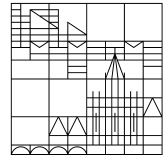


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## COMPARATIVE GERMANIC SYNTAX WORKSHOP 34 **CGSW 34**

University of Konstanz  
June 14-15, 2019

Main Organizers:  
*Andreas Trotzke*  
*George Walkden*

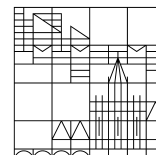
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COMPARATIVE GERMANIC SYNTAX WORKSHOP 34

**CGSW 34**

University of Konstanz / Level K7

June 14-15, 2019

**June 14, 2019**

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CHAIR: George Walkden

09:30 - 10:30

Elly van Gelderen

*A Modal Cycle and thoughts on third factors*

10:30 - 11:05

Alexander Pfaff

*1000 years apart: The noteworthy journey of a Norse demonstrative*

11:05 - 11:35

Coffee break

CHAIR: Andreas Trotzke

11:35 - 12:10

Gisli Runar Hardarson

*Processing violations in compound structures*

12:10 - 12:45

Sigríður S Sigurdardóttir

*Icelandic V3 orders with temporal adjuncts: A comparison with Standard Dutch and West Flemish*

12:45 - 14:00

Lunch break

CHAIR: George Walkden

14:00 - 14:35

Gerrit Kentner & Isabelle Franz

*Complement clause structure immune to phonological influences in German but not in English*

14:35 - 15:10

Gianina Iordachioaia

*Event and argument structure in English zero-derived nominals*

15:10 - 15:45

Alexandra Rehn

*Feature marking in German DPs*

15:45 - 16:00

Business meeting

16:00 - 16:30

Coffee break

CHAIR: Theo Marinis

16:30 - 17:05

Einar Freyr Sigurðsson, Iris Nowenstein & Sigríður Sigurjónsdóttir

*Merge before Agree: Acquiring datives in Insular Scandinavian*

17:05 - 17:40

Ankelien Schippers, Margreet Vogelzang & David Öwerdieck

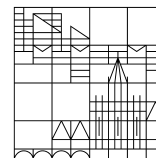
*COMP-trace effects in German: The role of processing*

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17:40 - 18:15

Julia Bacskai-Atkari  
*English relative clauses in a cross-Germanic perspective*

19:30 -

Conference dinner at *Stromeyer – Die Bleiche*

### **June 15, 2019**

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CHAIR: Andreas Trotzke

09:30 - 10:30

Jon Sprouse  
*Experimental syntax and three case studies in movement*

10:30 - 11:05

Gerard Kempen & Karin Harbusch  
*Information-structural effects of the accessibility of finite verbs: Corpus evidence from spoken English, Dutch, and German*

11:05 - 11:35

Coffee break

CHAIR: Josef Bayer

11:35 - 12:10

Ellen Brandner  
*On 'to' in (some) infinitival complements*

12:10 - 12:45

Elisabeth Witzenhausen  
*Paratactic negation in the history of German*

12:45 - 14:30

Lunch break & Poster session

CHAIR: Tanja Kupisch

14:30 - 15:05

Theresa Biberauer & Erin Pretorius  
*Variation triggering remorphologisation in Kaaps*

15:05 - 15:40

Kari Kinn  
*Pragmatised determiners in American Norwegian*

15:40 - 16:15

Melanie Hobich  
*From head to phrase: The diachrony of was für*

16:15 - 16:45

Coffee break

CHAIR: Andreas Trotzke & George Walkden

16:45 - 17:20

Theresa Biberauer, Cora Pots & Erin Pretorius  
*Auxiliary developments: A comparative perspective on Modern Afrikaans*

17:20 - 18:20

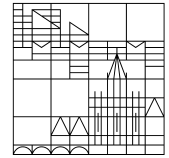
Terje Lohndal  
*Islands in Scandinavian and beyond: Theoretical implications*

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**Poster session** (June 15, 2019; 12:45 - 14:30)

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Markus Bader:	<i>Modeling syntactic variation with weighted grammars: A case study of auxiliary inversion in German verb clusters</i>
Anne Breitbarth:	<i>Adversative aber in adverbial clauses in historical German</i>
Paula Fenger & Gisli Runar Hardarson:	<i>A n(umber) of things: Linking morphemes in Dutch and German</i>
Lutz Gunkel & Jutta Hartmann:	<i>Prepositional object clauses in German and Dutch</i>
Andrew Murphy:	<i>Rightward verb movement in German: A reappraisal</i>
Marjolein Poortvliet:	<i>Seems to be one path: The diachronic syntactic development of Germanic modal copular verbs</i>
Vera Lee-Schoenfeld & Nicholas Twiner:	<i>German passives and English benefactives: The need for non-canonical accusative case</i>
Peter Svenonius	<i>The prepositional nature of the North Germanic complementizer</i>
Joanna Wall:	<i>Have-doubling and the grammaticalization of have in West Germanic</i>

## A Modal Cycle and thoughts on third factors

Elly van Gelderen

A new set of modals is appearing in contemporary English. The epistemic modals with perfect *have* are forming a new class ending in schwa, often rendered *mighta*, *coulda*, *woulda*, *shoulda*, and *musta*. They can be used with an additional *have*, as in (1), or without a (present) perfect meaning, as in (2).

- (1) I **shoulda** just **have** kept her as a friend. (Twitter 2019)  
(2) Kylie you **shoulda** go have a feast! (Twitter 2019)

The phonological reduction of *have* to schwa aligns this new modal with a whole set of semi-modals (*wanna*, *oughta*, *hafta*, etc) also ending in *-a*. The frequent doubling in (1) provides speakers with examples of an infinitive after the modal ending in *-a*, affecting which (interpretable) features appear after the new modal. The stages of change are given in Figure 1.

Stage 1		Stage 2		Stage 3		Stage 4
would have	>	would a	>	woulda	>	woulda have/INF
M Aux-Perf		M Aux-Perf		M=Aux-Perf		M Perf/V
[u-mood]		[u-mood]		[u-asp]		[u-mood]
raising to T		raising to T		raising to T		raising to T
raising to C		raising to C		no raising to C		no raising to C

Figure 1: The Modal Cycle

I describe various characteristics of core modals, new modals, and affix hop in terms of Minimal Search, a third factor principle: higher uninterpretable features look for lower interpretable ones.

Epistemic and deontic modals occupy one of five M position (Cinque 1999: 106) and optionally move to T. If modals (and other auxiliaries) expand the TP-layer in structure, do indeterminate structures arise (Chomsky et al 2016) that stop further movement to C? Double modal varieties, as in (3), provide some evidence that modals move only once in a phase. For *might* in (3) to move to T and C would violate indeterminacy and that's why *could* does.

- (3) **Could** you **might** ~~might could~~ go to the store for me? (Hasty 2012: 124)

I also test indeterminacy in expanded TPs using quantifier-float, with data from native speakers and COCA. Quantifiers are generally not allowed in Spec v\*P when a progressive or passive auxiliary is present and this is due to labeling problems. However, intermediate merges (before Spec TP) are allowed so this is puzzling. Finally, I examine proposals for phase extensions for multiple auxiliaries and how that works with floating quantifiers.

## *1000 years apart: the noteworthy journey of a Norse demonstrative*

Alexander Pfaff  
University of Oslo / ILOS  
a.p.pfaff@ilos.uio.no

In this talk, I will examine the development of the element *(h)inn* from a Proto Norse demonstrative to the Modern Icelandic definite – free and suffixed – articles, with a particular focus on the Old Norse article system, but also with a glimpse at the development in the Mainland Scandinavian languages. I will address synchronic and diachronic, theoretical and empirical aspects (along the way presenting some novel findings drawing on data from IcePaHC and MÍM).

