethingwouldoccur,butthatsomethingdoesnotoccur under (Reichert 2007: 330): ‘B/¬ B, unless A’. In such negative-conditional (exceptive) sentences, the statement in the matrix clause is often formally negated as illustrated in (46a), or it is negative qua content as in (46b) (Paul 2007: § S 159).

See also (42).

1. a. dazichiunimmerˆ woldegeligennâhenbî,irensagetmirwâ vonKriemhilt diu Sîvrides thatIyou neverwould near by, you not-tell me why K. lie the.FEM.Siegfried.GEN wine sî (NL 619.3-4) lover be.SUBJ

‘that I would never lie near you unless you tell me how come that

Kriemhild is Siegfried’s lover.’

b. den wil ich verliesen, sine werde mîn wîp. (NL 327.4); this one will I lose unless become.SUBJ my wife ‘I will give up (my life) if she is not going to be my wife.’

The asyndetic link between the two clauses continues until late in Early New High German (Penzl 1984: § 165 3.8.2a): Notice that MStG uses an originally present subjunctive to initiate the exceptive clause.[[5]](#footnote-5)

(46’) a. Ichwürdemichniemehrzudirlegen,essei.SUBJ denn,dusagstmir, wieso Kriemhild Siegfrieds Geliebter ist. b Mein Leben will ich lassen, es sei.SUBJ denn, sie wird meine Frau.

Despite its semantic subjunction function, es sei denn ‘it-be-then’ has retained its parenthetical (coordinating) clause type triggering root complementation (as in du sagst mir with root verb-position): We think that this is indicative of the fundamentally non-factual description of the adverbial exceptive clause.

### Subordinations with the paratactic negation particle ne

Insubordinateclausesnotinitiatedbysubjunctors,thepreverbalnegationparticle neoftenoccurswhenitisconnectedtothemeaningoftheverbinthematrixclause. Such predicates are typically characterized by an implicit negation. This type of negative implicative embraces verbs of omitting, denying, withholding, etc. Recall the two types of verbs characterized by the feature of veridicality and nonveridicality in (3)–(4) above. The ne-particle in this type of clausal complex seems unnecessary as the subordinate clause contains a non-negative statement (although positive only by implication cf. Behaghel 1924: 73, 76; Paul 2007: § S 147): Yet, in the NL it provides the second-frequent occurrence. In (39) above, the clausal component sine rîte zuo zir vriunden (‘she.NEG ride to her kinfolk’) is added to the matrix verb lâzen, in this context ‘fail, refrain from’. The content of the complement clause is positive. Here is another example for this type of implicative denial.

1. diu molte ûf der strâze die wîle nie gelac, sine stübe alsam ez brünne allenthalben dan (NL 1333.2-3) the dust in the street the while not lay down, it rose up as if it burn.SUBJ all over then

‘The dust in the street never lay down, it rose up as if there were an arson all over.’

(43), in contrast, cannot be interpreted as a complement clause selected by gelac.Preterit gelacfrom perfectivegeligen ’lie’, iftaken literally, is nota member of the class of negative implicative verbs. However, it can be interpreted as such in context as ’end, stop’ thereby semantically implying negation. The propositional content of the sentence sine stübe is positive.

The seemingly superfluous negation particle is captured by van der Wouden (1997: Sections 2.6–2.8) as ‘paratactic negation’ (hereafter: PN): PN has been observed both in diachrony and synchrony in different languages as behaving in relatively the same way (see Harbert 2007: 382–383; van der Wouden 1997: Section 2.6): Notwithstanding individual differences, it occurs in the following three syntactic environments (van der Wouden 1997: 200):

1. a. in subordinate clauses embedded by the matrix predicates fürchten ‘fear, be afraid of’, verhindern ‘prevent’, verbieten ‘forbid’ and, occasionally, zweifeln

‘doubt, be doubtful about’;

* 1. in subordinate clauses dependent from comparative constructions;
	2. in subordinate clauses introduced by the subjunctions bevor ‘before’ or ohne dass ‘without’.

Compare the French examples with craindre ‘fear’ and douter ‘doubt’ in (36)–(37): We concluded that the verb craindre ‘fear’ in (9a) triggers the PN in its dependent clause. The words that may license the PN lose this effect under negation (van der Wouden 1997: 203) rendering the selection of the negators in the dependent clause ungrammatical as in in (36b): However, there are also verbs that have the reverse effect. As was shown above, verbs like douter ‘doubt’ unable to trigger PN in their dependent clause may retain this property under negation.

In this context, examples must be mentioned where ni as a subordinator nevertheless receives a negative meaning. In Otfrid’s OHG, numerous sentences can be found connected to a negated clause allowing many cases to be interpreted as a consecutive (Erdmann 1874: § 262): See (45).

1. ni si mán nihein so veigi,´ ni sinan zíns eigi (OHG Otfrid I.11.10) not be a man not so poor not one’s debts had.SUBJ

‘No one should be considered as insignificant as being not obliged to pay his taxes in his own country’[[6]](#footnote-6)

To this we have to add many exceptive examples with ni si ‘unless’ after a negated sentence. See (50a): The exceptive design has become formulaic later (Erdmann 1874: § 263): This is evidenced by (50b) as the singular verb si ‘be’ goes along with the plural subject sie ‘they’.

1. a. Nist mán nihein so ríchi, ther stige in hímilrichi, ni si ther mennigsgen´

 not=is one not so wealthy there to no one be the

 rise.SUBJ heaven men’s

sun, ther thánana quam ouh herasun (OHG Otfrid II.12.61-62) son who therefrom came also hereto

‘No one is so mighty that he may rise to heaven unless he is the Savior who also came from there to us.’

* 1. Nistuntarínthaz thúlte,thaz kúningirowálte, iuwóroltiniheine,´ nisithíe sie zugun heime´ (OHG Otfrid I.1.93-94)

not=is under them that allows that king they.GEN reigns some world no one unless those who educated home

‘No one among them allows that a king in any world reigns over them except when they have educated such kings back at home.’

In the two semantic environments, the consecutive and the exceptive one, the occurrence of the introducing negative particle ni (in bold type in (49) and (50)) may be triggered by the negation of the preceding sentence. This is taken to highlightthefactthattheclauseinitiatedbyniisaconstituentofalargersentential fabric allowing the ni particle to act either as a negator or a subordinator.

WehaveseenonillustrationsfromSpanishthatthereisgoodreasontoassume that dependent marking by negation can occur at different points of the pertinent sentence. Recall the Spanish example in (51) replicated here for convenience.

 (51) No creo [ que Pedro haya traido nada ]

 not I think that Pedro has.SUBJ brought nothing ]

‘I don’t think that Peter has brought anything.’ (Uribe-Etxebarria 1996: 309)

Etxebarria (1996: 312) argued that both the subjunctive form haya and the negation pronoun nada in the subordinated sentence in (51) are triggered by the negation of the matrix sentence. This implies that the sentential negation is marked in various different ways in the dependent clause. Hence, it is not implausible to assume that the ni/ne particle in OHG and MHG acted as a marker of clausal dependency. This invites the conclusion that the subjunctive in OHG and MHG contributes to the demarcation of the sentential negative scope as much as the subjunctive in Spanish

(51). We shall come back in some detail to the mood question in the next section.

## Negation and mood in MHG

### Mood in negated sentences

Itisexpectedthatthesubjunctiveincontextsnegatedbyneoccursmorefrequently in subordinated structures than in root ones. The motivation is that the assimilation of mood selection is a frequent phenomenon in MHG in that subjunctive, imperative or the modality signaled by a root modal verb is mirrored in the subordinated sentence co-selecting the subjunctive where otherwise the indicative wouldsuffice(Paul2007:§S183):Furthermore,thesubjunctiveasanexpressionof non-factuality (unreality or potentiality) may be selected in the subordinated clause once the matrix clause is explicitly negated or negative by implication (Paul

2007: 184): In MHG Nibelungenlied, three quarters of the occurrences of finite

Q8 verbs in subordination negated by ne take the subjunctive, whereas the corresponding matrix sentences generally are marked by indicative (Table 5).

