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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)

1 Introduction: Breaking the ground for the notion 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!’
- b. *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

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.

- (2) a. Ther gotes geist ther imo anawas, ther gihaz 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 that Christ he
 carry.PERF. PRET. SUBJ in hand
 MStG: Der Gottes Geist, der in ihm war, verhiess ihm, dass er Christus auf
 dem Arm tragen wuerde'
- b. 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: 'dafuer muss ich Sorge tragen mithilfe eines Mannes, der es
 beschuetzen **kann- koenn 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 non-factuality. Note that the examples in (2a–b) referred to are in fact both dependent clauses.

2 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. Schrodtt (2004: 184ff.) takes the stance that mood selection in OHG complement clauses depend on 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 Schrodtt 2004: 185) as well as negation and modalization. A similar view is shared by Petrova (2013), who goes beyond Schrodtt'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 that in OE, the subjunctive can follow all types of verbs. The point is where it 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.

- (3) Veridical predicates selecting indicative:
 - a. assertives (following Giannakidou's Greek verbs Greek *leo*-German *sagen*-English *say*-French *lire*, *dhiavazo*-*lesen*-*read*-*lire*, *isxirizome*-*behaupten*-*claim*-*soutenir*)
 - b. fiction verbs (*onirevome*-*träumen*-*dream*-*rêver*, *fantazome*-*sich vorstellen*-*imagine*-*imaginer*)
 - c. epistemics, non-factives (*pistevo*-*glauben*-*believe*-*croire*, *nomizo*-*denken*-*think*-*penser*)
 - d. epistemics, factives (*sich freuen über*-*be glad*, *wissen*-*know*-*savoir*, *bedauern*-*regret*)
 - e. semifactives (*entdecken*-*discover*, *erinnern*-*remember*)
- (4) Non-veridical predicates selecting subjunctive:
 - a. volitionals (German *wollen*-English *want*-Greek *thelo*-Italian *volere*, *hoffen*-*hope*, *planen*-*plan*-*skopevo*-*sperare*)
 - b. directives (*anordnen*-*order*-*dhiatazo*-*ordinare*, *raten*-*advise*-*simvulevo*-*consigliare*, *vorschlagen*-*suggest*-*protino*-*consigliare*)
 - c. modals (*müssen*-*must*-*prepi*-*è necessario*/*bisogna*, *dürfen*-*may*-*bori*-*è possibile*)
 - d. permissives (*zugestehen*-*allow*-*epitrepo*, *verbieten*-*forbid*)
 - e. 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).

Van Gelderen (2017) shows that, in Old English, all kinds of matrix verbs can be complemented by subjunctives. This gives the mood in the subordinate clause independence to express its own assertion (i.e. be speech act autonomous), as 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, hence Reichenbach's $s=e$. By contrast, the non-veridicals are based on non-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 C-quality: mood on the complement predicate as illustrated by OHG (5a) (secondary quote from Coniglio 2017; see also Coniglio et al. 2018). The subjunctive mood in the following OHG example cited in 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.

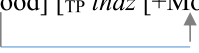
- (5) a. *gibót* thaz sie **fuorin** ubar then giozon (Tatian 85, 20f, adapted
 ordered that they travel.SUBJ across the sea from Petrova 2013: 45)
 Latin 'iussit ire trans fretum'
 MStG: 'ordnete an, dass sie übers Meer fahren **sollten**'
 'he ordered that they travel across the sea.'
- b. jo thahta, iz imo **sazi**, ob er sia **firliazi**
 and thought it him comfort.SUBJ when he her left.SUBJ
 (Otfrid 2.7.52, adapted
 from Schrodts 2004: 199)
 MStG: 'und dachte, dass es ihm **zustünde**, wenn er sie **verließe** [weil sie
 bereits schwanger in die Ehe kam]'

"and thought that it was appropriate for him to leave her" (und dachte, dass es ihm *zustünde*, wenn er sie *verließe* [weil sie bereits schwanger in die Ehe kam])

Schrodts (2004: 199) classifies OHG *thenken* 'think, assume' together with *thunken* '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).

c **OHG (thaz+)** **SUBJ**: [_{CP} Subord^o [_{FinP} [_{Fin} *thaz* [+Mood] [_{TP} *thaz* [+Mood]]]]]



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 veridicality in the matrix clause playing the determining role for factual vs. non-factual reference in the complement clause has to be reconsidered when it comes to relative clauses (cf. Coniglio 2017). In Schrodts (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 exist in reality or not. Coniglio (2017) takes this up pointing out that in Old High German (OHG), alternations between the indicative and the subjunctive mood are quite frequent in relative clauses. See the subjunctives in (6a,b) (gleaned from Schrodts 2004: 180).

