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Mood swings in West Germanic adverbial clauses: A diachronic comparative analysis

Marco Coniglio, Chiara De Bastiani, Roland Hinterhölzl, Svetlana Petrova

Workshop on Mood Alternation in Adverbial Clauses

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Introduction

- Old High German (OHG), Old Saxon (OS) and Old English (OE) display well-known alternation between the indicative and the subjunctive in adverbial clauses (ACs).
- Previous research is **non-exhaustive**, focusing on **individual** varieties only based on synchronic studies – mostly focusing on complement clauses –, such as Farkas (1985), Quer (2001), Giannakidou (2009), etc. (cf. Schrodtt 1983, Petrova 2008, 2013, Coniglio 2017, Coniglio/Hinterhölzl/Petrova 2018; Mitchell 1985, Vezzosi 1998, van Gelderen 2019).
- A comparative investigation of mood alternation in Old Germanic is still a **desideratum** (cf. Coniglio/De Bastiani/Hinterhölzl/Weskott 2021).
- Present paper: results of **pilot study** as part of a larger comparative project aiming at filling this void.

The overall situation

- Verbal mood in ACs in OHG, OS (*Referenzkorpus Altddeutsch*, Zeige et al. 2022) and in OE (*YCOE*, Taylor et. al 2003).
- All three varieties share a ratio of appr. **65-70% of IND** and **30-35% of SUBJ** in ACs, thus revealing a **very similar situation**:

	OHG		OS		OE	
IND	3.130	65%	828	69%	4.242	70,7%
SUBJ	1.682	35%	372	31%	1.761	29,3%
Total	4.812	100%	1.200	100%	6.003	100%

Table 1. Numbers and ratio of IND and SUBJ in ACs in OHG, OS and OE

- SUBJ cannot be regarded as a general mood of dependency but results from other factors