Table : Mood Citationsin ne-negated Independent andDependentClausesof the Nibelungenlied.

|  |  |  |
| --- | --- | --- |
|  | In independent clause | In dependent clause |
| Indicative |  |  |
| Subjunctive |  |  |
| undistinguished by form |  |  |
| Imperative |  |  |
| Σ |  |  |

Table : Mood citations in the negated subordinate clauses of the Nibelungenlied

|  |  |  |  |
| --- | --- | --- | --- |
|  | Ne | ne … niht | Niht |
| Indicative |  (%) |  (%) |  (%) |
| Subjunctive |  (%) |  |  (%) |
| undistinguished by form |  (%) |  (%) |  (%) |
| Σ |  |  |  |

The question is legitimate whether the subjunctive is also the predominant mood in the subordinate clauses negated by ne … niht or niht alone. As Table 6 shows, the subjunctive never accompanied ne … niht, although there are individual cases where it is not decidable whether it’s a subjunctive form. In the subordinate clauses with niht, the subjunctive is not the primarily used mood even if subjunctives and formally indistinguishable verbal mood forms are counted together.

Overall, it is observed that the subordinate clauses with ne exhibit affinity to the subjunctive form of the finite verb. By contrast, the subordinate clauses with ne … niht and niht align with the indicative. This suggests that the function of the single ne-particle in the dependent clause can be viewed as the function of the subjunctive. In other words, the functional domains of the subjunctive and the neparticle can be seen to overlap. In the following section, the focus will be on the function of the subjunctive in older German withthe aim to find out why ne and the subjunctive in the dependent clause correlate with each other.

### The function of the subjunctive in the older periods of German

In German, there are two moods next to the imperative, and either mood occurs in two tenses yielding four paradigms: indicative present tense, indicative preterit, subjunctive present tense, and subjunctive preterit. However, not each of the finite verb form expresses the paradigmatic members of tense and mood in equal distribution. For verbs in the indicative, tense has generally an independent value, while forverbsin the subjunctive,timereferenceis generallysuspendedin favorof the marking of mood (Paul 2007: § S 16).

According to the relevant literature (e.g. Behaghel 1928; Paul 2007), the selection of the subjunctive is predominantly a matter of common syntactic principles. Accordingly, the use of the subjunctive in the dependent sentence is distinguished from that in the independent sentence (Petrova 2008: 82): In a second step, the subjunctive readings in the independent construction are identified (Paul 2007: § S 18–20) on the criteria of tense (present and preterit) and of sentence such as request,questionand declarative. The variants of thesubjunctive in the dependent sentence are the conditional, the exceptive, the purposive/final, and temporal (Paul 2007: § S 189–199)

By contrast, Petrova (2008: 82–83) pursues a semantically based approach. She assumes that the subjunctive in both the independent and the dependent clause has the same semantic readings. Based on her analysis of diverse OHG and MHG texts and irrespective of the multiplicity of syntactic variants, she set up three types of functional domains of performance (Petrova 2008: 85–86):

1. a. the domain of non-factual situations/non-real facts
	1. the domain of indirect speech
	2. the domain of the subjunctive in constatives

The first group comprises a number of uses of the subjunctive, the common characteristic of which is the non-reality of the denoted facts. This subsumes the traditional subjunctive readings of the unreal, potential, optative, volitional and purposive/final subjunctive (Petrova 2008: 89–90).

The second group refers to indirect speech. It is still a matter of controversy whether the subjunctive expresses the speaker’s or narrator’s distancing from the narrated content. This conclusion is based on the fact that the use of the subjunctive in indirect speech is not in semantic opposition to the indicative. The two moods are more or less free variants (Petrova 2008: Section 3.2.3.1; Paul 2007: § S 199). In addition, present tense and preterit subjunctive in the indirect speech are free variants in OHG and MHG texts (Petrova 2008: Section 3.2.3.2).

The subjunctive form, the use of which belongs to the last group in (52), occurs in primary statements and refers to facts that have actually taken place from the perspective of the narrator (Petrova 2008: 144), See (53).

1. Gisáh tho druhtin nóti, thio unsero ármuati, thio blíntun gibúrti, er uns ginádig

 Saw.IND.PRET thenmasterdistresstheour the blindness inborn he us

 poverty merciful

wurti.SUBJ.PRET (OHG Otfrid III.21.13-14) became

‘At that time, our lord recognized our distress and poverty, the inborn blindness, and he offered us his mercy.’

In (53), the preterit subjunctive (wurti lit. ‘would become’) stands for the narrated facts believed by the narrator to be solid facts. Petrova (2008: 146) claims that such subjunctives do not primarily inform about facts, but signal the narrator’s conclusions.

In sum and with an eye on the last two subjunctive categories, indirect speech and claim uttered by the narrator/speaker cannot be seen to be helpful as they are not found in terms of negated subordinate clauses as found in the Nibelungenlied text. What we aim at, consequently, are statements about non-factualities as they occur in subordinate clauses where both the single ne-particle and the subjunctive form occur simultaneously.

### Negation and subjunctive in subordinate sentences

In Section 5.5.1, we raised question why the subjunctive mood was selected so commonly in the subordinate clauses in co-construction with the single ne-particle. The correlation between the subordinate clause and the use of the subjunctive in the Nibelungenlied shows up in Table 7. Recall that there are no non-finite subjunctives. Thesubjunctivemood,thus,isbound tothe structuralT-tier,i.e.way up in the CP-structure, similarly to epistemic modal verbs in German.

Table : Citation Number of Moods in ne-negated Subordinates in the Nibelungenlied.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Sentence type | Indicative | Subjunctive | Indistinguishable by form | Σ |
| Conditional |  |  |  |  |
| Exceptive |  |  |  |  |
| With PN |  |  |  |  |
| Other |  |  |  |  |
| Σ |  |  |  |  |

It was suggested above that both ne and the subjunctive in exceptive subordinates and, additionally, PN in subordinate clauses may occur copying the matrix negation. Note that such a process is meant to strengthen the illocutionary force of the subordinate clause primarily when the information provided by the embedded clause has in fact really taken place. In (47), for example, the propositional content that the dust on the road shot up is clad in the subjunctive mood although it is not conceivable that the event has not really taken place. A similar use of the subjunctive can be found in OHG. See (54), which has lots of interpretations also due to the rhyme óugti – sougti.

7 Thisincludestheconsecutivesentence(49), theonly clausecomplementedby daz ‘that’andthe matrix verb dunken ‘deem’.

 (54) a. ni meid sih´ , suntar sie óugtiSUBj, then gotes sún sougtiSUBj (OHG Otfrid

I.11.38)

not shamed herself but she showed then god’s son gave.the.breast ‘She was not ashamed, but let everybody see how she breast-fed the Lord’s son.’

(translation following Hartmann 2005)

b. Si sprach: „ez ist deheiner, der ez gerne von mir nimt, ine gebe ir ietslîchem, swaz im wol gezimt (MHG NL 1169.1-2) she said: there is noone, who it gladly from me accepts, him=not give.SUBJ he anyone, what him well befits

‘She said: There is no one, who gladly accepts it from me, who would not give anyone what would be his due.’

We comment on (54a) first as it is the more complex case. According to the biblical story, the facts expressed with the subjunctive have really taken place. To explain the subjunctive use in (50a), Erdmann (1874: 155) points out that ni in the matrix clause negates the finite verb meid as well as the subjunctive sentence suntar sie óugti. As a consequence, the negation particle ni negates the facts encoded by the subjunctive as being non-factual yielding ‘She did not shun away from not showing them’. In other words, ‘She showed.’ Yet, there seems to be an alternative explanation of the use of the subjunctive use in (54a): As for the use of the Spanish subjunctive form in (51), the subjunctive is elicited by the negation in the matrix clause to mark that the subjunctive structure is a constituent of a larger complex. Given that the OHG coordination suntar ‘but’ following the matrix clause negated by ni (Kelle 1881: 571) can act as a kind of PN initiating a dependent construction (for details of PN see Section 5.5.2).