- (6) a. [...] *sprah druhtin zi imo sinaz wort, thaz er fuori heimort* (Otfred 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
- b. Alarich **soll** vor den Toren Roms stehen
 A. shall.Evid in front of the gates of Rome stand
- c. 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
- d. 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*. The speaker of both (7a, b) takes no truth responsibility for the propositional content for more than someone else’s responsibility. As Giannakidou (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 ive point of view, in particular, her uncertainty about the existence of a value for the NP. I will call this epistemic weakening of the subjunctive.”

And, in a quite similar vein, Marques (2010: 153) points out for complement clauses in Portuguese:

“Thus, the selection of indicative or subjunctive for complement clauses in Portuguese seems 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. The subjunctive is selected otherwise. It does not seem to be associated with a specific 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 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”.

- (8) a. *Ion a spus ca Maria a plecat*
 Ion has said that Maria has.IND left
 ‘Ion said that Maria left’.
- b. *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).

- (9) a. Alarich **stehe/stünde** vor den Toren Roms
 A. stand.SUBJ/PRES/PRET in front of the gates of Rom
- b. Alarich **soll** vor den Toren Roms stehen
 A. shall.EVID in front of the gates of Rome stand
- c. Alarich **sollte** vor den Toren Roms stehen
 ... fate future: e<O<S
 A. was expected.EVID in front of the gates of Rome stand
- d. 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**
- e. 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**
- f. Hans sucht eine Frau mit blauen Augen/die **hat/*habe/soll(te)** blaue Augen **haben ...VO**
 Hans is looking for a woman with blue eyes/that **has/have should/have** blue eyes

- (10) 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. looks for a woman that **has.SUBJ** the eyes blue woman with blue eyes is
 ‘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.”

3 Relative clauses and mood alternation

In this section, the link between the role of mood and *de re/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 Cimbrian 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).

3.1 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)).

- (12) 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.

- (13) 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
 b. 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)

In Standard Italian, the use of the subjunctive is obligatory in the unspecific case as 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

² This is reminiscent of Giannakidou’s (1998: 167) “*Sensitivity in subjunctive relatives*: [Op (DP + Subjunctive Relative Clause) VP] has a truth value iff it is not known whether the following is true: -x [NP(x) _ Subjunctive Relative Clause (x)].”

- (14) 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 exist(s)
 has.IND / had.SUBJ
- b. Hans sucht eine (solche) Frau, die blaue *de dicto* (unspecific referent: the **Augen hat/hätte**.
 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

3.2 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 Lusérn,] iz vil interessant
 das Buch wo=da spricht von L. ist sehr interessant
 'The book where=he speaks of Lusérn, 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 non-restrictive, 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 (Cimbrian) does not (Grewendorf 2013: 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 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.

4 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 are located in different positions in the left periphery 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 is found also under *dumat* ‘think’, *znat* ‘know’ and *skazat* ‘say’.

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

- (20) 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'* 'to be' by grammaticalization and formal reduction. Both in the Polish and the 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 subordinations, *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):

4.1.3 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

- (23) **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

- (24) **(To) že** Peter odišiel nebolo tajomstvom už nejaký 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

- (28) Peter odišiel do Moskvy (**za účelom**) **aby** ho nenašla polícia.
 ‘Peter went to Moscow (to the end) that him not=found police.’

Russian

- (29) 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

4.1.3.1 Old Church Slavonic

Vaillant (1948: §258) reports that Old Church Slavonic distinguished complementizers on the criteria of assertiveness (declarative) reflected by *uako* as opposed to volition represented by *da*.

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*).

- (B) predicates selecting *ke* + indicative (calqued from Italian *que*): assertive verbs such as *khön* (deriving from OHG *quedan*) ‘sagen-say’ and *bizzan* ‘wissen-know’ (scil. *whit(ness)*), verba sentiendi like *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 sperà **azz=ar** *nèt 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** *nèt 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:

- (C) **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,
- (D) **ke** occurs with the same speaker also in other contexts, where non-assertivity is available, for example, in the context of negation on the matrix verb. Like in the previous case, the Italian set of input contains the sequence *che* + Subj. See (32a,b) (Bidese’s 2017: ex. (28)).