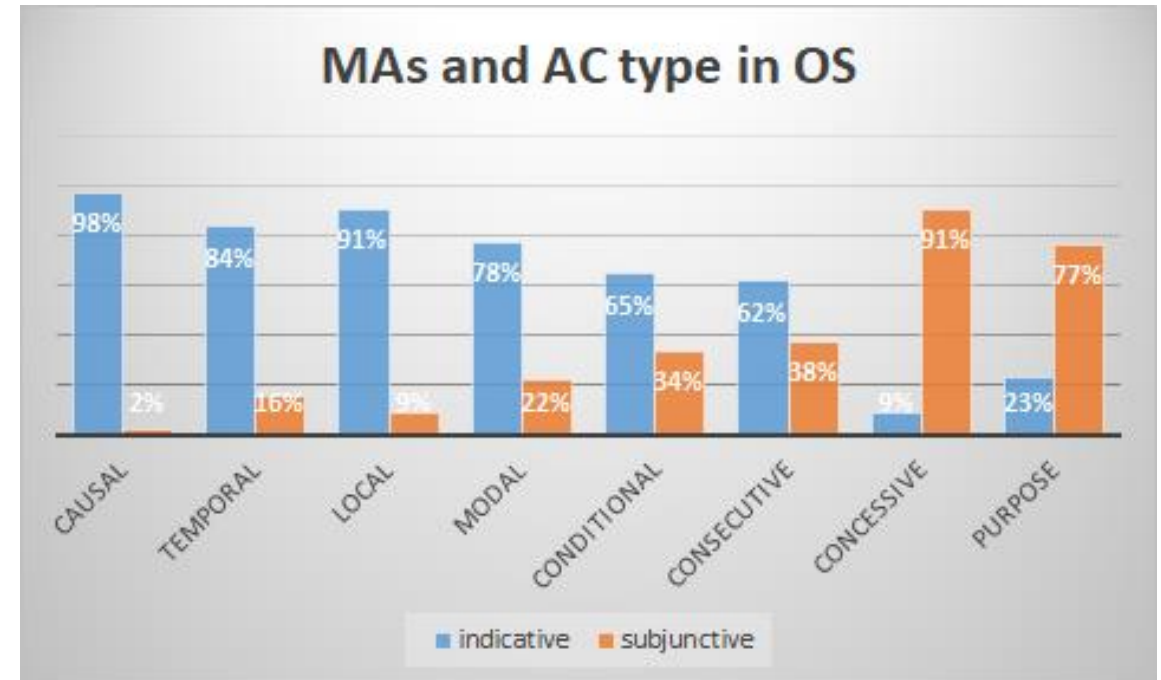
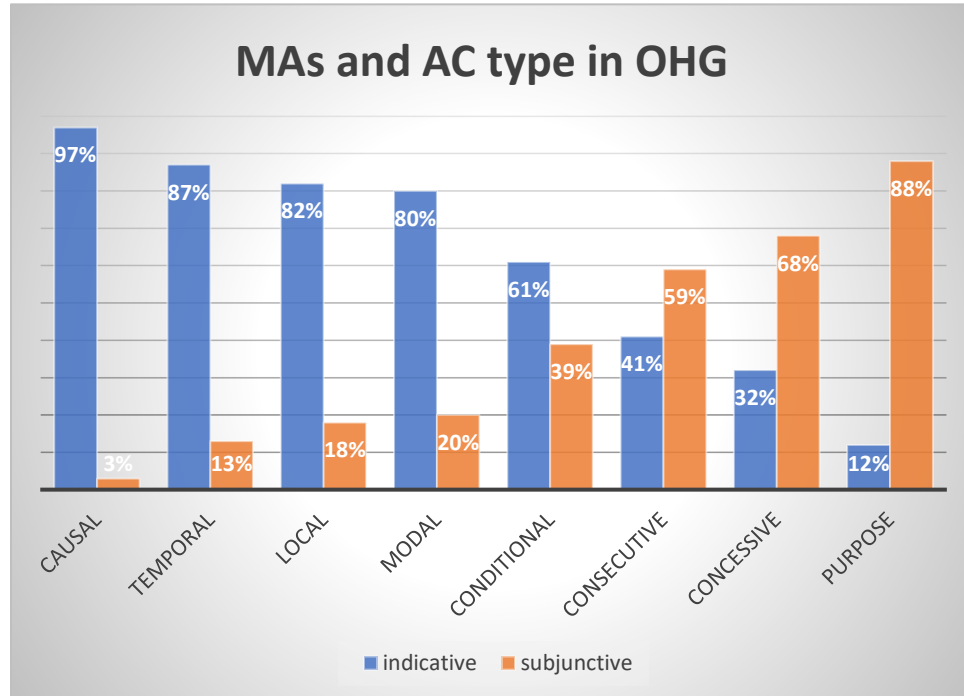
Roadmap

- Factors determining mood alternations in adverbial clauses
 - Factor 1: Semantic type of adverbial clause (OHG, OE, OS)
 - Factor 2: Type of adverbial subordinator (OHG, OE, OS)
 - Interim conclusions
- Specialized complementizer positions (?)
 - Crosslinguistic evidence
 - Evidence for multiple complementizer positions in OHG and OE
- Analysis
- Conclusions