(54b) is the more straightforward case of double negation although ine ‘him=not’ seems to work as a complementizer (or relative pronoun) despite not triggering V-final (ine gebe ir ietslîchem). ine goes back to enclitic ne on the 1st pers pron ih (ih ne ‘I=NE’). ir ietslîchem means ‘to each of them’, ir is gen pl of ‘they’ in partitiveuse,ietslîchemisthedatsgoftheindefpron‘each/every□I=NEgive-Subj of.themeach□“Iwillgiveanyofthose,whoarereadytoacceptanythingfromme, whatever is apt for them” (‘Ich würde jedem derer, der etwas von mir annimmt, geben, was ihm zusteht’; literally: ‘Es gibt niemanden, der bereitwillig etwas von mir annimmt, derer jedem ich nicht gebe, was ihm zusteht.’). In sum, all of this invites the conclusion that the semantic dependence of a construction from a matrix structure is encoded both by the ni-/ne-particles as well as by the subjunctive. The schema in (55a, b) charts this up in a semi-formal way (Nishiwaki 2017). The curved arrows capture the scope ranges of negation, which are different in the three stages, OHG, MHG, and MStG, downgrading in sequence the force of negation to trigger the subjunctive. The two lines under the arrow lines delineate the probing and agreement relations. The sequence ranges from extra-sentential scope to inner-sentential scope to complete loss of scoping for mood.

(55)

Given conditional sentences in the narrow sense, the frequent occurrence of the subjunctive can beinterpreteddifferently from the occurrenceof exceptive sentences and those with PN. According to Behaghel (1924: 74), negated conditional clauses haveemergedfromoptativesentences. Weconclude fromthisthatthesubjunctivein the conditional derives from an original optative referring to non-factuality as in (48a). Illustration (45), replicated hereunder for convenience in (56a), can be rewritten paratactically: ‘May he flee quickly! In this way, he could save himself!’

Separating negated conditional sentences from the desiderates is difficult once the conditional component sounds as if the speaker asked the Lord for something. See (56b).

(56) a. er envliehe dann vil sere, er enkan sich es nimmˆ er bewaren.ˆ (NL 944.4) henot-flee.SUBJ thenrightaway,henot-can REFL that.GEN nolongersave

‘Unlessheisrightawayontheflight,hewillnotbeabletosavehimself.’

 b. ez enwelle got von himele, ir vernemet messe nimmerˆ merˆ . (NL

1853.4)

it NEG.willSUBJ god in heaven you hear service never again ‘Unless the lord in heaven wishes differently you will not hear a mass service again.’

Reformulated paratactically, (56b) reads as follows: ‘May the Lord in heaven decide differently! Otherwise you will never again listen to a mass service.’ This reading allows (56b) to adjoin in neat semantic terms to the ne-negated first component. In this way, conditionality is no longer focused.

## Summary: Negation and non-factuality

In the present discussion, the preverbal negation particle ne in MHG was investigatedin detail in the textof the Nibelungenlied.Characteristically, its occurrencein independent sentences is restricted to a number of specific verbs (see Table 4), while in dependent clauses it is found mainly in conditional and exceptive constructions as well as in complex sentences with PN. The other two variants of sentential negation, ne … niht and niht, are not restricted in the same way.

In Section 5.5.2, it was pointed out that the ne-particle can act as a kind of subordinator if it is in a relation of dependence on the preceding negated sentence. It can be assumed that the negation of the matrix sentence triggers the presence of sentence-initiating ne in the status of a subordinator, comparable, in a way, with the epistemically weakened complementizers Russian čtoby, Polish gdyby, Slovak aby, and Greek na.

In these subordinate clauses initiated by ne, the finite verb is very often in the subjunctive (see Table 7): Given that the subjunctive in the subordinate clauses negated by ne … niht and niht is not the predominant mood (see Table 6), its correlation with ne needs to be determined. In Section 5.6.3, the hypothesis was raised that the subjunctive in co-activation with ne may also be implemental in markingsubordination.Wesawthatthisappliestotheuseofthesubjunctiveinthe exceptive PN construction. By contrast, in conditional subordinate clauses, the predominant function of the subjunctive is marking non-factuality.

The question remains why the use of the ne-particle is confined to specific contexts. In the independent sentences, the negation particle is used only with specificverbssuggestingaformulaic limitation(seeSection5.4). Strikingly,thenenegated dependent clauses present root word order (declarative V2 instead of Vlast), while a subordinator occupies Comp (the V2 position) in most of the NL examples negated by ne … niht and niht. In other cases, the finite verb is in clausefirst position to highlight the conditionality as in modern German. In other cases, finally, Vlast conventionally marks clause dependent status.

Table 8 shows this. In sentences negated by ne, there is no specific marker for clausesubordination. Thissuggeststhatthene-particlein co-constructionwiththe subjunctive form have been used to encode the clause dependence from the previous negated clause. In specific semantic constructions, the original function of negation and the denotation of non-factual situations were lost.

Syntactically speaking, the complemental subjunctive must be higher than indicativefortheveryreasonthat,inlinewithepistemic(asopposedtoroot)modals (Abraham 2012), there is no non-finite form of the subjunctive. This carries over to attributive clauses in the D-layer: the subjunctive must be in I or higher, while

Table : Citation Index of Dependent Clauses Marked for [± Subordinator] along with Types of Negation in the NL.

|  |  |  |  |
| --- | --- | --- | --- |
| Negation type | Total of dependent clauses | [+ subordinator] V V | [− subordinator] |
| Vfinal Vclause middle |
| Ne |  |     |  |  |
| ne … niht |  |     |  |  |
| niht |  |     |  |  |

indicative probes from the V-layer to eventually being interpreted in I (or C/Speaker deixis, in terms of the Rizzi C-expansion, pending the speech act distinction).

# Conclusion and diachronic overview

Non-factuality is speaker deixis, i.e. attitudinal force extending over the entire utterance (and, consequently, over the proposition): Speaker deixis emerges as a concept due to predicative subjunctive (speaker’s uncertainty about p), to complementizer distinctions between factuality and non-factuality subordinators, to specific negation complexesinthematrixanddependentclause,and,inrelativeclauses,betweendere and de dicto readings. These specific links echo, and extend in some detail, Nordström’s general dictum that subordination emerges cross-linguistically in very divergent forms and in different degrees of syntactic complexity (Nordström 2010).

WepursueddetailedphenomenainthetextoftheMiddleHighGermanoftheLayof theNibelungs,butreachedoutaswelltoOldHighGerman,EarlyNewHighGermanand, for matters of comparison, to Romance/Italian, Spanish), modern Greek, and Slavic (Russian, Polish, Slovak):Thecore discussion dealtwith negation in its divergent forms andmeaningsyielding,asamainresult,syntacticnegationasasubordinatorinitsown right.Ingeneral,(non-)factuality(including(un-)specificreferenceinthecaseofrelative clause syntax and semantics) emerged either as complementizer alternants, as verbal mood alternants, or as specific negation complexes. It seems crucial for our speaker deixisconclusionthatnoneofthethreeconditionsoccurredinunison.Thefactthatthey occurred individually, i.e. without redundant transcategorial distribution confirms our conclusion that the pertinent information merges in Comp. As we have seen there is eitherForceextendedbythematrixverboverthecomplement(inthecaseofveridicalvs. non-veridical matrix predicates), or there is Force directly immanent in the dependent clausebyforceofrespectivecomplementizertypes(factualvs.non-factual),bynegation or by (non-)factuality signal on the embedded predicate. The reference feature oppositionemanatingfromrelativeclauses,specificity(dere,Bezeichnung,realexistence)vs. non-specificity (de dicto, Bedeutung, assumed existence), carries over propositional (non-)factuality of situations.

Inwhatfollowswetakeupagaineachofthefiveepistemicweakenersfocusing on the syntactic derivation of the subjunctive mood on the dependent predicate across the three historical periods, OHG, MHG, and MStG.

## Present and past subjunctive in modern German

Wewentintothisdiscussionbypredictingthatthepathofsubjunctivecodingfrom independent non-factuality to purely syntactic, non-interpretable subjunctive marking was going to be an intertwined path. Subjunctive forms and functions were much simpler in the early historical periods of German than in Modern Standard German/MStG. This has borne out.