- (36) a. ’Z iz nèt 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 è 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).

- (37) a **Cimbrian *az*+ SUBJ**: [CP Subord⁰ [IP [Fin *az* [+Mood] [TP *az* [+Mood]]]]]
-
- b **Cimbrian *ke* + IND**: [CP Subord⁰ [IP [Fin *V_default* IND [TP ...]]]]
- c **Italian CP**: [CP ... [Force/Fin *che* [+Mood] [TP ...]]]
-
- d **OHG (*thaz*+) SUBJ**: [CP Subord⁰ [IP [Fin *thaz* [+Mood] [TP *thaz* [+Mood]]]]]

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

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.

4.4 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 hãm 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*) gètt vil gètt, 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.’

A similar dichotomy of complementizers has been reported for present day dialects 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.

- 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 the matrix sentence. In the OHG illustration (39b), likewise, the subjunctive is triggered in the OHG illustration by negation in the matrix clause followed by indefinite pronouns in the complement sentence. This implies that the sentential negation is marked in various different ways in the dependent clause. Where and whereby the scope of the 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) expressing an implicit negative meaning. Given this assumption, the PN in German could be triggered by the implicitly negating predicates.

However, there is the alternative explanation that the PN as a subordinator is triggered by the negation capturing the overall sentence structure rather than by the negative implicative verbs in the matrix clause. This stance is supported by the following French examples (gleaned from van der Wouden 1997: 196, 198, 203–204).

- (40) a. *Je crains qu'il ne vienne.*
I fear that=he not come.SUBJ
'I am afraid that he might come.'
- b. *Je ne crains pas qu'il (^{ne}) fasse cette faute.*
I not fear NEG that=he not make.SUBJ this mistake
'I am not afraid that he might make this mistake.'⁴
- (41) a. *Je doute fort que cela soit.*
I doubt very much that this be.SUBJ
'I doubt that this is so.'

⁴ The notation (^{ne}) indicates clausal ungrammaticality under application of the negator.

- b. *Je ne doute point que la vraie la source du repos.*
devotion (ne) soit
 I 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 (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).

5.2 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 (2019) 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.

5.2.1 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 or in addition to it, thus, in a way, doubling up (Behaghel 1918: 229): The additional 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): In MHG, *niht* going back to *niwiht/niowiht*, is fully grammaticalized as the new negation adverbial although used also in the old sense as negative indefinite (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 illustrated by OHG *drof* (deriving from *Tropfen* ‘drop’): In MHG, there are minimizer 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 the literature, the Jespersen cycle is divided in 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 1: Schematic Jespersen-cycle (following Jäger 2008: 15).

Phase	Morphological features	illustrated in: <i>ich sage nicht</i> I-say-not
I	clitic	<i>nisagu</i>
II	clitic + free morpheme	<i>ih ensage niht</i>
III	free morpheme	<i>ich sage nicht</i>

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 words may stand by themselves to negate the sentence or they co-occur in the same 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 2: Types of Negative Expressions and Citations in NL.

Type of negation	Citations	Illustration
<i>ne</i>	62	(42a)
<i>ne ... niht</i>	214	
<i>niht</i>	264	(43)

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 preverbal negation particle *ne* disregarding, though, the difference between the enclitic 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.

5.2.2 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)) does not exhaust the types of negation with effects of epistemic weakening 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 marking of clauses or its link with predicative subjunctive as a token of non-factuality 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 *nihht* 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 1917; van Gelderen 2009, 2011). We point out in passing that the appearance in several languages has also met with controversial stances (Willis et al. 2013: 13): See (42a) from MHG for the particular interplay of the two negators and (42c–e) for further variants without negation following (42b) (adapted from Witzgenhausen 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 Etsel.GEN wife
 'Yes, I am not concerned whether King Etsel's wife might get angry about it.'
- b. *den [lîp] wil ich verliesen*
 the [life] will I lose
- c. *si=ne werde mîn wîb* (ms. A, B and C)
 she=NEG become my wife
- d. *si en werde danne mîn wîb* (ms. D)
 she NEG become than my wife
- e. *si werde mîn wîb* (ms. d)
 she become my wife
 ›Das Leben will ich verlieren, **es sei denn**, sie **werde/wird** meine Frau‹
 (NLd, 326–327)