Roadmap

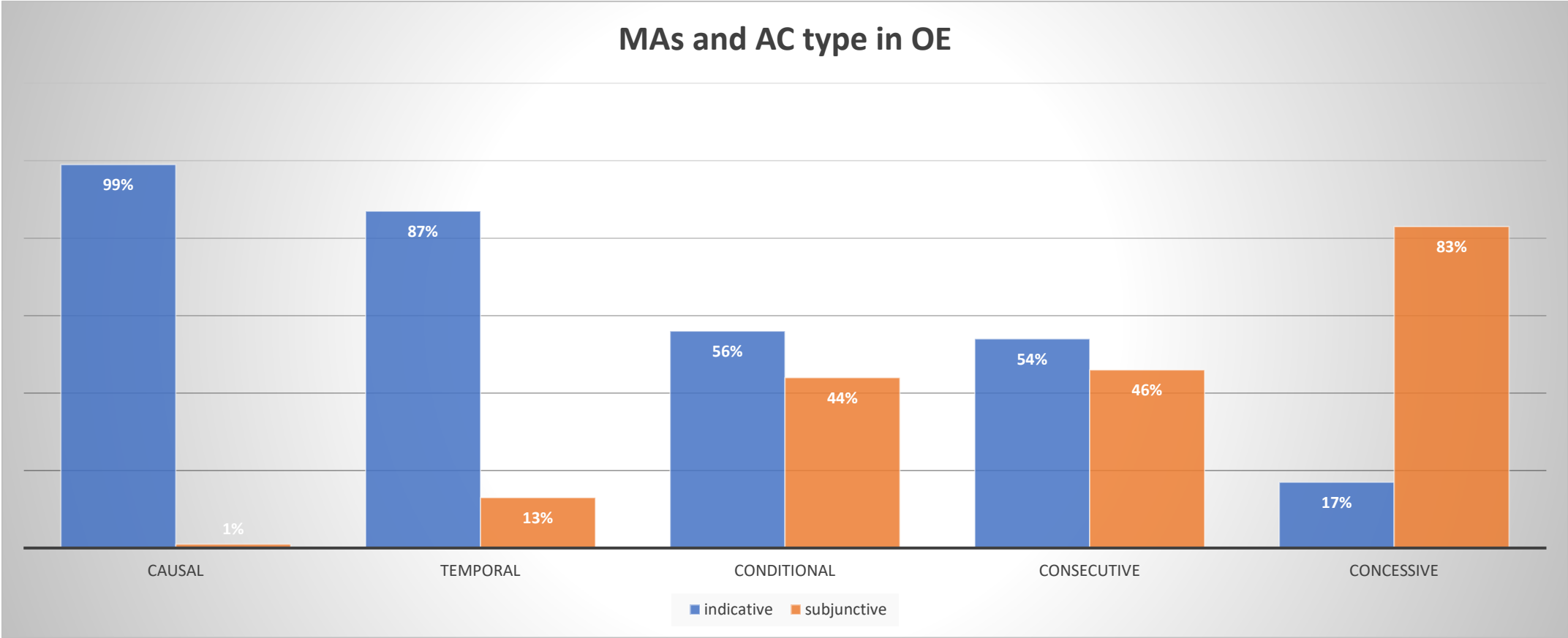
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MAs and AC type in OHG and OS



(Coniglio/Hinterhölzl/Petrova 2018:24)

MAs and AC type in OE



Mood alternations and type of adverbial clauses

- Coniglio et al. (2018) show that IND and SUBJ in OHG correlate with (non-)veridicality, similarly to distributions known from Greek and Romance (Giannakidou 1995 and later).
- Considering also other Germanic languages, SUBJ appears to be particularly frequent in concessive and purpose clauses (with very similar ratios):

	Concessive			Purpose			Temporal		
	OHG	OS	OE	OHG	OS	OE	OHG	OS	OE
IND	31,0%	9,3%	17,4%	10,8%	23,3%	na	87,6%	84,3%	87,0%
SUBJ	69,0%	90,7%	82,6%	89,2%	76,7%	na	12,4%	15,7%	13,0%
Total	100,0%	100,0%	100,0%	100,0%	100,0%	na	100,0%	100,0%	100,0%

Table 2. Distribution of IND and SUBJ in some types of adverbial clauses

MAs in different types of temporal ACs

- In OHG, OS and OE, the SUBJ is practically non-existent in *as/after*-clauses but well-represented in *before*-clauses, which are among the non-veridical contexts described by Giannakidou (1995) for Greek.
- At the same time: different ratios for different adverbial subordinators introducing *before*-clauses.