In OHG, where no periphrastic verb forms had emerged yet, OHG gikústi in (57a) (replicated from (2a)) and MHG wer in (57b), could mean the irrealis depending on the larger context: ‘kissed, hadkissed, might havekissed’.MStG takes adifferentpathillustratedagainintheinsubordinateexclamatives(58a,b).(57a)is difficult again because of rhyme brústi – gekústi, but also because the NPI io ‘ever’ is present here (often neglected in interpretations of this example). In fact, the line says that any breast kissed by Christ is holy, i.e. the subjunctive appears in a relative clause the nominal head of which is non-specific, despite of the fact that it is formally definite (thio brústi).

1. a. […] thio brústi, thio krist io gekústi OHG (OtfridI 11,39;

the breasts the Christ ever PERFECTIVE-kissed.3SG.PRET.SUBJ adapted from

Coniglio

 ‘thebreastthatChristeverhadkissedthoroughly’ 2017: ex. (9))

* 1. daz [lant] muoz ich besorgen mit eim manne der MHG (Iwein 2314ez wer 15)

 (for) that [country] must I care with a man who it

save.PRET.SUBJ

‘for that (country) I have to take care of with the help of a man who can/ could save it’

1. a. Wenn sie doch geküsst würde/worden MStG passive wäre! periphrasis if she only kissed would/been have

‘If only she would be kissed/would have been kissed!’

* 1. Wenn er sie doch küssen würde/geküsst MStG active hätte! periphrasis if he her only kiss would/kissed had

‘If he only would kiss her/would have kissed her!’

* 1. Für das Land muss ich Sorge tragen mithilfe MStG active eines Mannes, periphrasis der es beschützt/beschützen kann-könnte/soll-sollte’

Both (58a) and (58b) have in common that they are non-factual irrespective of narrower designations of mood. Thus, comparison between (57) and (5x8a, b) shows that what we miss in the historical periods is a clear signal of the irrealis function as in the MStG correspondences in (1) (repeated here in (58a, b)).

The present subjunctive in root structures of MStG has only two functions: optative and, quite different, evidential. Both appear in root sentences as well as in complements of veridical matrix predicates.

1. a. (Er riet,) Sei gescheit! … imperative he advised be smart
	1. Es sei so! … optative it be so
	2. Sie seien auf der Donau auf einem evidential (reference to thirds‘

Dampfer.… knowledge) they be.3PL.SUBJ on the Danube on a cruiser ‘They are said to be on a cruiser on the Danube.’

However, things are different in dependent clauses. Counter to the past subjunctive, which is always irrealis, the present subjunctive in dependent clauses has no speech act function. In other words, it remains uninterpreted. It has disappeared completely in spoken language and is stylistically almost banned. Its function is taken over by the modal verb sollen ‘shall’.

1. a. ??Er riet ihr, dass sie gescheit sei.

he advised her that she smart be

* 1. Er riet ihr, sie soll(?e) gescheit sein. … bridge (root) dependence he advised her she shall(.SUBJ) smart be
	2. Er riet ihr, dass sie gescheit sein soll(?e).

he advised her that she smart be shall(.SUBJ)

Insum,wemaysaythatthepresentsubjunctiveinrootclausessignalsspeechactstatus asoptative,desiderate,directive–moregenerally,non-factual–withthepresupposition ¬p→p. In contrast to the older historical stages of German, subordinate clauses are void of speech act status (and, consequently, of illocutionary autonomy). Hence, the coding as present subjunctive is void of semantic interpretability.

Giventhatthere is nosuch morphosyntactic restriction onsubordinate clauses in MStG, while, nevertheless, subordinates lose their illocutionary independence except in premise subordinates, we can draw the conclusion that the subjunctive in older stages of German (OHG, MHG, possibly still ENHG) was a carrier of the various features of illocutionary non-autonomy that characterize modern German grammar such as: factivity on matrix predicates, the eventivity link in sentential complexes, presuppositionality as opposed to assertivity. By contrast, indicativity remains the major indicator of illocutionary autonomy in contrast to MStG, where modal indicativity fails to unambiguously encode sentential autonomy.

## Matrix predicates as epistemic weakeners

Mood alternation in complement clauses was found to be implemented by indicative or veridical matrix predicates as in (3). The complement subjunctive is interpreted semantically. It reflects the commitment as opposed to the noncommitment by the speaker (or subject of the main verb) to the truth of the complement clause. Veridical predicates trigger the indicative mood on the complement predicate, while non-veridical predicates such as directives (anordnen-order, raten-advise, vorschlagen-suggest) do not. OHG gibót ‘ordered’ (infinitive gibíotan) as in (61) is such a non-veridical epistemic weakener on account of its desiderative speech act status. The non-veridicality of the matrix predicate is reflected in the choice of the subjunctive mood on the complement predicate, fuorin, as illustrated by OHG (61a) (repeated from (5a)) and MHG (61b) (copied from (2b)).

 (61) a. gibót thaz sie fuorin ubar then giozon (OHG, from

Petrova 2013: 45)

ordered that they across the sea travel.SUBJ

‘he ordered that they travel across the sea’

b. daz [lant] muoz ich besorgen mit eim manne (MHG, from Paul 1969: der ez wer 457)

that [country] must I care with a man who it save.PRES.SUBJ ‘that (country) I have to take care of with the help of a man who can/ could save it’

MStG: ‘dafür muss ich Sorge tragen mithilfe eines Mannes, der es beschützen kannkönnte/soll-sollte’

The indicative mood of the complement would be OHG fuoren, MHG wert. It is crucialtoseethatthemodalstatusof thecomplementisderivedfromthe illocutive autonomy of the matrix predicate. This holds for the older stages of German, while it does no longer in MStG and its dialectal vernaculars.

## Non-specificityasanepistemic weakener inattributes and relative clauses

We argued, in line with Coniglio (2017), that mood alternations in relative clauses are triggered by criteria different from complement dependents. The crucial bottom line is the categorial stance of attributes to nominals as opposed to verbal complements.Theconclusionwasthat(non)veridicalitycannotbethetriggertobe applied to relative clauses irrespective of their status as restrictive vs. appositive modifiers. Coniglio (2017) has shown convincingly that, while veridical matrix predicates leave open the choice of mood in the complement, what counts for relative clauses is the (non-)specificity status of the referent determined by the relative clause. Compare Coniglio’s (2017) illustration in (12) adapted here as (62).

(62) Gianni vuole che una persona che ha/abbia il libro lo chiami. Gianni wants that a person that has.IND /has.SUBJ the book him calls.SUBJ

‘Gianni wants that a person that has the book calls him.’

The syntactic derivation follows he usual schema. Mood, i.e. indicative or subjunctive,islicensed underaseparateprojectioninI orT.See(63)and(64)(adapted from Coniglio (2017), the author’s (34) and (35)).



The derivative difference reflects the difference between the two German relative clauses in (65a, b).

1. a Hans sucht eine Frau, die blaue Augen hat/\*hätte. de re

(specific referent:thewomanisknowntoexist) John looks for a woman that eyes blue has.IND/had.SUBJ b Hans sucht eine Frau, die blaue Augen hat/hätte. de dicto

(unspecific referent: the woman is John’s dream girl) John looks for a woman that eyes blue has.IND/had.SUBJ

GiventhatrelativeclausesareprojectedasattributesoftheD-head,thereferentinan appositive relativeclauseisspecificandas such doesnot licensethesubjunctive.As Coniglio (2017) argues convincingly, appositive, i.e. non-restricted, relative clauses must be independently interpretable as in (66) due to the (non-)specific property.

1. Hans sah die Hexe, die ja blaue Augen hatte John saw the witch, who MP blue eyes had

In German, relative clauses project V-final. Moreover, as Coniglio (2017: 37) points out, while, on the one hand, the data clearly show only a correlation between specificity and mood, their interpretation leads to a scenario in which the three variables, specificity, mood, and verb position, perfectly interact with each other.

More generally, the subjunctive must be in a projection higher than the indicative for the very reason that, counter to indicative forms, there is no nonfinite form of the subjunctive. Thus, irrespective of (un)specificity in relative modification showing sensibility for indicative/subjunctive in the D-layer, subjunctive must be in I or higher, while indicative probes from the V-layer to eventually being interpreted in I (or C/Speaker deixis, in terms of Rizzi’s C-expansion, pending the speech act distinction): Recall that we pointed out the similarity of the subjunctive vs. indicative to the opposition between epistemic and root modal verbs. EMV have no non-finite representation (cf. the ‘Epistemic Non-finiteness Constraint’, Abraham 2001; Nishiwaki 2017) and are therefore merged in I or T.