Three variants from versions of the *Nibelungenlied* show that *denne* and even *ne/en* can be left out. In (42) appears either *ne/en* with clause scope as in (42c), *ne/en* with 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* ‘except 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 indicative. 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 modern 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 also my sister that she not leave out
sine rîte zuo zir vriunden (NL 733.3f.)
 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 *ne*-particle, 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 as negation congruence, because the negation is expressed in different places in the sentence structure without cancelling out each other (cf. Paul 2007: 147): The main question is in which specific environments and why the preverbal particle loses its negative function in cliticization.

One may follow Witzenhausen (2019: 26) in deducing from (42) that various factors play a role in the semantics of exceptional conditionality. The list of variants is likely to lead through the diachrony of German up to MStG. One main reason may be the disappearance of the separate particles *ne/s* as well as 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 other hand, remains more salient. The monoclausal and biclausal structure coexist with *denne* until ModStG (Witzenhausen 2019: 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; Witzhausen 2019: 26).

5.2.3 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 3: Citations of the Three Types of Negation in Dependent and Independent Clauses in the NL.

Negation types	In independent sentences	In dependent sentences
<i>ne</i>	21 (34%)	41 (66%)
<i>ne ... niht</i>	186 (87%)	28 (13%)
<i>niht</i>	142 (54%)	122 (46%)

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

5.3 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 Gêrnôt* (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 4: Preverbal *ne* in the Independent Clause with Specific Verbs.

	Citations
with <i>ruochen</i>	5
with <i>wizen</i>	7
<i>ne welle got</i>	3
with other verbs	6
Σ	21

5.4 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).

5.4.1 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 $\neg A$ then $B/\neg B$ ’, where ‘ \neg ’ stands for negation and A and B for each a proposition. An example of this is (45).

- (45) *er envliehe dann vil sère, er enkan sich es nimmèr bewaren.* (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, under which something would occur, but that something does not occur under (Reichert 2007: 330): ‘ $B/\neg B$, 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).

- (46) a. *daz ich iu nimmêr wolde geligen nâhen bî, ir **ensaget** mir wâ von Kriemhilt diu Sîvrides*
 that I you never would 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

- (46’) a. Ich würde mich nie mehr zu dir legen, **es sei**.SUBJ **denn**, du sagst mir, 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.

5.4.2 Subordinations with the paratactic negation particle *ne*

In subordinate clauses not initiated by subjunctors, the preverbal negation particle *ne* often occurs when it is connected to the meaning of the verb in the matrix clause. 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 non-

⁵ So does Modern Dutch, without any comparative particle and with only the indicative: **hetzij ze 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 dispensable 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).

veridicality 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.

(47) *diu molte ûf der strâze die wîle nie gelac, sine stûbe 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 *gelac* from perfective *geligen* 'lie', if taken literally, is not a 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 stûbe* 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):

- (48) 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';
- b. in subordinate clauses dependent from comparative constructions;
- c. in subordinate clauses introduced by the subordinations *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).

- (49) *nī si mán nihein so véigi, nī 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

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’.

- (50) a. *Nīst mán nihein so rīchi, ther stige in hímilrīchi, nī si ther mēnnigsgen*
 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.’
- b. *Nīst untar in thaz thūlte, thaz kúning iro wálte, iu wórolti nihéine, nī si thie sie zugun héime* (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 highlight the fact that the clause initiated by *ni* is a constituent of a larger sentential fabric allowing the *ni* particle to act either as a negator or a subordinator.

⁶ We were aided by Hartmann’s (2005: 45) translation.

We have seen on illustrations from Spanish that there is good reason to assume 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.

5.5 Negation and mood in MHG

5.5.1 Mood in negated sentences

It is expected that the subjunctive in contexts negated by *ne* occurs more frequently 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 would suffice (Paul 2007: §S 183): Furthermore, the subjunctive as an expression of 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 verbs in subordination negated by *ne* take the subjunctive, whereas the corresponding matrix sentences generally are marked by indicative (Table 5).

Table 5: Mood Citations in *ne*-negated Independent and Dependent Clauses of the *Nibelungenlied*.