	OHG	OS	OE
<i>do/tho/đa</i>	0,0%	3,0%	0,6%
<i>er/er/ær</i>	36,8%	41,7%	65,7%
<i>er danne/er than/ær đan đe</i>	58,6%	72,7%	77,7%

Table 3. Percentage of SUBJ in *as/after* vs *before*-clauses in OHG, OS and OE

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General observations

- Mood choice obviously depends on the lexical type of the adverbial subordinator.
- In OHG and OS, concessive subordinators correlate with different verbal mood:

	OHG		OS			OE	
	<i>doh</i>	<i>mit diu</i>	<i>thoh</i>	<i>that</i>	<i>so</i>	<i>ðeah</i>	<i>ðeah ðe</i>
IND	11,6%	100,0%	2,4%	50,0%	100,0%	17,0%	17,5%
SUBJ	88,4%	0,0%	97,6%	50,0%	0,0%	83,0%	82,5%
Total	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%

Table 4. IND vs SUBJ in concessive clauses in OHG, OS and OE

Mood choice and complementizer type in concessive clauses in OHG

- *mittiu* takes only the IND, *thoh* predominantly the SUBJ:

(1) *uuo theser buohstaba uueiz, mittiu er sie ni lerneta*
why DEM letters knows although he them NEG **learned.IND**
‘Why does he know the letters although he did not learn them’ (Tat104, ReA)

(2) *Thaz nezzi dróf thoh ni brást, thoh iro wári sulih lást*
the fishnet at.all though NEG tore although of.them **was.SUBJ** such weight
‘The fishnet did not tear, although it [the fish within] was so heavy’ (Otfv.5.13, ReA)

Mood choice and complementizer type in concessive clauses in OS

- OS: *so* takes only the IND, *thoh* predominantly the SUBJ:

(3) *endi ôc seokan man te gebêleanne, sô ik ina brînan ni tharf*
and also sick.ACC man to heal although I him touch NEG need.IND
'and also to heal a sick man although I do not need to touch him' (Hel_28)

(4) *thoh thu nu an sulicoro pînu sîs*
although you now in such sorrow are.SUBJ
'although you are suffering now' (Hel_66)

Mood choice and complementizer type in conditional clauses in OE

- OE: *gif* takes predominantly the indicative, *butan/buton* the subjunctive:

(5) **Gif** *ðu lufast God þonne fortretst þu þa woruldlican styrunga;*

If you love.IND God then tread you the wordly trouble

‘if you love God, then you tread upon the wordly disturbance’ (cocathom2.o3, ÆCHom_II,_28:228.217.5076)

(6) *Ac wite gehwa to gewisson **buton** he his flæsclican lustas.*

but know everyone to certainty unless he his fleshly lusts

& *galnysse **gewanige:** þæt he ne hylt his cristendom mid rihtum biggenge.*

and wantonness diminish.SUBJ that he NEG holds his Christianity with right observance.

‘But everyone should know for sure that, unless he diminish his fleshly lusts and wantonness, he does not hold his Christianity with right observance.’ (cocathom1.o3, ÆCHom_I,_6:227.86.1108)

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Interim conclusions

- OHG, OS and OE share not only the **same ratio** of IND and SUBJ in ACs but also the **same factors** determining the selection of mood:
 - the semantic class of the subordinate clause, in line with non-veridicality as a trigger of SUBJ in particular types of ACs crosslinguistically;
 - the lexical type of adverbial subordinator.
- **Follow-up** question: Why do these complementizers select different mood forms in one and the same type of AC?

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Crosslinguistic evidence

- Several studies (mainly focusing on complement clauses) show the presence of **Complementizer Doubling** in (Early) Italian (Paoli 2003, Ledgeway 2005, Munaro 2016), French (Dagnac 2012), Spanish (Villa-Garcia 2012, González i Planas 2014), Portuguese (Mascarenhas 2007), Slovenian (Plesnicar 2020).
- Recent studies on Cimbrian argue for the existence of **specialized complementizer positions** for the declarative complementizers *aʒ*+SUBJ and *ke*+IND (e.g. Bidese/Padovan/Tomaselli 2012, 2013, Bidese 2017).

Crosslinguistic evidence

Complementizer Doubling in Old Italian (Munaro 2016: 215):

(7) ... *però vi priegho in lealtade e fede **che, se** ttue vuoi*

but you pray in loyalty and faith that, if you want

*del mio avere, **che** ttu ne tolghi.*

of my have that you CL take

‘...therefore I ask you in loyalty and faith that, if you want my belongings, that you take some’
(Libro della distruzione di Troia, p.155, ll. 26-27)

Complementizer Doubling in Modern Portuguese (Munaro 2016: 219)

(8) *Acho **que se** lbe ligasses **que** tudo se resolveria.*

think that if him/her called that all itself solve

‘I think that if you called him/her everything would turn out fine.’