I will first and foremost challenge the widespread assumption that the Old Norse suffixed and free articles in examples like (1) are merely two surface varieties of the same element. On that view, “the” (one and only) definite article is a clitic element (with a free and a bound variant) occupying a head position in the nominal extended projection (e.g. Roehrs and Sapp 2004; Faarlund 2004, 2007, 2009; Lohndal 2007; Laake 2007).

Instead, I will argue for a distinction that does not neatly align with the traditional morpho-phonological distinction (free vs. suffixed). I will provide arguments for an *adjectival article* (an idea that has been proposed e.g. by Nygaard 1906; Skrzypek 2009; Perridon and Sleeman 2011; Stroh-Wollin 2009; Börjars et al. 2016), which may occur as a free or a suffixed morpheme, (1b-d), and which forms a constituent with an adjective to the exclusion of the noun (it is an element of AP, not of xNP). This assumption is motivated by a range of observations that prove problematic for the one-article approach:

- the free (but not the suffixed) article requires the presence of an adjective: *\*(h)inn maðr*,
- the sequence [*(h)inn* + weak adjective] is in complementary distribution with strong adjectives, e.g. in the context of possessives, (2), (to a lesser extent also demonstratives),
- the two can be coordinated, (3),
- differently from genuine determiners, *(h)inn* occurs ‘per adjective’ rather than ‘per noun phrase’, (4).

In addition, I will argue for a *nominal article*, which only occurs as a bound morpheme, (1a), which occupies a low n<sup>0</sup> in the nominal spine and has scope over the noun only. This second assumption allows us, moreover, to account for

- double definiteness: *(h)inn gamli maðr-inn*,
- the virtual absence of the Modern Icelandic standard pattern: *\*gamli maðr-inn* (this last point is in and of itself a novel and interesting empirical observation).

To the contrary, for Modern Icelandic, it has been convincingly shown that free and suffixed articles really are just two surface manifestations of one underlying article element (e.g. Magnússon 1984; Sigurðsson 1993; Pfaff 2015; Harðarson 2016; Ingason 2016). To the extent that both views can be defended (for different stages of the language), it follows that the two sometime distinct elements – free and suffixed articles – must have structurally and categorially coincided, i.e. merged into one element at some point. Considering further that both originally started out from the same element *(h)inn* some time(s) during the Viking period, this development reveals a rather unusual grammaticalization biography: *one* element, gives rise to *two* distinct elements, but a thousand years or so later, these two elements coincide once more as *two* manifestations of *one* element.

In order to provide a contrast foil for *(h)inn*, I will finally take a brief look at the development of the distal demonstrative *sá* and its function as adjectival article in the history of Icelandic and Mainland Scandinavian.

- |     |                                    |                                     |
|-----|------------------------------------|-------------------------------------|
| (1) | a. maðr -inn<br>man -DEF           | c. maðr (h)inn gamli<br>man DEF old |
|     | b. maðr -inn gamli<br>man -DEF old | d. (h)inn gamli maðr<br>DEF old man |

- (2) a. þín [<sub>AP</sub> hin mesta] gæfa  
           your     ART greatest.WK luck  
       b. æsing sinn [<sub>AP</sub> hinn mikla]  
           fury POSS     THE great.WK  
       c. sinni [<sub>AP</sub> fullkominni] vináttu  
           POSS     perfect.STR friendship  
       d. öxi sína [<sub>AP</sub> forna]  
           axe POSS     old.STR
- (3) hann var [<sub>AP</sub> hinn vasklegasti] og [<sub>AP</sub> fullur af ofurkappi]  
       he was     THE bravest.WK and     full.STR of over-eagerness  
       ‘he was very brave and full of over-eagerness’
- (4) þeim [ hinum smám ] og [ hinum fám ] skipum  
       those THE small and THE few ships  
       ‘those few small ships’

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## Processing Violations in Compound Structures

*Gísli Rúnar Harðarson (University of Iceland)*

This paper reports the findings of two experiments investigating the potential processing cost of structural configurations in three-part compound nouns in Icelandic with a special focus on violations of bracketing restrictions that are motivated by observational data and speaker judgements. The findings indicate that although structural configurations do have an effect in processing, violations to bracketing restrictions do not have additional effects. This lack of effect is argued to be due to low-cost repair strategies in processing.

**Background:** Recent research into Germanic compounds, motivated by observational data and speaker judgments, indicates that compound formation is subject to bracketing restrictions that are conditioned by the size of the non-head element (Harðarson 2016; 2017; Fenger & Harðarson 2018). These are exemplified by the Icelandic examples below. When an uninflected non-head element linearly precedes an inflected non-head element, only interpretations compatible with left-branching structures (LB) are available, (1). The inverse pattern is observed when the uninflected non-head element linearly follows the inflected one. Then only interpretations compatible with a right-branching structure (RB) are available, (2).

- |     |    |  |    |                                 |
|-----|----|--|----|---------------------------------|
| (1) | a. | [[barn# fjall-a#] vagn]                | b. | * [barn# [fjall-a# vagn]]       |
|     |    | child# mountain-GEN# wagon             |    | child# mountain-GEN# wagon      |
|     |    | ‘a wagon suitable for young mountains’ |    | ‘a mountain wagon for children’ |
| (2) | a. | * [[barn-a# fjall#] vagn]              | b. | [barn-a# [fjall# vagn]]         |
|     |    | child-GEN# mountain# wagon             |    | child-GEN# mountain# wagon      |
|     |    | ‘a wagon suitable for young mountains’ |    | ‘a mountain wagon for children’ |

When both non-head elements are either inflected or uninflected, the compounds are ambiguous between LB and RB. This effect was argued to be due to compounding targeting different layers in the structure of the noun, which contains at least the structure in (3), the bare stem, N, and a head necessary for the realisation of inflection,  $\varphi$ . Bare stems, of size N, must attach at the layer headed by N, whereas inflected non-heads, of size  $\varphi$ , must attach at the layer headed by  $\varphi$ .

- (3) [ [ N ]  $\varphi$  ]

The two questions that are to be addressed here are a) would violations of the type shown in (1b) and (2a) result in a processing delay, and b) will different structural configurations, i.e. presence or absence of inflection and branching, show differences in reading times (RT).

**Methods:** Two self-paced reading tasks were administered. The design was a 2 x 2 x 2 latin square with 18 lists each comprised of 8 sentences. Each item was prefaced with a flashing introductory sentence which was intended to induce an interpretation consistent with either LB or RB. In the first experiment all compound words were broken up and presented element-by-element and in the second experiment the compound were presented as a whole. The expectation is that if violations to the Matching Condition do result in a processing delay, a three-way interaction should be observed where the violations lead to a significantly higher RTs.

**Experiment 1, results:** In regions 5–7, consisting of the compound noun, no effects crossed the significance threshold. There was a marginally significant effect for the second constituent at regions 6 ( $p=.07172$ ) and 7 ( $p=.0675$ ) with higher RTs in case of an uninflected element. It is also worth noting that, although the effect was not significant, there was an interaction

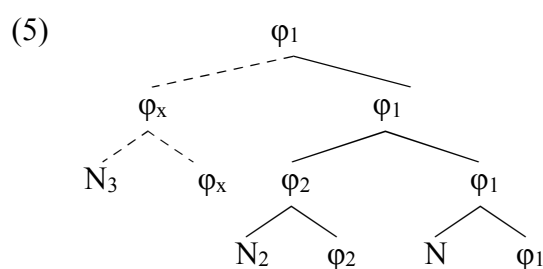
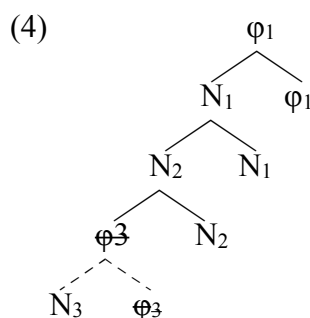


between the two non-head elements at region 7 with a p-value much lower than all other interactions ( $p=.092491$ ), where RTs were higher in case of uninflected non-heads.