	In independent clause	In dependent clause
Indicative	18	4
Subjunctive	2	30
undistinguished by form	0	7
Imperative	1	0
Σ	21	41

Table 6: Mood citations in the negated subordinate clauses of the *Nibelungenlied*

	<i>ne</i>	<i>ne ... niht</i>	<i>niht</i>
Indicative	4 (10%)	24 (86%)	65 (53%)
Subjunctive	30 (73%)	0	32 (26%)
undistinguished by form	7 (17%)	4 (14%)	25 (21%)
Σ	41	28	122

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 *ne*-particle can be seen to overlap. In the following section, the focus will be on the function of the subjunctive in older German with the aim to find out why *ne* and the subjunctive in the dependent clause correlate with each other.

5.5.2 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 for verbs in the subjunctive, time reference is generally suspended in favor of 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

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.

5.5.3 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. The subjunctive mood, thus, is bound to the structural T-tier, i.e. way up in the CP-structure, similarly to epistemic modal verbs in German.

Table 7: Citation Number of Moods in *ne*-negated Subordinates in the *Nibelungenlied*.

Sentence type	Indicative	Subjunctive	Indistinguishable by form	Σ
Conditional	1	7	1	9
Exceptive	1	14	3	18
With PN	2	8	1	11
Other ⁷	0	2	1	3
Σ	4	31	6	41

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 *ougti – sougti*.

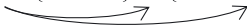

⁷ This includes the consecutive sentence (49).

- (54) a. **ni méid sih, suntar sie óugti**_{Subj}, then gotes sún **sougti**_{Subj} (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 ietslichem, 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 ietslichem*). *ine* goes back to enclitic *ne* on the 1st pers pron *ih* (ih ne 'I=NE'). *ir ietslichem* means 'to each of them', *ir* is gen pl of 'they' in partitive use, *ietslichem* is the dat sg of the indef pron 'each/every' □ I=NE give-Subj of.them each □ "I will give any of those, who are ready to accept anything from me, 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) a. OHG: $\text{NEG} \{ S V \dots \} \text{ni} \{ S' V'_{\text{SUBJ}} \dots \}$

- b. MHG: $\text{NEG} \{ S V \dots \} \{ S' \text{ne-V}'_{\text{SUBJ}} \dots \}$


Given conditional sentences in the narrow sense, the frequent occurrence of the subjunctive can be interpreted differently from the occurrence of exceptive sentences and those with PN. According to Behaghel (1924: 74), negated conditional clauses have emerged from optative sentences. We conclude from this that the subjunctive in 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 sêre, er enkan sich es nimmèr bewaren.* (NL 944.4)
 he not-flee.SUBJ then right away, he not-can REFL that.GEN no longer save
 ‘Unless he is right away on the flight, he will not be able to save himself.’
- b. *ez enwelle got von himele, ir vernemet messe nimmèr mèr.* (NL 1853.4)
 it NEG.will_{SUBJ} 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.

5.6 Summary: Negation and non-factuality

In the present discussion, the preverbal negation particle *ne* in MHG was investigated in detail in the text of the *Nibelungenlied*. Characteristically, its occurrence in 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 marking subordination. We saw that this applies to the use of the subjunctive in the 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 specific verbs suggesting a formulaic limitation (see Section 5.4). Strikingly, the *ne*-negated 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 clause-first 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 clause subordination. This suggests that the *ne*-particle in co-construction with the 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 indicative for the very reason that, in line with epistemic (as opposed to root) 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 8: Citation Index of Dependent Clauses Marked for [± Subordinator] along with Types of Negation in the NL.

Negation type	Total of dependent clauses	[+ subordinator]	[- subordinator]			
			V ₁	V ₂	V _{final}	V _{clause middle}
<i>ne</i>	41	1	0	40	0	0
<i>ne ... niht</i>	28	25	0	0	3	0
<i>niht</i>	122	100	18	0	3	1

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).

6 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 complexes in the matrix and dependent clause, and, in relative clauses, between *de re* 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).