Crosslinguistic evidence

- **Two complementizers in Cimbrian** (Bidese 2017: 134, 135)

(9) *I bill/sperar, azz=ar net au=höar zo spila.*
I want/hope that=he not PART=stops.SBJV to play.FL
'I want /hope that he will not stop playing'

(10) *si khött, ke dar höart nèt au zo spila.*
she says that he stops.IND not part to play.FL
'She says that he will not stop playing'

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Evidence for complementizer doubling in OHG

(11) *thaz thar ib bin thaz ir sit*

that where I am that you **are.SUBJ**

‘that you may also be where I am’ / Lat. *ut ubi sum ego / & uos sitis* (Tat_162, ReA)

(12) *in duom quam ib in thesa uueralt*

in judgement came I in this world

thaz thie dar ni gisehent gisehen,

in.order.that those Part Neg see.3PlIndPres **see.SUBJ**

in thie dar gisehent daz sie sin blinte

and those Part see.Ind that they **are.SUBJ** blind

‘I came to judge, in order that those who do not see become seeing and those who see become blind’ / Lat. *In iudicium ego In hunc mundum ueni/ ut qui non uident uideant. / & qui uident caeci fiant* (Tat_133, ReA)

Evidence for complementizer doubling in OS

- (13) *Hôriad nu huô thie blindun, [sîður im gibôtid uuarð, that sie*
listen now how the blind after them healed was that they
sunnun liobt gesehen môstun], huô si thô dâdun
sun.GEN.SG light see.INg must.PAST how they then did.IND
'Listen how the blind people behaved after they were healed such that they could see the light of the sun'
(DDD-AD-Heliand_1.1 > Hel_44 (edition 632 - 659))

Evidence for complementizer doubling in MHG

(14) *Unf saget d̄ch div heilige s̄chrift.*

us tells also the holy scripture

daz *zeder wile do adam daz uerboten obiz eze.*

that at-the time when Adam the forbidden fruit eat.SUBJ

daz *z̄ der selben wile der heilige krist. an dem*

that at the.Dat same time the holy Christ on the

heiligen krivce mit gallin unt mit ez̄ziche gitrenkit w̄rde.

holy cross with gall and with vinegar drunk was

‘The Holy Scripture also tells us that at the time when Adam ate the forbidden fruit, the Holy Christ was given to drink gall and vinegar on the Holy Cross’ (13_1-bairalem-PV-G > M165-G1)

Left dislocation and adverbial resumption in that-clauses im MHG

- Adverbial resumption and left dislocation in MHG in embedded clauses:

(15) *Unſ ſaget ouch div heilige ſchrift.*

us tells also the holy scripture

daz zeden ſelben ſtunden. *do der erſte man gischaffen wart* [...]

that at-the same hours when the first man created was

zeder ſelben wile **wart** *der gotiſ ſiñ enphangen uon miner fr̄wen*

at-the same time was the God's son conceived by my Lady

‘The Holy Scripture also tells us that at the same time when the First Man was created [in Paradise], the Son of God was conceived by my Lady’ (13_1-bairalem-PV-G > M165-G1)

Evidence for higher complementizers

- We have reason to assume that there is an even higher position above Force

(16) *For nahte he tealde ænig þincg to biddenne buton*
for naught he accounted any thing to bid except
*gesihþe. **for ðan þeah** se blinda sum þinc hæbbe: he ne*
sight because though the blind some thing has.SUBJ he not
mæg buton leohte geseon þæt he hæfd.
may without light see what he had

‘For naught he accounted to ask for anything except for eyesight. Because, though the blind man had something, he could not see what he had without light.’ (cocathom1.o3, ÆCHom_I_10:262.107.1900)