## Epistemic weakening on complementizers

We can be brief on the distinction of weak vs. strong complementizers: Such never existed in German in contrast to Slavic and Greek as was illustrated by (17)–(28): Yet, subjunctive after non-veridical matrix predicates in OHG and MHG confirms convincinglytheunitingforceofCompwithrespecttoclausalepistemicity.Epistemic weakening is bound to the complementizer distinction in Slavic, it surfaces also in terms of Comp-alternation in Greek, while it does only in terms of mood on the embeddedpredicateinGerman.Theclauseisafullprojectionofthevalenceproperty of the predicate. We pointed out that there is a stylistic possibility to keep separate purpose dass/damit ‘that, in order to’ and complemental dass. See (67)–(68).

 (67) Ich wünsche mir, dass Paul kommt/käme/?komme … purpose/

non-veridical

|  |  |
| --- | --- |
| I wish | Me that Paul comes/PAST SUBJ/PRES.SUBJ …complement/ veridical dass |
| Thelo | \*oti/na erthi o Pavlos. (Giannakidou2013: 23) |
| want.1SG | that.IND/that.SUBJ come-3SG.PERF the Paul |
| (68) | ‘Paul meint, dassI want Paul to come.’…Roxani gegangen complement/ ist/\*wäre/?sei veridicaldass | Paul left is/were.PAST SUBJ/ thinks be.PRES.SUBJ that R. |
|  | O Pavlos nomizi oti/\*na | efije i (Giannakidou Roxani. 2013: 23) |
|  | the Paul think.3SG that.IND/that.SUBJ‘Paul thinks that Roxanne has left.’ | left.3SG the Roxani |

Insum,wefoundtwosyntacticalternantexpressionsof(non-)factuality,oneinthe category of factual vs. non-factual subordinators (Russian čto vs. čtoby and Greek oti vs. na), and another one in terms of verbal mood (factual-indicative vs. nonfactual-subjunctive) in OHG. We note that both subordinator and verbal mood share Co-potentials, possibly fused under sentential Attitudinality or Force. We shallseethatnegationwillhavetobeaddedasafactualityalternant,butatpresent it is not clear how this fits into an entire Force commonality.

AsvanGelderen(2017:herexamples(18a–c))pointedoutModernEnglishhasan expandedembeddedCP which is free, i.e.can beoccupiedbytopics, forassertivesas in (69a) (van Gelderen’s ex. (18a)), but it does not allow non-assertives. In the case of factive non-assertives, the ForceP is occupied by the fact/it that and with volition verbs,alsonon-assertives,theCPisspecifiedforirrealisandthereforeneverreducible since an irrealis/future marker for ispresent. Factivesthat have [+realis] features and non-factives [-realis] are collapsed in (69b, c) (van Gelderen’ ex. (18b, c)).

(69) a [VP believe, discover [ForceP that [TopicP … b [VP regret [ForceP the fact … c [VP want [ForceP[-realis] for …

These verb-based distinctions do not apply for any historical period of German except, possibly, if the standard complementizers, dass, damit, sodass, um zu allow forsplitCswhendecomposedintotheirparts.Butwearenotawareofsuchattempts.

## Double negation as an epistemic weakener

What remains to take care of is negation as an epistemic weakener in terms of a non-factualizer. We found that both ne and the subjunctive in exceptive subordinates and, additionally, PN in subordinate clauses may occur when copying negation in the matrix clause. Note that such a process is meant to strengthen the illocutionary force of the subordinate clause primarily when the information provided by the embedded clause has in fact really taken place. See OHG (70), wherethesubjunctivemood isappliedalthough itisnot conceivablethattheevent has not really taken place. (70) has been replicated from (54a).

 (70) ni meid´ sih, suntar sie then gotes sún sougtiSUBj

 óugtiSUBj, (OHG Otfrid I.11.38)

not shamed REFL but then god’s son gave the breast she showed

‘She was not ashamed, but let everybody see how she breast-fed the Lord’s son.’

(translation following Hartmann 2005)

Despite the non-factual subjunctive in suntar sie ougtiSUBJ, ‘but she did show’, i.e. she did not hide giving the Lord’s son her breast. So why is there the subjunctive counter to the factuality of the event in the first place? We argued that the subjunctive is elicited by the negation in the matrix clause to mark that the subjunctive structure is a constituent of a larger complex. We were led to conclude that the semantic dependence of a construction from a preceding structure is encoded both by the ni-/ne particles as well as by the subjunctive. Note that modern German would embrace the two coordinate finite structures by embedded infinitives.

(70’) Sie scheute sichnicht (zuzeigen) GottesSohn (offen) ihre Brustzu geben. ‘She did not shy away from (showing) (openly) breast-feeding the Lord’s son.’

The subjunctives in the finite asyndetic coordinates, óugtiSUBJ, and sougtiSUBJ, echo the negated negative-implicative predicate meid (sih)´ thereby factualizing, as it were, the double non-factuality of the initiating structure. (71a, b) show the syntactic states in OHG and MHG with double negation (PN in asyndetic linking after comma).

 (71) a In dhesemu quhide ni bluchisoe ni dhiz chiuuisso dher

 eoman, sii anderheit

 in this not doubted anyone not this be.SUBJ.PRES certainly

statement the other being godes, selbo druhtin christ. (OHG Isidor III.6)[[7]](#footnote-7)god’s self lord Christ.

‘As to this statement, no one doubted that quite certainly this was no one but the other person of god, the same Lord Christ.‘

b Si sprach: ez ist deheiner, der ez gerne von mir nimt, ine gebe ir ietslîchem, swaz im wol gezimt (MHG NL 1169.1-2)

she said: there is no one, who it gladly from me accepts, whom-not give.SUBJ he anyone, what him well befits

‘She said: There is no one, who gladly accepts it from me, who would not give anyone but what would not be his due.’

By adapting the idea in Coniglio (2017) [[8]](#footnote-8) in (72), we take up the syntactic relations accounting for the trigger of the subjunctive in the complement (or superficial second coordinate).Aswasarguedabove (inthe context of(55)), the right-pointing arrows signal the relations between matrix negation and complement semantics. [Ind=indicative, NegI=negative implicative, Subj=subjunctive; S=preceding coordinate clause, S’=following coordinate clause]



Negation in (72c) for MStG extends no scoping relations any longer. Evidently, there is no negation-triggered mood relation retained in modern German.

The skeletal assumptions on the diachronic states from OHG to modern German is that the subjunctive surfaces in OHG and MHG overwhelmingly more often in subordinate clauses and under sentential negation than in matrix clauses (Behaghel 1918, 1924; Nishiwaki 2017; Paul 1969, 2009; Schrodt 2004). As we have seen from pre-MStG examples, negation often paired with the subjunctive. This confirms the conclusion that non-factuality is the determining factor for the subjunctive. Negation makes the proposition untrue/false unless it has the illocutionary force of the speaker’s denial of the speech act. The decision between the two operations depends on the type of matrix predicate (factive vs. non-factiveand other specific matrix predicates).

In sentences negated by ne, there is no specific marker for clausal subordination. As we formalized in (72a, b), for the constructions investigated from the Nibelungenlied, the ne-particle in co-construction with the subjunctive form has been used to encode the dependence of a clause from the previous negated clause. In specific semantic constructions, the original interpretability of negation and the denotation of non-factual situations were lost and gave way to the pure syntactic coding of embeddedness thus anticipating subjunctive restrictions in MStG as shown in (65c). Epistemic weakeners came in various constellations in the history of German to eventually lose momentum completely in modern German.