We pursued detailed phenomena in the text of the Middle High German of the *Lay of the Nibelungs*, but reached out as well to Old High German, Early New High German and, for matters of comparison, to Romance/Italian, Spanish), modern Greek, and Slavic (Russian, Polish, Slovak): The core discussion dealt with negation in its divergent forms and meanings yielding, as a main result, syntactic negation as a subordinator in its own right. In general, (non-)factuality (including (un-)specific reference in the case of relative clause syntax and semantics) emerged either as complementizer alternants, as verbal mood alternants, or as specific negation complexes. It seems crucial for our speaker deixis conclusion that none of the three conditions occurred in unison. The fact that they occurred individually, i.e. without redundant transcategorial distribution confirms our conclusion that the pertinent information merges in Comp. As we have seen there is either Force extended by the matrix verb over the complement (in the case of veridical vs. non-veridical matrix predicates), or there is Force directly immanent in the dependent clause by force of respective complementizer types (factual vs. non-factual), by negation or by (non-)factuality signal on the embedded predicate. The reference feature opposition emanating from relative clauses, specificity (*de re*, *Bezeichnung*, real existence) vs. non-specificity (*de dicto*, *Bedeutung*, assumed existence), carries over propositional (non-)factuality of situations.

In what follows we take up again each of the five epistemic weakeners focusing on the syntactic derivation of the subjunctive mood on the dependent predicate across the three historical periods, OHG, MHG, and MStG.

6.1 Present and past subjunctive in modern German

We went into this discussion by predicting that the path of subjunctive coding from 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, had kissed, might have kissed’. MStG takes a different path illustrated again in the in subordinate exclamatives (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*).

- (57) a. [...] *thio brústi, thio krist io gekústi* OHG (Otfrid I 11,39;
the breasts the Christ ever PERFECTIVE-kissed.3SG.PRET.SUBJ adapted from
Coniglio
‘the breast that Christ ever had kissed thoroughly’ 2017: ex. (9))
- b. *daz [lant] muoz ich besorgen mit eim manne der* MHG (Iwein 2314-
ez 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’
- (58) 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!’
- b. *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!’

- c. 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.

- (59) a. (Er riet,) **Sei** gescheit! ... imperative
he advised be smart
b. Es **sei** so! ... optative
it be so
c. 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'.

- (60) a. ??Er riet ihr, dass sie gescheit **sei**.
he advised her that she smart be
b. Er riet ihr, sie **soll(²e)** gescheit sein. ... bridge (root) dependence
he advised her she shall(.SUBJ) smart be
c. Er riet ihr, dass sie gescheit sein **soll(²e)**.
he advised her that she smart be shall(.SUBJ)

In sum, we may say that the present subjunctive in root clauses signals speech act status as optative, desiderate, directive – more generally, non-factual – with the presupposition $\neg p \rightarrow p$. 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.

Given that there is no such morphosyntactic restriction on subordinate 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.

6.2 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 non-commitment 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 *gibiotan*) 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: 457)
 der ez **wer** who it save.PRES.SUBJ
 that [country] must I care with a man
 ‘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-könnte/soll-sollte**’

The indicative mood of the complement would be OHG *fuoren*, MHG *wert*. It is crucial to see that the modal status of the complement is derived from the 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.

6.3 Non-specificity as an epistemic weakener in attributes 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. The conclusion was that (non)veridicality cannot be the trigger to be 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 the usual schema. Mood, i.e. indicative or subjunctive, is licensed under a separate projection in I or T. See (63) and (64) (adapted from Coniglio (2017), the author's (34) and (35)).

- (63) [DP D_[iSpec] ... [CP-Rel ... Mood _[iInd] _[uSpec] ... V_[uInd]] ... NP] *Agree*
 [DP D_[iSpec] ... [CP-Rel ... Mood _[iInd] _[uSpec] ... V_[uInd]] ... NP] → indicative
- (64) [DP D_[iSpec] ... [CP-Rel ... Mood _[iSubj] _[uSpec] ... V_[uSubj]] ... NP] *Agree*
 [DP D_[iSpec] ... [CP-Rel ... Mood _[iSubj] _[uSpec] ... V_[uSubj]] ... NP] → subjunctive

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

- (65) a Hans sucht eine Frau, die blaue Augen **hat/hätte**. *de re*
 (specific referent: the woman is known to exist)
 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

Given that relative clauses are projected as attributes of the D-head, the referent in an appositive relative clause is specific and as such does not license the subjunctive. 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.

- (66) 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 non-finite 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.