Following the compound, there was a significant interaction between branching and the first constituent at region 8 ( $p=.04712$ ), with higher RTs in case of uninflected first constituent in LB, but lower in RB. There were also significant effects of the second constituent at regions 9 ( $p=.01762$ ) and 10 ( $p=.03894$ ) with higher RTs in case of uninflected non-heads. There was also a marginally significant interaction between branching and the first constituent in region 10 ( $P=.03894$ ) with higher RTs in case of LB with an uninflected first constituent. There was no additional delay in case of violations to the Matching Condition.

**Experiment 2, results:** In region 5, no effects crossed the significance threshold. It is worth noting, however, that two effects came considerably closer to reaching significance: an interaction between branching and the second modifier ( $p=.1754$ ) and a three-way interaction between all factors ( $p=.2708$ ), with all other effects at  $p>.69$ . At region 6 there was a marginally significant three-way interaction ( $p=.06477$ ). This region also showed an inverse curve compared to the corresponding region in experiment 1. There were no significant effects at regions 7–8. There was no additional delay in case of violations to the Matching Condition.

**Discussion:** Although the structural configuration of the compound does appear to have some effect, there were no additional delays for the illicit structural configurations. The higher RTs for uninflected non-heads may be an effect of frequency as genitive compounding is much more common than stem compounding in Icelandic. The lack of effects of the violation of the Matching Condition, however, may be the result of ease of correction. It is known that certain violations of grammar do not result in a processing delay (e.g., Crain & Fodor 1986; Duffield et al. 2009) and are sometimes read faster than grammatical sentences (e.g., Staum & Sag 2007). Furthermore, ease of correction has been shown to affect acceptability judgements (e.g., Frazier 2014 and references cited therein). With that in mind, the absence of a grammaticality effect in these experiments is less surprising given how little repair is necessary. (1b) and (2a) are structurally ungrammatical, however, as is evident from (1a) and (2b), the linear string is not. The repair then only needs to apply to the structural configuration without affecting the linear order. This could be achieved in one of two ways. Either by inserting  $\phi$  onto the uninflected modifier,  $\phi_x$  in (5), or by deleting the  $\phi$  from the structure of the inflected modifier, (4). Both approaches offer the possibility of immediate repair for the the respective violations. In case of (1b), the left branching structure, deletion, (4) would allow the correction to be applied immediately as  $N_3$  is attached to the structure rather than building the structure and adjusting at a later point. Likewise, in case of (2a), insertion, (5), would allow for immediate repair over deletion.



# Complement clause structure immune to phonological influences in German but not in English

Gerrit Kentner & Isabelle Franz

Finite complement clauses (CC) in German and English come in two varieties, viz. i) those that are introduced by a complementiser (hence introduced CC) and ii) those that forego a complementiser (unintroduced CC). In German, introduced CCs display verb-final syntax, which is characteristic of subordinate clauses in German. The word order of unintroduced CCs (a.k.a dependent main clauses; Auer 1998) corresponds to the syntax of simple declarative clauses with the tensed verb in second position (V2). English, in contrast, does not show a word order difference between introduced and unintroduced CCs, apart from the presence or absence of the complementiser.

Several studies on English suggest that the choice between introduced and unintroduced CCs is, among other things, conditioned by phonology: Jaeger (2006) and Lee & Gibbons (2007) suggest that speakers tend to omit the unstressed complementiser when the word at the top of the CC starts in an unstressed syllable (avoidance of stress lapse). Walter & Jaeger (2005) show a clear effect of phonological identity avoidance (OCP): if the top of the CC has the same word form as the complementiser, the CC is preferably unintroduced (avoidance of double *that* sequences).

By means of a language production experiment and two corpus studies we show that the choice between introduced and unintroduced CCs in German is immune to phonological influences of the type found in English.

## Experiment 1a and 1b: Recalled language production (modelled on Lee & Gibbons 2007)

We presented participants with 32 written test sentences like (1) or (2), with 8 different embedding verbs that allow for both introduced and unintroduced CCs (*denken, finden, glauben, hoeren, hoffen, meinen, sagen, wissen* 'think, find, believe, hear, hope, reckon, say, know'). Participants were asked to recall each sentence after a distractor task. In Exp 1a (32 participants) the distractor task was recalling another (unrelated) sentence; in Exp 1b (32 participants) it was solving a simple arithmetic task. The 8 conditions systematically varied in terms of the rhythmic environment at the clause boundary. Based on the results by Lee & Gibbons, we predicted more recalled CCs introduced by unstressed *dass* when the embedding verb ends in a stressed as opposed to unstressed syllable, and when the CC subject started in a stressed as opposed to unstressed syllable. Conversely, we expected more unintroduced CCs when syllables around the clause boundary were unstressed.

(1) Felix glaubt(e), dass (Nádja/Nadine) den Brief geschrieben hat.

(2) Felix glaubt(e), (Nádja/Nadine) hat den Brief geschrieben.

Felix thinks/thought (that) Nadja/Nadine has written the letter

Both experiments show a clear preference for recalls involving introduced CC but failed to produce the predicted rhythmic effects. By means of Bayes Factor analysis (see Nicenboim & Vasishth 2016, for a tutorial), we provide strong evidence (with Bayes factors >10) in favour of the null hypothesis according to which the rhythmic environment does not affect the choice between introduced and unintroduced CCs in German.

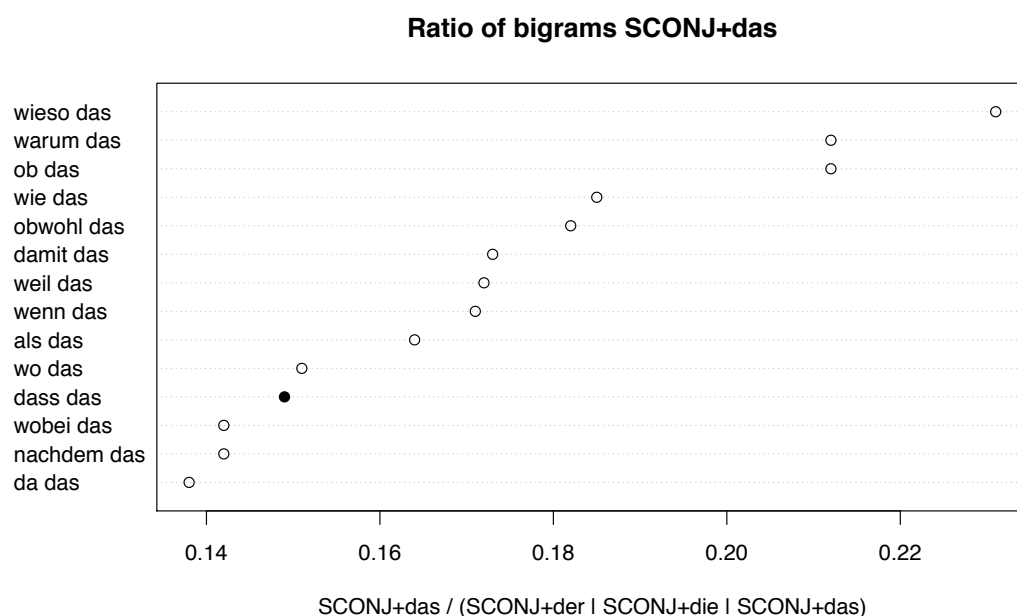
## Experiment 2: Corpus study on rhythm and CC structure (TÜPP/DZ corpus)

In order to validate the findings of Exp 1, we searched the taz newspaper corpus (TÜPP/DZ) for all tokens of the 8 embedding verbs that were immediately followed by a complement clause (with or without complementiser) with a proper name as clause-initial subject. This search yielded 2751 complement clauses, 1476 subordinate clauses with, and 1275 subordinate clauses

without, the complementiser *dass*. Against predictions, but in line with Exp 1, there was no evidence for introduced CCs (with *dass*) to be more likely when the proper name started in a stressed syllable (52% introduced CCs) as opposed to an unstressed one (56% introduced CCs).