1. Overall, we may conclude that, while in OHG and MHG, epistemic weakening was applied also in dependent clauses in the form of the subjunctive with autonomous speech act validity, this structural depth disappeared in modern German. The (present) subjunctive came to be restricted to root sententiality applying just optativtity and evidentiality. Thelatteristhestronger ofthe two, primarilyinSwiss German.Oursearch through the historical periods yields this: in (74a–c):
2. a In contrast to Old English (van Gelderen 2017), the distinction between veridical(assertive)andnon-veridical(non-assertive) isrelevantinOHG and MHG, whereas in MStG (again in contrast to Modern English where non-assertivescanselectsubjunctivecomplements) thesubjunctivehas no interpretive function in dependent structures (no representation to express optativity and, somewhat regionally constrained (Swiss German), for evidentiality).

b Thereisnoindependenceofthecomplementinanyofthehistoricalperiods of German (Axel 2007, 2012; Weiß 2006). Consequently, this continued situation did not motivate epistemic weakening in terms of a split

Complementizer as evidenced in other (Romance and Slavic) languages. c While a clear difference between veridical and non-veridical verbal complements arose after Old English (van Gelderen 2017), this older distinction in pre-MStG disappeared completely giving way to the indicative. All that carried over from the early (non-)veridicality criterion on complement mood choice is that, counter to non-factives (especially verbs of performance), factives disallow bridge constructions, i.e. V2 in semantic dependency. But, then, this is expected as there is no complementizer in V2-structures in the first place.

The overall picture is that, while in OHG and MHG, the matrix predicate and coordinative negation deautonomizes the illocutive potential (FORCE) in the complement,thisprocesshaslostmomentuminMStGinthatdependentclausesin MStG no longer carry an echo of the matrix governor. Dependent clauses may have gained independent illocutive autonomy, which, in turn, made them free for illocutive potential intheir own right. However, this tendential potential isfar from completely exploited.

# Primary sources

Brackert, Helmut. 2008. Das Nibelungenlied. Band 1. Mittelhochdeutscher Text und Übertragung. Herausgegeben,übersetztundmiteinemAnhangversehenvonHelmutBrackert.Frankfurta. M.: Fischer Taschenbuch Verlag.

Eggers, Hans. 1964. Der althochdeutsche Isidor. Nach der Pariser Handschrift und den Monseer

Fragmenten. Neu herausgegeben von Hans Eggers. Tübingen: Niemeyer [Althochdeutsche Q9 Textbibliothek; 63]. [=Isidor].

Erdmann, Oskar. 1934. Otfrids Evangelienbuch. Herausgegeben von Oskar Erdmann. 2. Auflage besorgt von Edward Schröder. Textabdruck mit Quellenangaben und Wörterbuch. Halle:

Waisenhaus. [=Otfrid].

Grosse, Siegfried. 2007. Das Nibelungenlied. Mittelhochdeutsch/Neuhochdeutsch. Nach dem Text von Karl Bartsch und Helmut de Boor ins Neuhochdeutsche übersetzt und kommentiert von Siegfried Grosse. Stuttgart: Reclam.

Reichert, Hermann. 2005. Das Nibelungenlied. Nach der St. Galler Handschrift herausgegeben und erläutert von Hermann Reichert. Berlin/New York: de Gruyter.

Vollmann-Profe,Gisela.1987.OtfridvonWeißenburg.Evangelienbuch.Auswahl.Althochdeutsch/ Neuhochdeutsch. Herausgegeben, übersetzt und kommentiert von Gisela Vollmann-Profe.

Stuttgart: Reclam.

# References

Abraham, Werner. 2001. Modals: Toward explaining the epistemic non-finiteness gap. In Reimar

Müller & Marga Reis (eds.), Modalität und Modalverben im Deutschen (Sonderheft Linguistische Berichte), vol. 9, 7–36. Hamburg: Buske.

Abraham, Werner. 2012. Gesprochene Syntax im Zimbrischen der deutschen Sprachinseln

Oberitaliens. Was sie über Sprachuniversalien und über Wandel unter Sprachkontakt (nicht) verrät. In Claudio Di Meola, Antonie Hornung & Lorenza Rega (eds.), Perspektiven Vier. Akten der 4. Tagung Deutsche Sprachwissenschaft in Italien Rom, 4.-6. Februar 2010, 37–72.

Frankfurt am Main: Peter Lang.

Abraham, Werner. 2019. Lecture In honor of Michail Kotin. Zielona gòra. Ms.

Abraham, Werner. 2020. Modality. Syntax, Semantics, and Pragmatics. Cambridge: Cambridge University Press.

Axel, Katrin. 2007. Studies on Old High German syntax. Left sentence periphery, verb placement and verb-second (Linguistik Aktuell/Linguistics Today 112). Amsterdam: Benjamins.

Axel, Katrin. 2009. The verb-second property in Old High German: different ways of filling the prefield. Information Structure and Language Change. In Roland Hinterhölzl & Svetlana Petrova (eds.), New Approaches to Word Order Variation in Germanic (Trends in Linguistics. Studies and Monographs/TiLSM), vol. 203, 17–43. Berlin: de Gruyter.

Axel-Tober, Katrin.2012. (Nicht-)kanonische Nebensätze im Deutschen. Synchrone und diachrone Aspekte (Linguistische Arbeiten 542). Berlin: de Gruyter.

Behaghel, Otto. 1918. Die Verneinung in der deutschen Sprache. Wissenschaftliche Beihefte zur Zeitschrift des allgemeinen deutschen Sprachvereins 5. 225–252.

Behaghel, Otto. 1924/1928. Deutsche Syntax. Eine geschichtliche Darstellung. Band II. Die Wortklassen und Wortformen. B. Adverbium; C. Verbum./Band III. Die Satzgebilde.

Heidelberg: Winter.

Bidese, Ermenegildo. 2008. Die diachronische Syntax des Zimbrischen. Tübingen: Narr.

Bidese, Ermenegildo. 2017. Kontaktbedingter Sprachwandel. Problemannäherung aus der I-

Language-Perspektive. In Shin Tanaka, Elisabeth Leiss, Werner Abraham & Yosuhiro Fujinawa (eds.), OV-Varianz im Deutschen und Japanischen (Sonderheft Linguistische Berichte), vol. 259, 135–157. Hamburg: Buske.

Bidese, Ermenegildo, Andrea Padovan & Alessandra Tomaselli. 2012. A binary system of complementizers in Cimbrian relative clauses. Working Papers in Scandinavian Syntax 90.

1–21. <https://project.sol.lu.se/uploads/media/Bidese_et_al_WPSS90_02.pdf>.

Catasso,Nicholas&RolandHinterhölzl.2016.Onthequestionofsubordinationorcoordinationin V2-relatives in German. Linguistische Berichte 21. 99–123.

Cinque, Guglielmo. 1988. La frase relativa. In Lorenzo Renzi, Giampaolo Salvi & Anna Cardinaletti (eds.), Grande grammatica italiana di consultazione, vol. 1. (La frase. I sintagmi nominale e preposizionale), 443–503. Bologna: il Mulino.

Cognola, Federica. 2012. Verb second and asymmetric Pro-drop in a German dialect of Northern Italy. Amsterdam: Benjamins.

Coniglio, Marco, Roland Hinterhölzl & Svetlana Petrova. 2018. Mood alternations in Old High German. Annali di Ca’ Foscari. Serie occidentale 52. 7–38.

Coniglio, Marco. 2017. Verbal mood in early Old High German relative clauses. Annali di Ca‘ Foscari. September 2017.

Coniglio, Marco, Sonja Linde & Tom Ruette. 2017. Relative clauses in Old High German: A corpusbased statistical investigation of their syntactic and information-structural properties. Journal of Germanic Linguistics 29(2). 101–146.

Donhauser, Karin. 1996. Negationssyntax in der deutschen Sprachgeschichte:

Grammatikalisierung oder Degrammatikalisierung? In Ewald Lang & Gisela Zifonun (eds.), Deutsch – Typologisch, 201–217. Berlin, New York: de Gruyter. (Jahrbuch des Instituts für deutsche Sprache 1995). <https://doi.org/10.1515/9783110622522-010>.

Elspaß, Stephan & Nils Langer. 2012. Jespersen’s cycle and the history of German negation –

Challenges from a sociolinguistic perspective. Neuphilologische Mitteilungen 113. 275–292.

Erdmann, Oskar. 1874. Untersuchungen über die Syntax der Sprache Otfrids. Erster Teil. Die Formationen des Verbums in einfachen und in zusammengesetzten Sätzen. Halle:

Waisenhaus.