Evidence for higher complementizers

- We have reason to assume that there is an even higher position above Force

(17) *Abur quidu ib iu, uuanta oba zuuene fon iu*
again tell I to.you that if two of you
gizuftigont sib obar erdu fon eogilicheru rachu, so uuelichu so sie pittent,
unite themselves above earth of any thing whatever they ask
uuesent in fon minemo fater ther dar in himile ist
are.SUBJ to.them by my father who PRT in heaven is

‘I am telling you again that if two of you unite above the earth because of anything, whatever they ask, it will be given them by my father.’ (T_Tat98)

Evidence for activation of higher C-domain

- Additional methodological consideration: contrastive elements above nominative subjects in embedded clauses activating the higher left periphery of the clause

(18) *Únde iz náhtêt. êr an hímele sténnen skînen*

and it becomes.night before on sky stars shine.SUBJ

‘and it becomes night before the stars are shining in the sky’ / Lat. *Ac nox funditur desuper in terram . nondum uenientibus astris celo* (N_DeCon_I_13-15, ReA)

Evidence for activation of higher C-domain

- Contrastive material above the nominal subject:

(19) *Þæt fifte wite wæs cwealm on heora orfe.*

the fifth plague was slaughter on their cattle

swa þæt on ðam lande fornean nan orf ne

so that on the land almost no cattle not

belaf. buton Israheles þe ansund gestod;

remained.IND except Israhel.GEN that sound stood

‘The fifth punishment was death on their cattle, so that on the land there remained almost no cattle, except for that in Israhel, that remained sound.’ (cocathom2.o3, ÆCHom_II,_12.1:112.64.2418)

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Formal properties of the C-Layer

- The twofold explanation for the different distribution of the SUBJ in the different ACs must be linked to the formal properties of the C-Layer, which both
 - 1) determines the **semantic class** of the AC
 - 2) and hosts the **subordinating element**.

Previous Analysis

- Coniglio/Hinterhölzl/Petrova (2018: 30) claimed that an **Agree** operation affecting different **heads** in the clausal spine (and ultimately a C-head) is responsible for the licensing of the IND/SUBJ mood in ACs (cf. Ledgeway 2012 for a similar approach).
- Following Giannakidou (2009 et seq.), **(non)-veridicality** is argued to play a crucial role in the licensing of MAs in ACs (cf. Zeijlstra for the notion of Upward Agree):

- (20) [CP1 ... [CP2-Adv C[iVerid] ... Mood [iInd] [uVerid] ... V[uInd]]] Agree
 [CP1 ... [CP2-Adv C[iVerid] ... Mood [iInd] [~~uVerid~~] ... V[~~uInd~~]]] → indicative
- (21) [CP1 ... [CP2-Adv C[i¬Verid] ... Mood [iSubj] [u¬Verid] ... V[uSubj]]] Agree
 [CP1 ... [CP2-Adv C[i¬Verid] ... Mood [iSubj] [~~u¬Verid~~] ... V[~~uSubj~~]]] → subjunctive

Need for refinements

- This analysis very well captures the fact that **different semantic types of ACs license mood alternations** and that the **types of the subordinating conjunctions alone** are sometimes able to determine the verbal mood independently of the semantics of the AC (cf. Rivero 1988, Calabrese 1993, Damonte 2010, Ledgeway 2005, 2012, Giannakidou 2009, Padovan 2011).
- However, this previous analysis does not consider crosslinguistic facts showing that subordinating elements occupy **different positions in the C-Layer**.

Refinement of the previous analysis

- Recent theories proposed for other Germanic and non-Germanic languages (which mainly concentrate on complement clauses) assume that the subordinating elements of ACs target **different head positions** in the C-Layer (cf. Bhatt/Yoon 1991, Roussou 2000, Grewendorf/Poletto 2011, Bidese/Padovan/Tomaselli 2012 a.o.).
- We have evidence for **different complementizers** endowed with different features and linked to different selection properties. The different lexical types of complementizers target/are merged in **different complementizer slots/projections**.