### Experiment 3: Corpus study on word-form OCP and CC structure (DeReKo)

In an attempt to replicate the findings of Walter & Jaeger (2005; avoidance of double *that* sequence) for German, we searched the German Reference Corpus (DeReKo-W, written section) for bigrams involving various subjunctions followed by the definite determiners (or demonstrative pronouns) *der*, *die* or *das*. We predicted that if CC structure is susceptible to phonology, we should observe a similar OCP effect as Walter & Jaeger did, i.e. a clear avoidance of *dass das*. The plot in the Figure below depicts the frequency ratio of subjunction+*das*/subjunction+(*der|die|das*) for 14 subjunctions (POS-tag “SCONJ”). While the *dass das* bigram (black dot) is at the lower end of the spectrum (.15), it is clearly not exceptionally low. Note also that the frequency ratio of singleton *das*/(*der|die|das*) is even lower (.14).



In sum, the apparent lack of phonological influences suggests that CC structure (introduced vs unIntroduced) in German is fixed by syntax before phonology gets access to it. In contrast, the presence/absence of the overt complementiser in English is clearly affected by the phonological environment. The absence of the overt complementiser may be conceived as phonological ellipsis. Hence, in spite of the differences concerning phonological influences on overt CC structure, the syntax proper remains phonology-free in both languages.

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## Event and argument structure in English zero-derived nominals

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This paper is concerned with the morphosyntax of deverbal *zero-derived nominals* (ZNs, e.g., *to walk* > *a walk-Ø*), which have received much less attention in the literature than the *suffix-based nominals* (SNs, cf. *walking*, *examination*, *assignment*). In the generative literature, in particular, after Grimshaw's (1990) seminal work on SNs and their possibility to inherit verbal event structure realizing arguments, ZNs have been taken to lack all these properties: e.g., in syntax-based models of word formation, which take argument realization in deverbal nouns to indicate the inheritance of verbal functional structure from the base verb, ZNs have been analyzed as derived not from a verb but from an uncategorized root, as implemented in Borer (2013). The prediction of such accounts is that the interpretation of ZNs should be faithful to the ontology of the root and independent of verbal functional structure. Following Rappaport Hovav & Levin's (1998ff) ontology of verbal roots as expressing either manner (of events) or results, I show that some ZNs derived from result verbs denote events, which can only come about from the event structure of their base verbs. In support of this, such ZNs also realize argument structure, as plenty of corpus examples from the BYU corpora show. A further implication of this study is that zero deserves a derivational status similar to that of overt suffixes (contra Borer 2013).

**Argument structure nominals (ASNs).** In the long tradition of the theoretical debate on nominalization issued by Chomsky (1970), Grimshaw (1990) brings a noteworthy contribution in showing that deverbal nominals are pervasively ambiguous. She distinguishes between readings on which nominalizations share event and argument structure properties with their base verbs, and readings that depart from their base verbs to various degrees up to lexicalization. The former have been known as Argument Structure Nominals (ASNs; cf. Grimshaw's *complex event nominals*) and the latter are labeled Result Nominals (RNs) or Simple Event Nominals (SENs), depending on their conceptual meaning. The contrast is illustrated in (1). In (1a) *the instructor's* and *of the papers* are verbal arguments inherited by the ASN. The incompatibility of the Voice-modifier *intentional* with the RN and SEN readings of *examination* shows that *the instructor's* in (1b, c) is not an external argument usually hosted by Voice but just a possessive modifier.

- (1)a. *The instructor's* (intentional) **examination** *of the papers* took a long time. (ASN)  
b. *The instructor's* (\*intentional) **examination**/exam (\**of the papers*) was on the table. (RN)  
c. *The instructor's* (\*intentional) **examination**/trip took a long time. (SEN)

Syntax-based models like Distributed Morphology (DM) have expressed this distinction in terms of presence of verbal event structure in ASNs and lack thereof in RNs/SENs as in (2) (see Marantz 1997, van Hout & Roeper 1998, Harley & Noyer 2000, Alexiadou 2001ff, Borer 2013).

- (2)a. [DP D [<sub>NP</sub> n [ *verb template* [<sub>VP</sub> v [ √ROOT ]]]]] (ASN: with verbal event structure)  
b. [DP D [<sub>NP</sub> n [ √ROOT ]]] (RN/SEN: no event structure)

**ZNs and event/argument structure.** Grimshaw claims that ZNs are always RNs/SENs and never ASNs, without addressing them closely. Later syntactic literature, however, supported her thesis, by arguing that ZNs do not license arguments as in (3a, b), in spite of a few 'exceptional' cases such as (*ex*)change, release, use, abuse, misuse, murder, discharge (Borer 2013: 331).

- (3)a. *John's* breaking/\***break** *of the glass* (Marantz 1997)  
b. the importation/\***import** *of goods* from China in order to [...] (Borer 2013:332)

In her exo-skeletal model, Borer analyzes ZNs similarly to (2b), from which she excludes the nP, as she rules out zero suffixes and takes categorization to be carried out by functional projections like D, in general. A comparable DM analysis of the ZN *break* in (3a) is given in (4).

(4) [DP D [NP Ø [ √BREAK ]]]

In Rappaport Hovav & Levin's (RHL 1998ff) system, *break* is built on a result root, which, following (4), accounts for the result reading of the ZN *break*, derived from the root. Levin (1993:8-9) even uses the interpretation of ZNs to determine whether a verb involves a manner or result root: based on this criterion, she argues that *cut* is a result verb (cf. result ZN *a cut*), while *hit* is a manner verb (cf. event ZN *a hit*). This reasoning is expected for the structure in (4).

**Challenges to a root-based analysis of ZNs.** Widely adopted event structure theories decompose verb meanings into a template and a root component (see references in Beavers & Koontz-Garboden: BKG 2017). The template introduces the *compositional* temporal and causal event structure and is built from a small set of recursively used primitives, while the root fills in the *idiosyncratic* real world information on the event. In syntactic approaches (including DM), the template corresponds to the functional structure as in (2a), while the root occupies a particular position in this template depending on its manner/result status (RHL 1998ff; cf. (2)). I will show that many ZNs derived from verbs that express result must project event structure, since their event interpretation and argument realization cannot be accounted for by (2b) — they need (2a).

First, Borer's 'exceptional' ZNs realizing arguments involve coherent classes of ZNs derived from: 1) 'murder' verbs like *murder*, *dispatch*, *massacre* in (5a), which encode result and whose *event* ZNs (cf. Levin 1993) must be derived by a template with at least a vP and 2) Latinate verbs as in (5b), which usually include a result (Harley 2008). In addition, we find verbs as in (5c-d), whose roots BKG (2012, 2017) argue encode manner+result. Even if all the verbs in (5) involved manner+result roots as BKG argue for those in (5c-d), template structure must be available in these ZNs to account for the structural case on their arguments (possessive & *of*-genitive in (5-6) vs. special PPs for root arguments) and their use with adjectives that correspond to verbal Voice/event modifiers (e.g., *intentional*, *furious*, *quick*), as plenty of corpus examples show:

- (5)a. *their dispatch of Osama bin Laden*/ [He] probably witnessed *their murder of his mother*
- b. the *release of prisoners*/ It could continue *its import of petroleum products* [contra (3b)]
- c. He began *his climb of M. Everest*/ The sun resumed *its slow roast of the forest canopy*
- d. a furious *toss of said wheel to the ground*/ a quick *throw of a syringe*

Second, starting with the 20th century (cf. OED), ZNs have been particularly productive with complex verbs that involve prefixes (*rewrite*, *declutter*, *disconnect*) or particles (*down/upload*, *override*; *bailout*, *muck-up*, *walk-off*). These prefixes and particles are known to add a result state to the (usually) manner verb (Harley 2008, Marantz 2013), building a complex event structure, which their corresponding ZNs inherit, as proven by their realization of argument structure in (6):

- (6)a. But the events of recent days have brought a rapid *rewrite of the Green story*.
- b. such bills are useful for the ongoing *declutter of the legislative landscape*
- c. during the *upload of a large file*/ *Our bailout of SCF depositors* has cost us a \$800 mill.