Evans, Nicholas & Honore Watanabe (eds.). 2016.´ Insubordination (Typological studies in language), vol. 115. Amsterdam: Benjamins.

Farkas, Donka F. 1985. Intensional descriptions and the Romance subjunctive mood. New York:

Garland.

Fleischer, Jürg & Oliver Schallert. 2011. Historische Syntax des Deutschen. Eine Einführung.

Tübingen: Narr.

Georgi,Doreen&MartinSalzmann.2014.Caseattractionandmatchinginresumptioninrelatives.

Evidence for top-down derivation. In Anke Assmann, Sebastian Bank, Doreen Georgi, Timo Klein, Philipp Weisser & Eva Zimmermann (eds.), Topics at Infl. Linguistische Arbeitsberichte 92, University of Leipzig, 347–395.

Giannakidou, Anastasia & Alda Mari. 2015. Mixed (non)veridicality and mood choice with emotive verbs. University of Chicago and Institut Jean Nicod, CNRS/ENS/EHESS.

Giannakidou, Anastasia. 1995. Subjunctive, habituality and negative polarity items. Mandy Simons and Teresa Galloway (eds.), SALT V. 94–111. Ithaca, NY: Cornell University.

Giannakidou, Anastasia. 1998. Polarity sensitivity as (non-)veridical dependency. [Linguistik

Q10 Aktuell 23]. Amsterdam: Benjamins.

Giannakidou, Anastasia. 2009. The dependency of the subjunctive revisited. Temporal semantics and polarity. Lingua 120. 1883–1908.

Giannakidou, Anastasia. 2011. Nonveridicality and mood choice: Subjunctive, polarity, and time. InRenateMusan&MonikaRathert(eds.),Tenseacrosslanguages,59–90.Berlin:Moutonde Gruyter.

Giannakidou, Anastasia. 2013. (Non)Veridicality, evaluation, and event actualization. Evidence from the subjunctive in relative clauses. In Radoslava Trnavac & Maite Taboada (eds.), Nonveridicality and evaluation. Theoretical, computational, and corpus approaches (Studies in Pragmatics), vol. 11, 17–47. Leiden: Brill.

Giannakidou, Anastasia. 2014. The futurity of the present and the modality of the future: A commentary on Broekhuis and Verkuyl. Natural Language & Linguistic Theory 32(1). 1–26. Giannakidou, Anastasia. 2015. Evaluative subjunctive and nonveridicality. Ms. University of Chicago.

Grewendorf, Günther. 2013. Sytztyp und linke/rechte Peripherie. In Jörg Meibauer, Markus

Steinbach & Hans Altmann (eds.), Satztypen des Deutschen, 652–679. Berlin: De Gruyter.

Haider, Hubert. 1999. Deutsche syntax – generativ. Vorstudien zur theorie einer projektiven grammatik. Tübingen: Narr.

Haider, Hubert. 2003. V-clustering and clause union – Causes and effects. In: Peter Seuren & Gerard Kempen (eds.), Verb constructions in German and Dutch, 91–126. Amsterdam: John Benjamins.

Haider, Hubert. 2010. The syntax of German. Cambridge: Cambridge University Press.

Hanneforth, Thomas & Gisbert Fanselow (eds.). 2010. Language and logos. Studies in theoretical and computational linguistics (Studia grammatica), vol. 72. Berlin: De Gruyter Akademie Forschung.

Harbert, Wayne. 2007. The Germanic languages. Cambridge: Cambridge University Press.

Hartmann, Heiko. 2005. Otfrid von Weißenburg. Evangelienbuch. Aus dem Althochdeutschen übertragenundmiteinerEinführung,AnmerkungenundeinerAuswahlbibliographie.BandI:

Widmungsbriefe. Liber primus. Herne: Verlag für Wissenschaft und Kunst.

Hooper, Joan & Sandra Thompson. 1973. On the applicability of root transformations. Linguistic Inquiry 4(4). 465–497.

Hooper, Joan. 1975. On assertive predicates. In John Kimball (ed.), Syntax and semantics. vol. V, 91–124. New York: Academic Press.

Jäger, Agnes. 2008. History of German negation (Linguistik Aktuell/Linguistics Today 118).

Amsterdam: Benjamins.

Jäger, Agnes. 2010. Der Komparativzyklus und die Position der Vergleichspartikeln. In Linguistische Berichte, vol. 224. 467–493.

Jäger, Agnes. 2013. Negation in the history of (High) German. In David Willis, Christopher Lucas & Anne Breitbarth (eds.), The history of negation in the languages of Europe and the Mediterranean, Bd. 1: Case studies, 151–189. Oxford: OUP.

Jespersen, Otto. 1917a. Negation in English and other languages (Historisk-filologiske Meddelelser I, 5). København: Bianco Lunos.

Jespersen, Otto. 1917b. Negation in English and other languages. København: Bianco Lunos. Julien, Marit. 2005. Nominal phrases from a Scandinavian perspective. Amsterdam: John Benjamins Publishing Company.

Kelle, Johann. 1881. Otfrid von Weissenburg. Evangelienbuch. Volume 3: Glossar der Sprache Otfrids. Regensburg: Manz.

Krifka, Manfred. 2010. How to interpret ›expletive‹ negation under bevor in German. In Adam Ledgeway. 1998. Variation in the Romance infinitive: the case of the southern Calabrian inflected infinitive. Transactions of the Philological Society, vol. 96. 1–61.

Ledgeway,Adam.2005.Movingthroughtheleftperiphery:Thedualcomplementisersysteminthe dialects of southern Italy. Transactions of the Philological Society 103(3). 336–396.

Leiss, Elisabeth. 2012 [2009]. Sprachphilosophie, 2nd edn. Berlin: de Gruyter.

Lenz, Barbara. 1996. Negationsverstärkung und Jespersens Zyklus im Deutschen und in anderen europäischen Sprachen. In Ewald Lang & Gisela Zifonun (eds.), Deutsch typologisch, 183–200. Berlin, New York: De Gruyter.

Lühr,Rosemarie.1998.VerallgemeinerndeRelativsätzeimAlthochdeutschen.InKarinDonhauser & Ludwig M. Eichinger (eds.), Deutsche Grammatik. Thema in Variationen. Festschrift für Hans-Werner Eroms zum 60. Geburtstag, 263–281. Heidelberg: Winter.

Marques, Rui. 2010. On the selection of mood in complementclauses. In Lotte Hogeweg, Helen de Hoop & Andrej Malchukov (eds.) Crosslinguistic semantics of tense, aspect and modality.

Amsterdam: John Benjamins.

Meinunger, Andre. 2004. Verb position, verbal mood and the anchoring (potential) of sentences.´ In Horst Lohnstein & Susanne Trissler (eds.), The syntax and semantics of the left periphery, 313–341. Berlin: Mouton de Gruyter.

Meinunger, Andre. 2017. Desires, wishes and hopes´ – Desiderative predicates and presuppositions. STUF 70(4). 1–24.

Nadathur, Prerna & Dan Lassiter. 2015. Unless – An experimental approach. Proceedings of Sinn und Bedeutung 19. 426–444.

Nishiwaki,Maiko.2017.NegationundKonjunktivgebrauchimMittelhochdeutschen–AmBeispiel des Nibelungenliedes. In: Shin Tanaka, Elisabeth Leiss, Werner Abraham & Yosuhiro Fujinawa (eds.), Grammatische Invarianz in typologischer und historischer Dimension: OVVarianz im Deutschen und Japanischen, 159–178. Hamburg: Buske.

Nordström, Jackie. 2010. Modality and subordinators. Amsterdam: Benjamins.

Padovan,Andrea.2011.Diachroniccluesto grammaticalizationphenomenaintheCimbrianCP.In Michael Putnam (ed.), Studies in German language islands (Studies in language companion series), vol. 123), 279–300. Amsterdam: Benjamins.

Paul, Hermann. 1969. Mittelhochdeutsche Grammatik. 20. Auflage. Neu bearbeitet von Hugo Moser und Ingeborg Schröbler. Tübingen: Niemeyer.