6.4 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 convincingly the uniting force of Comp with respect to clausal epistemicity. 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 embedded predicate in German. The clause is a full projection of the valence property 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**/²**komme** ... purpose/
non-veridical
I wish me that Paul comes/PAST SUBJ/PRES.SUBJ ...complement/
veridical *dass*
Thelo ***oti/na** erthi o Pavlos. (Giannakidou
2013: 23)
want.1SG that.IND/that.SUBJ come-3SG.PERF the Paul
'I want Paul to come.'

- (68) Paul meint, dass ... Paul left is/were.PAST SUBJ/
 Roxani gegangen complement/ thinks be.PRES.SUBJ
ist/*wäre/?sei veridical that R.
dass
 O Pavlos nomizi **oti/*na** efije i (Giannakidou
 Roxani. 2013: 23)
 the Paul think.3SG that.IND/ left.3SG the Roxani
 that.SUBJ
 ‘Paul thinks that Roxanne has left.’

In sum, we found two syntactic alternant expressions of (non-)factuality, one in the 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. non-factual-subjunctive) in OHG. We note that both subordinator and verbal mood share C°-potentials, possibly fused under sentential Attitudinality or Force. We shall see that negation will have to be added as a factuality alternant, but at present it is not clear how this fits into an entire Force commonality.

As van Gelderen (2017: her examples (18a–c)) pointed out Modern English has an expanded embedded CP which is free, i.e. can be occupied by topics, for assertives as 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, also non-assertives, the CP is specified for irrealis and therefore never reducible since an irrealis/future marker *for* is present. Factives that 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 for split Cs when decomposed into their parts. But we are not aware of such attempts.

6.5 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

‘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 ietzlîchem, 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)⁹ in (72), we take up the syntactic relations accounting for the trigger of the subjunctive in the complement (or superficial second coordinate). As was argued above (in the 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]

- (72) a **OHG:** $\text{NEG } \{S \text{ V } \dots\} \text{ ni } \{S' \text{ V}'_{\text{SUBJUNCTIVE}} \dots\}$

[CP Neg V<sub>[i-NegI]} ... [C' ni ... Mood<sub>[iSubj] [u-NegI]} ... V<sub>[uSubj]}] ... NP] Agree
[CP Neg V_{[i-NegI]} ... [C' ni ... Mood_{[iSubj] [u-NegI]} ... V_{[uSubj]}] ... NP] → **subjunctive**}}}</sub></sub></sub>

- b **MHG:** $\text{NEG } \{S \text{ V } \dots\} \{S' \text{ ne-V}'_{\text{SUBJUNCTIVE}} \dots\}$

[CP Neg V<sub>[i-NegI]} ... [C' ne ... Mood<sub>[iSubj] [u-NegI]} ... V<sub>[uSubj]}] ... NP] Agree
[CP Neg V_{[i-NegI]} ... [C' ne ... Mood_{[iSubj] [u-NegI]} ... V_{[uSubj]}] ... NP] → **subjunctive**}}}</sub></sub></sub>

- c **MStG:** $\text{NEG } \{S \text{ V } \dots\} \{S' \text{ V}'_{\text{INDICATIVE}} \dots\}$

[CP Neg V<sub>[iNegI]} ... [C' ... Mood<sub>[iInd] [uNegI]} ... V<sub>[uInd]]] Agree
[CP Neg V_{[iNegI]} ... [C' ... Mood_{[iInd] [uNegI]} ... V_{[uInd]]] → **indicative**}}}</sub></sub></sub>

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, 2007; Schrodts 2004). As we have

⁹ The derivations in lines 2 and 3 in (69a–c) follow the mechanism proposed by Zeijlstra (2012). See also Coniglio (2017).

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-factive and 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.

- (73) 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 optativity and evidentiality. The latter is the stronger of the two, primarily in Swiss German. Our search through the historical periods yields this: in (74a–c):
- (74) a In contrast to Old English (van Gelderen 2017), the distinction between veridical (assertive) and non-veridical (non-assertive) is relevant in OHG and MHG, whereas in MStG (again in contrast to Modern English where non-assertives can select subjunctive complements) the subjunctive has no interpretive function in dependent structures (no representation to express optativity and, somewhat regionally constrained (Swiss German), for evidentiality).
- b There is no independence of the complement in any of the historical periods 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, this process has lost momentum in MStG in that dependent clauses in 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 in their own right. However, this tendential potential is far from completely exploited.

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