I will argue that depending on the verb class they are derived from, the possible competition with *-ing* and Latinate SNs, and the special properties of their zero suffix (e.g., attachment to native bases, which is also found with ZNs in Romance languages like Italian and Portuguese), ZNs are in fact similar to Latinate SNs in building both ASNs and RNs/SENs as in (2a-b). This is also supported by the historical development of ZNs, which have occasionally replaced Latinate suffixes (cf. obsolete *increasement*, *changement*) and compete with them now (cf. *divide*, *invite*).

**References:** Beavers & Koontz-Garboden. 2017. Result verbs, scalar change, and the typology of motion verbs. *Language*; Beavers & Koontz-Garboden. 2012. Manner and result in the roots of verbal meaning. *Linguistic Inquiry*; Borer. 2013. *Taking Form*. OUP; Harley. 2008. The bipartite structure of verbs cross-linguistically. *Conferencias do V Congresso Internacional da Associacao Brasileira de Linguistica*.

### Feature marking in German DPs

German attributive adjectives must always inflect and there are two adjectival paradigms, a strong and a weak one. The distribution of these paradigms depends on the inflectional properties of the preceding article. In Alemannic, a southern German dialect, attributive adjectives can occur both inflected and uninflected. I will show that the occurrence of uninflected adjectives is connected to the grammaticalisation of both definite and indefinite article because two features must be marked in the German DP: number and oblique case. Therefore, adjectives can always occur uninflected when an article is merged regardless of its inflectional properties.

The distribution of adjectival inflection in German depends on the inflectional properties of the preceding article (Olsen, 1991; Roehrs, 2006). When phi-features and case are marked on the article, the adjective bears weak inflection. If phi-features and case are not marked on an article, the adjective shows strong inflection. This distribution can be found in both Standard German (StG) as well as dialects. In addition, in German dialects attributive adjectives also occur uninflected independent of the inflectional properties of the preceding article:

Standard German		Alemannic	
<i>d-er gut-e Wein</i> the good-wk wine	<i>ein gut-er Wein</i> a good-str wine	<i>Dr guad-(e) Wei</i> The good-(wk) wine	<i>a guad-(r) Wei</i> a good-(str) wine

The question is: Why are uninflected adjectives allowed in the dialects and do they follow a certain distribution? In order to answer these questions the diachronic development must be considered in detail. Up to Old High German (OHG) the two adjectival paradigms were distributed depending on the definiteness status of the DP. The weak inflection only occurred in definite DPs whereas the strong inflection occurred in indefinite DPs. This distribution only changed when both the definite and the indefinite article were fully grammaticalized which is the case in Middle High German (MHG). This means that from MHG onwards the distribution of adjectival inflection depends on the inflectional properties of the preceding article and no longer on definiteness. Importantly a second development happened parallel to this re-distribution: From MHG onwards uninflected attributive adjectives occurred (cf. Klein, 2007). The distribution of these adjectives used to be restricted by gender, number and case. They were clearly preferred with neuter and masculine nouns and only occurred in singular Nominative and Accusative DPs.

In order to find out whether uninflected adjectives in Alemannic (and other dialects) show similar restrictions we undertook an empirical study across the Alemannic area including the German speaking parts of Switzerland, the county Baden-Württemberg in Germany, Alsace in France and Vorarlberg in Austria. We tested the influence of definiteness, number, case and gender. The results clearly show: The distribution of uninflected adjectives is neither restricted by any morpho-syntactic nor by regional factors. Furthermore, in all contexts in which uninflected adjectives are possible, they can also appear inflected. This means that the distribution of uninflected adjectives in Alemannic is wider than in MHG (or Early New High German) and is thus a progressing development. Uninflected adjectives are only excluded from one context: in the absence of an article adjectival inflection is obligatory.

The results of the study raise two questions: Why are uninflected adjectives only possible when an article is merged and why does the standard not allow them. Considering the paradigm of the definite and indefinite article in both dialects and standard German, it becomes evident that only two features are consistently marked: number and oblique case. The syncretism patterns show that neither gender nor Nominative or Accusative must be marked overtly. This explains why the inflectional properties of the article are not important for the realization of adjectival inflection. The definite article always marks phi-features and case but the indefinite article does

not and occurs uninflected in Nominative and Accusative Masc/Neut. However, the indefinite article is inherently marked for singular. Therefore adjectival inflection can be dropped even after the uninflected indefinite article.

It may now be argued that because of these feature requirements adjectival inflection is obligatory in DPs without an article. This is only partially true. Number and case must be realized in a position in which these features are interpreted. This is not the AP and not the functional projection in which the AP is based (which I call ModP). Neither adjectives nor their inflection are obligatorily present in the DP. The answer to feature marking in DPs without articles thus lies in the syntactic structure. Following Wiltschko (1998) I do not only assume the indefinite article but also the definite article to be composed. It consists of the *d*-part – heading DP – and providing the connection to the discourse – and the phi-part, heading AgrDP directly below DP. The inflectional part is the same element that we also find as strong inflection on the adjective, namely the pronominal paradigm (*d-er*, *ein-es* – *gut-er*, *gut-es*). Obligatory number marking is thus realized and interpreted in AgrDP. Since the pronominal paradigm is an affix it needs another element it attaches to. In the absence of an article, this is the adjective, which moves to SpecAgrDP for reasons of convergence at PF. It is able to serve as a ‘host’ as it can bear the pronominal paradigm (as the only one of the lexical categories in German). So what appears as strong inflection in DPs without an article is in fact the pronominal paradigm that normally combines with *d*- and is located in AgrD°:

*Der gute Wein*: [DP[D d [AgrDP [AgrD er [ModP gut [Mod Ø/e [CIP[CI[NP[N Wein]]]]]]]]]]]

*Guter Wein*: [DP[D [AgrDP gut [AgrD er [ModP ~~gut~~ [Mod Ø [CIP[CI[NP[N Wein]]]]]]]]]]]

Two more questions must be answered: Why is number the only of the phi-features that must be marked overtly? Why must number be marked in DPs without an article as they normally contain a mass noun? I follow Borer (2005) in the assumption that all nouns enter the derivation as mass and that the mass-count-distinction is structurally represented in a CIP above the NP. When CIP is present, number must be marked because the absence of CIP means the absence of number marking and thus results in a mass-reading. However, Borer’s original dichotomy into mass and count is too strict as mass division does not necessarily imply ‘count’. Borer illustrates her basic notion of mass division by showing that all nouns can receive a mass interpretation as in (1) a. However, such a mass reading is in fact no longer possible when an adjective is present as shown in (1) b. I thus argue that adjectives entail the presence of the CIP and hence trigger obligatory number marking even with mass nouns in the absence of an article.

(1) a. There is dog on the floor.

b. ??There is small dog on the floor.

The results and analysis presented do in fact extend to StG – despite the fact that uninflected adjectives are not possible. The reason for their absence is not due to the syntax though but it is the result of the standardization process in the 17<sup>th</sup> and 18<sup>th</sup> century. The presence and the stigmatization of uninflected adjectives can be traced in the history of normative grammar and the difference between Alemannic and StG can be reduced to the influence of normative grammar. The underlying DP structure is the same in both varieties.