Paul, Hermann. 2007. Mittelhochdeutsche Grammatik. 25. Auflage. Neu bearbeitet von Thomas Klein,Hans-JoachimSolmsundKlaus-PeterWegera.MiteinerSyntaxvonIngeborgSchöbler, neubearbeitet und erweitert von Heinz-Peter Prell. Tübingen: Niemeyer.

Penzl, Herbert. 1984. Frühneuhochdeutsch. Bern: Pater Lang.

Petrova,Svetlana&RolandHinterhölzl.2010.EvidencefortwotypesoffocuspositionsinOldHigh German. In Gisella Ferraresi & Rosemarie Lühr (eds.), Diachronic studies on information structure. Language acquisition and change, 189–217. Berlin: de Gruyter.

Petrova, Svetlana. 2008. Die Interaktion von Tempus und Modus: Studien zur

Entwicklungsgeschichte des deutschen Konjunktivs (Germainistische Bibliothek 30).

Heidelberg: Winter.

Petrova, Svetlana. 2013. Der Ausdruck indirekter Aufforderungen im Vergleich Althochdeutsch – Neuhochdeutsch.EineFallstudiezurEntwicklungdesModusgebrauchs imabhängigenSatz.

In Franciszek Grucza (ed.), Vielfalt und Einheit der Germanistik weltweit. Akten des 12. Internationalen Germanistenkongresses Warschau 2010, 45–52. Frankfurt am Main: Peter Lang.

Quer, Josep. 1998. Mood at the interface. Utrecht: Universiteit Utrecht dissertation.

Reichert, Hermann. 2006. Konkordanz zum Nibelungenlied nach der St. Galler Handschrift. 2 volumes (Philologica Germanica 27). Wien: Fassbaender.

Reichert, Hermann. 2007. Nibelungenlied-Lehrwerk. Sprachlicher Kommentar, mittelhochdeutsche Grammatik, Wörterbuch. Passend zum Text der St. Galler Fassung („B“):

Wien: Praesens.

Salvesen, Christine & George Walkden. 2014. Diagnosing embedded V2 in Old English and Old French. <https://www.hf.uio.no/ilos/english/research/projects/traces-of-history>.

Schönherr, Monika. 2016. Diachronische, diatopische und typologische Aspekte des Sprachwandels. In Franciszek Grucza (ed.), Vielfalt und Einheit der Germanistik weltweit.

Akten des 12. Internationalen Germanistenkongresses Warschau 2010. Frankfurt am Main:

Peter Lang, Sektion 33: Diachronische, diatopische und typologische Aspekte des Sprachwandels, 34–37. Betreut und bearbeitet von Martin Durrell, Hans-Werner Eroms und Michail L. Kotin.

Schrodt, Richard. 1983. System und Norm in der Diachronie des deutschen Konjunktivs. Der Modus in ahd. und mhd. Inhaltssätzen. Tübingen: Niemeyer.

Schrodt, Richard. 2004. Althochdeutsche Grammatik II. Syntax. Tübingen: Niemeyer.

Szczepaniak,Renata.2011.ZumStanddesJespersen-ZyklusimNibelungenlied(HSA):Starkeund schwache negativ-polare Elemente. In: Jörg Riecke (ed.): Historische Semantik (Jahrbuch für germanistische Sprachgeschichte), vol. 2, 284–293. Berlin: de Gruyter.

Uribe-Etxebarria, Myriam. 1996. Sujunctive of negation and [Neg(ative)] complementizers. In

Karen Zagona (ed), Grammatical theory and Romance languages. Selected papers from the 25th Linguistic Symposium on Romance Languages (LSRL XXV), Seattle, 2–4 March 1995, 307–316. Amsterdam: Benjamins.

van Gelderen, Elly. 2004. Grammaticalization as economy. Amsterdam: John Benjamins.

van Gelderen, Elly. 2009. Cyclical change (Linguistik Aktuell/Linguistics Today 146). Amsterdam:

Benjamins. van Gelderen, Elly. 2011. The linguistic cycle. Language change and the language faculty. Oxford:

OUP.

van Gelderen, Elly. 2017. The main and embedded clauses in the history of English: Changes in assertive and non-assertive complements. Ms. University of Arizona.

 Vaillant, Andre. 1948.´ Manuel du vieux slave. Paris: Institute. §258.

Van der Auwera, Johan. 2009. The Jespersen cycles. In Elly van Gelderen (ed.), Cyclical change (Linguistik Aktuell/Linguistics Today), vol. 146, 35–71. Amsterdam: Benjamins. van der Wouden, Ton. 1997. Negative contexts. Collocation, polarity and multiple negation (Routledge Studies in Germanic Linguistics 1). London, New York: Routledge.

Visser, Fredericus. 1963/1966/1973. An historical syntax of the English language. Leiden: Brill.

Weiß, Helmut. 2006. Die rechte Peripherie im Althochdeutschen. Zur Verbstellung in dass-Sätzen.

Tagungsakten der Arbeitstagung der Indogermanischen Gesellschaft in Jena 2006. Ms. Universität Frankfurt.

Willis David, Christopher Lucas & Anne Breitbarth. 2013. Comparing diachronies of negation. In David Willis, Christopher Lucas & Anne Breitbarth (eds.), The history of negation in the languages of Europe and the Mediterranean. Volume I: Case studies, 1–50. Oxford: Oxford University Press.

Witzenhausen,Elisabeth.2019.Negation–Exception–Contrast.Thepost-cyclicaldevelopmentof ‘ne/en’ in Middle High German, Middle Low German and Middle Dutch. Ghent: University Ghent dissertation.

Witzenhausen, Elisabeth. 2020. Von Negation zu Domänensubtraktion. Die Funktion der Negationspartikel ne/en im Mittelniederdeutschen. Beiträge zur Geschichte der deutschen Sprache und Literatur 141(1). 1–30.

Zeijlstra, Hedde. 2012. There is only one way to agree. The Linguistic Review 29. 491–453.

1. Abbreviations used: EVID=evidential, F=feminine, GEN=genitive, IND=indicative, M=masculine, MHG=Middle High German, MStG=Modern Standard German, NEG=negation, OHG=Old High German, PERF=perfective, PL=plural, PRES=present tense, PRET= preterit tense, REFL=reflexive, S=preceding coordinate clause, S’=following coordinate clause, SG=singular, SUBJ=subjunctive, V=predicate in the preceding coordinate structure, V’=predicate in the following coordinate structure. [↑](#footnote-ref-1)
2. This is reminiscent of Giannakidou’s (1998: 167) “Sensitivity in subjunctive relatives: [Op (DP +SubjunctiveRelativeClause)VP] hasatruthvalueiffit isnotknownwhetherthefollowingis true: -x [NP(x) \_ Subjunctive Relative Clause (x)].” [↑](#footnote-ref-2)
3. Given Farkas’ (1985) generalization about the occurrence and cooptation of the subjunctive in relative clauses (cited from Giannakidou 1998: 86), “Subjunctive relative clauses are grammatical iff they modify DPs which are interpreted inside the scope of intensional operators.”, the question what is an account of the indicative-subjunctive shift in relative clauses using the extensionality versus intensionality contrast and the choice of complementizers becomes even more urgent. We leave this for future research. [↑](#footnote-ref-3)
4. The notation (\*ne) indicates clausal ungrammaticality under application of the negator. [↑](#footnote-ref-4)
5. So does Modern Dutch, without any comparative particle and with only the indicative: hetzijze wordt m’n vrouw. Hetzij works idiomatically as a lexical coordinator: [CP1…] [COORD Het zij[CP2 ze [C‘ wordt [VP mijn vrouw]]]. The comparative particle, denn in German (see (46’b), is dispensible to yield the exceptive meaning. The present subjunctive suffices to open the required individual and only alternative world. See […]. Es sei, sie wird (/werde) meine Frau/dass sie meine Frau wird instead of (46’b). [↑](#footnote-ref-5)
6. We were aided by Hartmann’s (2005: 45) translation. [↑](#footnote-ref-6)
7. Jäger (2013: 186) has pointed out that this citation is the only find of PN in all of OHG Isidor. [↑](#footnote-ref-7)
8. Thederivationsinlines2and3in(69a–c)followthemechanismproposedbyZeijlstra(2012).See also Coniglio (2017). [↑](#footnote-ref-8)