Different complementizer positions

- Evidence for two possible complementizer positions, and possibly one for external complementizers:

(22) [π P COMP₁ ... [HT(?) ... [ForceP COMP₂ ... [ContrP ... [Mood/FinP COMP₃ [TP ... [VP ...

	COMP ₁	COMP ₂	COMP ₃
OHG/OS/OE	<i>wanta/for đan/ ...</i>	<i>do/đa</i>	<i>doh/đeah</i>
Cimbrian	<i>ke</i>		<i>až (ke?)</i>
Italian	<i>(per)ché</i>	<i>che</i>	<i>(che)</i>
etc.			

Table 5. Types of complementizers in different languages

Formal properties of the C-Layer

- The different complementizer projections have different **impact on the selection of verbal mood**:
 - The highest complementizer is a pure marker of dependency and has no selection properties within the AC.
 - The intermediate complementizer licenses a definite interpretation of the adverbial clause indicated by indicative mood (cf. Farkas 1992).
 - The lowest complementizer licenses an indefinite interpretation of the adverbial clause indicated by subjunctive mood

Analysis

- We will explicate this proposal with the alternation in *before / after* clauses
- Temporal anchoring: matrix clauses are anchored with respect to the utterance time, embedded clauses are mostly anchored with respect to event denoted by the matrix verb

(23) *John said that Peter (already) left*

Analysis

- However, embedded clauses are also anchored with respect to the utterance situation, at least if the embedded predicate is marked with the indicative mood, as the contrast between (29a) and (29b) indicates.

- (24) a. *John said (ten days ago) that Peter will come *yesterday / tomorrow*
b. *John said (ten days ago) that Peter would come yesterday / tomorrow*

Analysis

- We assume a situation-based approach to tense:

(25) $\text{Past}(s_1, s_2) := s_1 \text{ precedes } s_2$

- Furthermore, we assume that also adverbial complementizers express relations between situations:

(26) $\text{before}(s_1, s_2) := s_1 \text{ precedes } s_2$

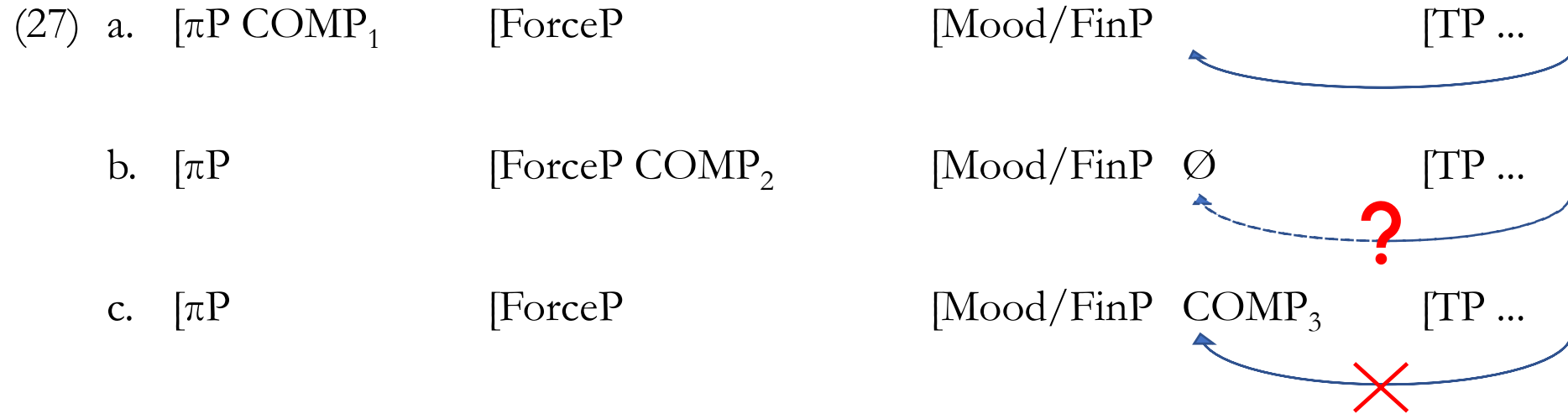
$\text{after}(s_1, s_2) := s_1 \text{ follows } s_2$

Analysis

- We assume that textual values are assigned in FinP , hence the reference situation argument must move to $[\text{Spec}, \text{FinP}]$ and the complementizer that takes it as an argument must be inserted or moved to Force^0 , while an indefinite situation argument can remain in $[\text{Spec}, \text{TP}]$, allowing for the insertion of the complementizer in Fin^0 .