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# Merge before Agree: Acquiring datives in Insular Scandinavian

Einar Freyr Sigurðsson • Iris Edda Nowenstein • Sigríður Sigurjónsdóttir

**1. Introduction:** Dative case is “preserved” on subjects under A-movement in Icelandic, regardless of whether an argument originates as a direct or an indirect object. In Faroese, by contrast, dative is much more readily preserved on subjects that originate in the position of indirect objects than in the position of direct objects (Eythórsson et al. 2012). The contrast is shown for the verbs *hrósa/rósa* ‘praise’ and *óska/ynska* ‘wish’ in Icelandic (1) and Faroese (2). In the active in both languages, ‘praise’ takes a direct object in the dative and ‘wish’ an indirect dative case object.

- |     |  |   |
|-----|--|---|
| (1) | a. <b>Henni</b> var hrósað.<br>her.DAT was praised<br>‘She was praised.’ | b. <b>Henni</b> var óskað góðrar ferðar.<br>her.DAT was wished good journey<br>‘She was wished a good journey.’ |
| (2) | a. <b>Hon</b> varð róst.<br>she.NOM was praised                          | b. <b>Henni</b> varð ynskt eina góða ferð.<br>her.DAT was wished a good journey                                 |

This suggests that the case assignment mechanism is not the same for arguments generated in SpecApplP (indirect objects) and arguments that originate as the complement of the verb (direct objects). In fact, we demonstrate that although Icelandic children eventually do not distinguish between direct and indirect objects when it comes to dative preservation, the distinction emerges in language acquisition — supporting that different mechanisms underlie the two object types. The patterns observed in the acquisition of dative subjects in L1 Icelandic therefore reflect an existing cross-linguistic hierarchy of dative case preservation (cf. discussion in Alexiadou et al. 2014).

**2. Case assignment via Agree vs. Merge:** We adopt Sigurðsson’s (2017) case analysis. He builds on previous work by Heck and Müller (2007), Müller (2010) when arguing for two types of datives in Icelandic and Faroese, where indirect objects are assigned dative case via Merge while direct objects are assigned dative via Agree (cf. also Chomsky 2001). Agree relations are sometimes overwritten by Merge and that is in fact the case for Faroese where only dative assigned via Merge is preserved in subject position. If the mechanism is not the same for different types of dative case subjects, then we can expect the acquisition process to be different for each of them. Therefore, it is ideal to investigate the acquisition of dative case subjects.

**3. The acquisition of dative subjects in Icelandic:** The data reported were obtained in a large-scale questionnaire which is part of an extensive project on L1 Icelandic. The method consisted of a forced-choice judgment task administered among 617 children aged 3 to 12. Participants were randomly assigned context (4) or (5), the test condition being whether the subject in a passive sentence originated as a direct or an indirect object, cf. the active sentences in (3).

(3) **Active sentences**

- |  |  |
|--|--|
| a. Við gáfum henni bók.<br>we gave her.DAT book<br>‘We gave her a book.’     | b. Við hrintum stráknum.<br>we pushed the.boy.DAT<br>‘We pushed the boy.’      |
| (4) <b>Passive subject originates as an indirect object</b>                  |  |
| a. Henni var gefin bók.<br>her.DAT was given book<br>‘She was given a book.’ | b. *Hún var gefin bók.<br>she.NOM was given book<br>‘She was given a book.’    |
| (5) <b>Passive subject originates as a direct object</b>                     |  |
| a. Stráknum var hrint.<br>the.boy.DAT was pushed<br>‘The boy was pushed.’    | b. *Strákurinn var hrintur.<br>the.boy.NOM was pushed<br>‘The boy was pushed.’ |



Following this, participants chose the variant they preferred: (a) dative case preservation or (b) structural nominative subject case. The results are presented in Figure 1. The youngest children show the lowest rate of dative case preservation, with no statistical difference between direct and indirect objects:  $\chi^2 (1, N = 173) = 0.31, p = 0.5749$ . On the other hand, a distinction between the object types emerges in the mean scores of children aged 6–7, with the dative being significantly more frequent when originating as an indirect object than as a direct object:  $\chi^2 (1, N = 98) = 5.79, p < 0.05$ . Although the distinction is also present in the 8–9-year-olds, it is no longer significant:  $\chi^2 (1, N = 124) = 3.7, p = 0.05457$ . Finally, 10–12-year-olds have reached the target grammar with almost full dative case preservation and no distinction between direct and indirect objects:  $\chi^2 (1, N = 204) = 0.32, p = 0.568$ .

**4. Implications:** The results suggest that when acquiring dative subjects, Icelandic children go through a stage where they distinguish between direct and indirect objects — the pattern observed in adult Faroese. Still, their initial tendency (3–5-year-olds) is towards non-preservation regardless of the objects’ nature, as is observed in Norwegian dialects that have dative objects in the active (Eythórsson et al. 2012). This can be explained on an analysis where indirect objects are assigned dative via Merge while direct objects are assigned dative via Agree. Our analysis suggests that case preservation via Agree is acquired later, although both assignment mechanisms may be available early on. The study therefore has implications for case theory, case assignment in language acquisition, and the mechanisms underlying the evolution of case within and across languages.

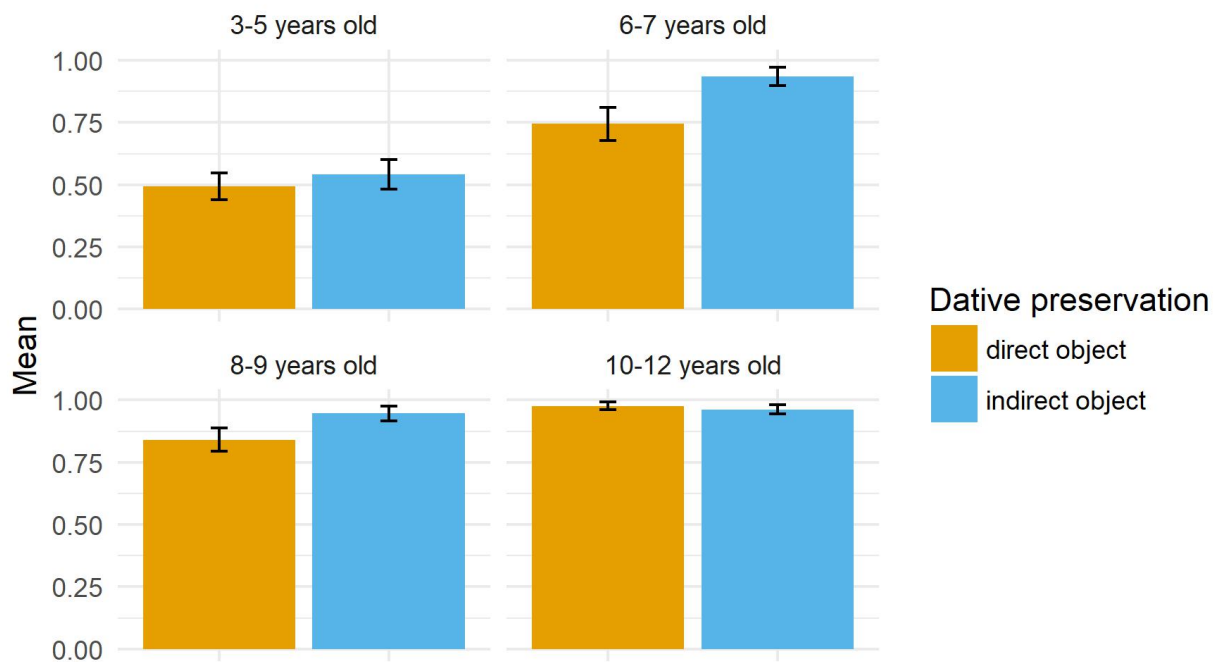


Figure 1: Mean dative preservation across direct and indirect objects, tested on passive subjects. Forced choice task — 95% confidence intervals.

**Ref.:** Alexiadou, Anagnostopoulou & Sevdali 2014: Opaque and transparent datives, and how they behave in passives • Chomsky 2001: Derivation by phase • Eythórsson, Johannessen, Laake & Áfarli 2012: Dative case in Norwegian, Icelandic and Faroese: Preservation and non-preservation • Heck & Müller 2007. Extremely local optimization • Müller 2010. On deriving CED effects from the PIC • Sigurðsson 2017: Deriving case, agreement and Voice phenomena in syntax

**COMP-trace effects in German: the role of processing**  
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English and German differ in their sensitivity to the COMP-trace effect: whereas in English, subject extraction across complementizers appears to be categorically excluded, no such ban seems to be present in German (although long-distance (LD) extraction itself is rare in present-day German). However, there is a clear LD subject/object asymmetry in German: LD subject extraction is less acceptable than LD object extraction [1], [3]. Kiziak [3] suggests that the weaker sensitivity to the COMP-trace effect in German can be partly attributed to processing. German embedded clauses have SOV word order, whereas English is SVO. As a result, subject gaps are to the left of V in English, and object gaps to the right. In German, however, both subject and object gaps occur to the left, so that superficially, CPs with either the subject or object extracted have the same form [C DP V]. According to Kiziak, this makes it more difficult to detect embedded subject gaps (i.e. a COMP-trace violation) in German. German (LD) wh-questions have to be disambiguated by inflection (case-marking, subject-verb agreement) or pragmatic/semantic cues: in the absence of such cues, subject and object questions are fully ambiguous. Interestingly, an acceptability judgement experiment by Kiziak showed that introducing local ambiguities by using ambiguously case-marked embedded DPs diminishes the subject/object asymmetry:

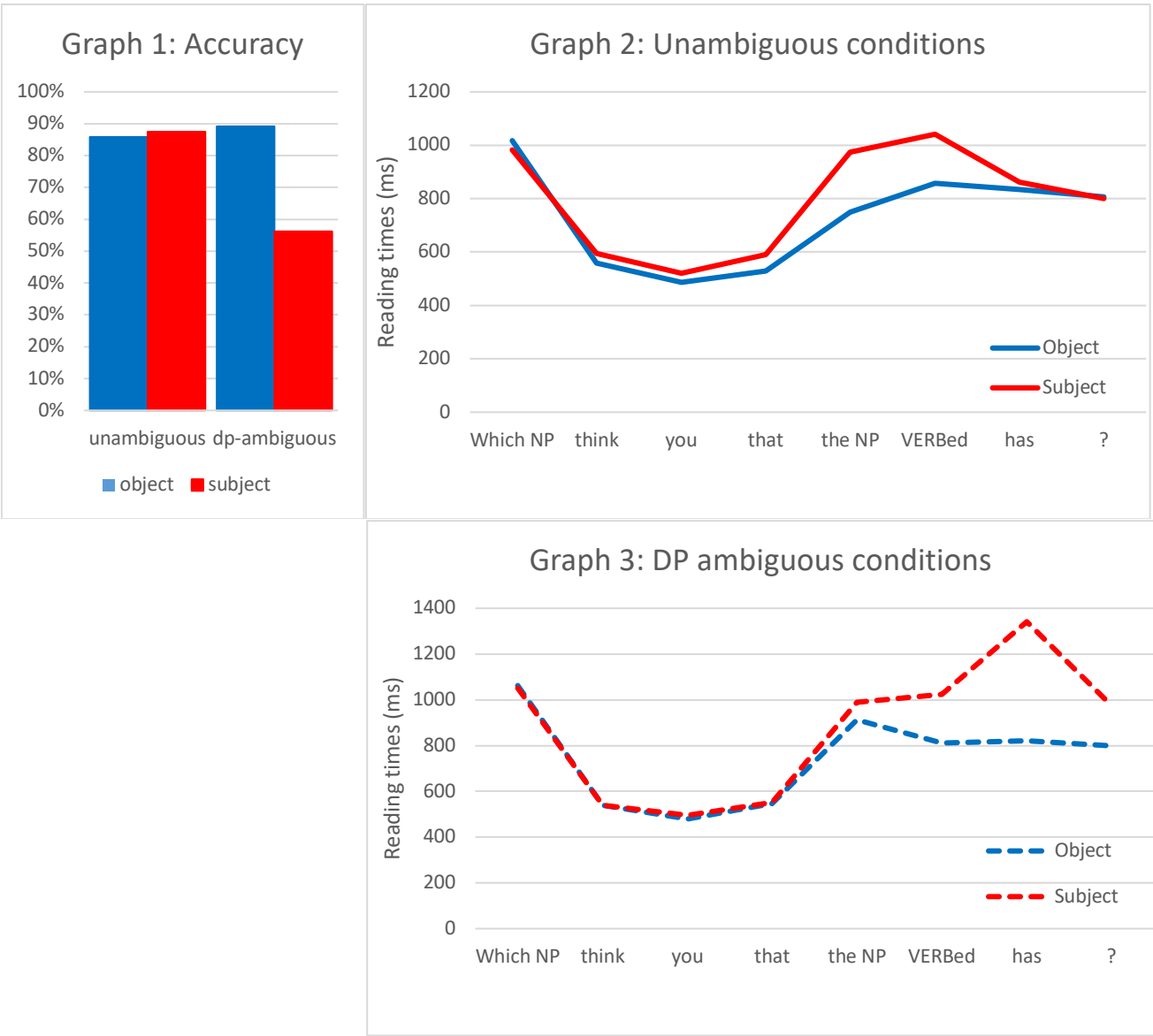
- (1) Welche-r      Künstler denkst du, dass \_\_      **die**                      **Dichter-in** inspiriert hat?  
 Which-NOM artist      think you, that      the.¿NOM/?ACC poet-F      inspired has  
 ‘Which artist do you think inspired the poet?’
- (2) Welche-n      Künstler denkst du, dass **die**                      **Dichter-in** \_\_      inspiriert hat?  
 Which-ACC artist      think you, that the.¿NOM/?ACC poet-F                      inspired has  
 ‘Which artist do you think the poet inspired?’

Kiziak explains this in term of ‘good enough’ processing [2]: under the assumption that subject gaps are dispreferred, comprehenders pursue a subject reading for the case-ambiguous DP, resulting in an (incorrect) object reading of the wh-phrase. To test this hypothesis, we gathered comprehension data on LD subject and object questions in unambiguous and locally ambiguous LD-questions (see Table 1). Additionally, we gathered self-paced reading times on the wh-questions. Data from 30 native speakers of German were analyzed. Participants saw 8 items per condition, in each case followed by two possible answers (corresponding to a subject and an object reading) from which they had to choose. The comprehension data (Graph 1) showed the following: for **unambiguous conditions**, there was no significant difference between subject and object questions. Preliminary analyses of the reading time data (Graph 2) show a slowdown for subject compared to object questions at the embedded argument ( $p < 0.001$ ) and the participle ( $p < 0.05$ ). Thus, even though the wh-phrase was unambiguously case-marked, signaling the presence of a subject gap, the detection of this gap resulted in a processing slow-down, providing psycholinguistic evidence for the problematic status of embedded subject gaps. The conditions with an embedded **case-ambiguous DP** provide further evidence for this: accuracy on subject questions dropped dramatically compared to object questions ( $p < 0.001$ ). Statistical analyses show that reading times for subject compared to object questions increase at the participle ( $p < 0.001$ ) and sentence-final auxiliary ( $p < 0.05$ ), suggesting comprehenders were garden-pathed in subject sentences. This can be explained as follows: in many cases, readers locally interpreted the case-ambiguous embedded DP as the subject, even though this conflicts with the unambiguously case-marked nominative wh-phrase. Again, this shows that subject gaps are dispreferred and that there is indeed ‘good enough’ processing (cf. [2]). As to the theoretical implications of our results, the data suggest that the COMP-trace effect must not be seen as an inviolable constraint: although embedded subject gaps are dispreferred, they do not cause the derivation to crash: comprehenders do in many cases arrive at the correct interpretation, and subject LD movement, although rare, is

not categorically excluded in German. We therefore propose to define the COMP-trace effect in terms of accessibility: embedded subjects are less accessible for LD-extraction, but not completely immobile.