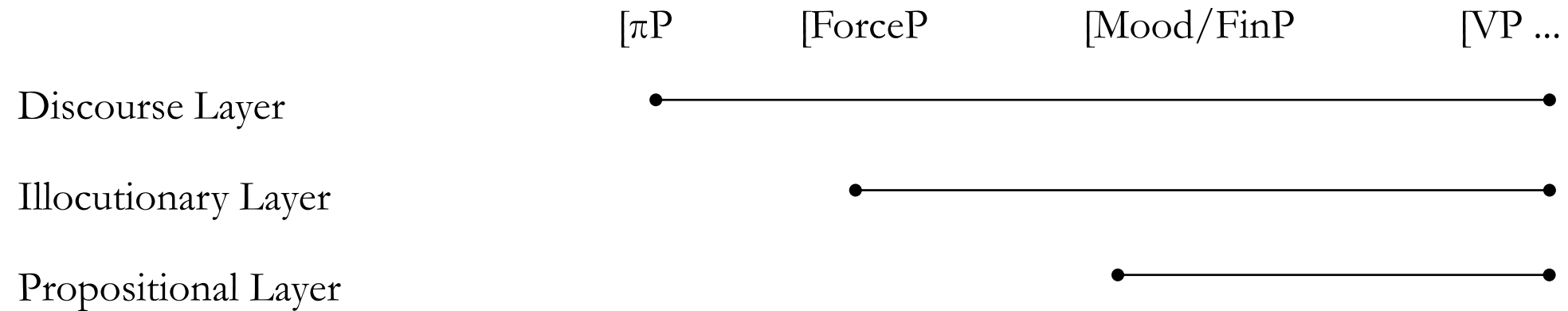
Types of complementizers and verb movement

- **Verb movement (OHG):**



- But the lower complementizer can move to Force when the higher left periphery is activated (e.g. contrast). Also cf. Coniglio, De Bastiani, Hinterhölzl, Weskott (2021) for an empirical survey of OHG and OE.

Layers involved in the licensing of Mood



- The **complementizer in the IND** always implies the presence of the Illocutionary Layer.
- The **complementizer in the SUBJ** normally indicates the absence of the Illocutionary Layer, but allows its activation by special information-structural processes (see next slide).

Layers involved in the licensing of Mood

- For example, in Modern German verb-final subordinate clauses, modal particles are excluded because of the default absence of the illocutionary level (22a) (cf. Coniglio 2011); but if this level is activated by a special focus, modal particles are also possible in subordinate clauses, as in (22b) (from Krifka and Hinterhölzl 2014):

- (28) a. * *Wenn **wohl** Peter kommt, wird die Party lustig.*
If Peter PRT comes, the party will be fun.
- b. *Wenn **wohl** nur **der PEter** kommt, wird die Party langweilig.*
If PRT only the PEter comes, the party will be boring.

Advantages of the analysis

The analysis explains:

- the interaction – from a West Germanic comparative perspective – between the **semantics of the AC and the type of subordinating element** in licensing mood alternations.
- the fact that both heads can be realized simultaneously or that **intervening materials** (for instance contrasted XPs) are realized in the C-layer.

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Conclusions

- We provided first insights into a corpus-based comparative investigation of MAs in ACs in OHG, OS and OE.
- We observed that next to well-known semantic properties related to (non)-veridicality the lexical type of the complementizer plays a role as well.
- We presented evidence for different complementizer projections in the languages under investigation;
- We proposed an analysis explaining how MAs can be derived from a structure involving different merging sites of complementizers that correspond with the definite/indefinite interpretation of the situation denoted by the adverbial clause.

Thank you for your attention!