Table 1: Conditions and sample stimuli

Unambiguous subject	Welche-r Minister denkst du, dass den Sekretär gewarnt hat? Which-NOM minister think you that the.ACC secretary warned has
Unambiguous object	Welche-n Minister denkst du, dass der Sekretär __ gewarnt hat? Which-ACC minister think you that the secretary warned has
DP ambiguous subject	Welche-r Minister denkst du, dass __ die Sekretär-in gewarnt hat? Which-NOM minister think you that the secretary-FEM warned has
DP ambiguous object	Welche-n Minister denkst du, dass die Sekretärin __ gewarnt hat? Which-ACC minister think you that the secretary-FEM warned has



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## English relative clauses in a cross-Germanic perspective

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My talk examines the distribution of relativising strategies in English in a cross-Germanic perspective, arguing that English is quite unique among Germanic languages both regarding the number of available options and the distribution thereof. I argue that the differences from other Germanic languages (both West Germanic and Scandinavian) are primarily due to the historical changes affecting the case system in English. This effect can not only be observed in properties that are known to correlate with case but also in distributions that are not evidently related to case.

As is well-known, English has two major types of relative clauses involving an overt relative marker: *wh*-relatives and *that*-relatives, as shown in (1) respectively:

- (1) a. This is the linguist **who** has an interesting theory.  
b. This is the linguist **that** has an interesting theory.

Non-standard varieties allow the co-occurrence of both elements:

- (2) % This is the town **in which that** I live.

The ban on this configuration in the standard variety is traditionally referred to as the Doubly Filled COMP Filter (DFCF), going back to Chomsky & Lasnik (1977), who argued that the two elements are competing for the same position, COMP. In more recent approaches, the COMP position is abandoned and patterns like (2) are more readily analysed as a *wh*-operator in the specifier of a CP headed by *that* (see, for instance, Van Gelderen 2009). Interestingly, while patterns like (2) are attested, they are not as frequent as their surface-similar counterparts in embedded questions:

- (3) % She asked me **in which city that** I lived.

The same applies to German dialects that have *wo*-relatives as well: while doubling with a demonstrative-based relative pronoun is possible (Brandner & Bräuning 2013), it is by no means as frequent as in embedded questions, where it may even be obligatory (Bayer & Brandner 2008). I argue that the reason behind this is that in English, just like in the relevant (Southern) German dialects, doubling patterns arise because relative pronouns can be added to the default complementiser pattern (and not because a ban like the DFCF is absent). This is tied to the strong preference for the complementiser strategy in non-standard English (and in spoken English in general, see Van Gelderen 2009 and references there): once the C head is lexicalised, the relative pronoun is essentially redundant (whereas a focussed interrogative pronoun is not). I present the results of a corpus study on the original and the modernised version of the King James Bible, showing that the preference for *that*-relatives was high in Early Modern English, whereas the strongly norm-oriented modernised version preferably employs the pronoun strategy.

English is in this respect not unique in Germanic: certain German dialects also prefer the complementiser *wo* to the relative pronoun strategy, and Scandinavian languages regularly employ a complementiser (*som* in Mainland Scandinavian, *sem* in Icelandic). However, English crucially differs from Dutch, where the complementiser *dat* may only appear in addition to the relative pronoun (Bennis & Haegeman 1984; Boef 2013 mentions only few dialects that marginally allow *dat*-relatives), suggesting that it is not able to type the relative clause as relative. I argue that the differences in West Germanic are due to differences in the relevant case systems. With the loss of most overt case markings in Middle English, the original relative pronoun was readily reanalysed as a relative complementiser, that is, as a finite complementiser marked as [fin] but still associated with a gap in the relative clause (whereby the exact function of the gap, unlike with relative pronouns, is not specified). The Dutch case system shows a similar change only considerably later (in Modern

Dutch). Regarding German, the complementiser strategy is attested in dialects that employ *wo* for this function: the German case system has not undergone a comparable change and the grammaticalisation of a demonstrative-based relative pronoun into a complementiser is not expected, as relative pronouns are indeed inflected for case, gender and number. However, the relative complementiser *wo* is etymologically related to the equative complementiser, as shown by Brandner & Bräuning (2013), who argue that *wo* may still alternate with *wie* in both functions in certain dialects, and that the same dialect areas used to apply *so* in both constructions till Early New High German. In other words, the German relative complementiser was not reanalysed from a relative pronoun, similarly to Scandinavian languages (*som/sem* are also attested as equative markers), and it is hence independent of changes affecting the case system.

I argue that the case system has also another effect on the distribution of relative clauses, which has not yet been examined in the relevant literature in detail. The choice between the *wh*-strategy and the complementiser strategy is known to show differences according to the Noun Phrase Accessibility Hierarchy (Keenan & Comrie 1977): the complementiser strategy is more likely to occur lower in the scale (subject > direct object > indirect object > PP complement etc.), as also found by Herrmann (2005) for British dialects. Most studies on such asymmetries concentrate on the subject/direct object difference, but Fleischer (2004) on his study on German dialects (subsuming Yiddish) argues that subjects and direct objects pattern together and contrast with “obliques” (i.e. all other functions lower in the scale). In the above-mentioned corpus study, I found that in English subjects are significantly different from all other functions in the King James Bible, which patterns with present-day dialectal distribution (and crucially differs from norm-oriented contexts, where these differences are levelled out). This gives two major patterns: a subject/direct object/oblique pattern (e.g. German) and a subject/oblique pattern (e.g. English and to some extent Danish). I argue that this difference is in line with the differences in the case systems: English is a nominative/oblique system (with more syntactic than morphological distinctions), while German differentiates between the accusative and the dative (and the genitive).

The English pattern is hence to some extent unique among Germanic languages; apart from purely syntactic factors (operator movement versus base-generated complementiser) and morphological factors (the availability of overt lexical elements), both the featural content of potential complementisers and the effect of the case system matter. The particular setting in English is thus not dependent on e.g. a single parameter but on various factors that are otherwise present in other Germanic languages as well, and it is ultimately the complex interplay of these factors that results in the particular setup.

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## Experimental syntax and three case studies in movement

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In this talk, I'd like to discuss three new studies that I think continue to make the case that syntactic theory can benefit from experimental and computational modeling work.

The first is a series of acceptability judgment and working memory experiments exploring three constructions that have historically been claimed to be exceptions to the theory of island effects: non-finite *wh*-islands, recursive NP islands, and bare participle adjunct islands. The goal is to determine if these constructions show the judgment pattern associated with island effects, and if so, to determine if that pattern is due to limited working memory capacity.

The second is a series of EEG studies of the sustained anterior negativity (SAN) that arises to long-distance dependencies. The goal is to determine to what extent the source of the SAN is specific to movement (e.g., the working memory requirements of *wh*-fillers), and if so, to what extent the SAN can be used to probe for movement in constructions for which a movement analysis is debated, like subject raising and how-come questions.

The third is a set of computational modeling studies on the role of UTAH and rUTAH in the acquisition of verbs (and verb classes). The goal is to determine to what extent adding innate knowledge of UTAH (with A-movement) or rUTAH (without movement) to a Bayesian model of verb class learning will lead to performance that better matches the developmental trajectory of actual children at ages 3, 4, and 5.

Though these studies all focus on English, my hope is that the underlying theme of movement will spark ideas for cross-linguistic comparisons with other Germanic languages, perhaps involving less well-studied constructions and dependency types. I also hope that the variety of methods (acceptability judgments, WM tasks, EEG, and computational modeling) will foster conversations about how these methods can (continue to be) brought to bear on questions in syntactic theory.

# Information-structural effects of the accessibility of finite verbs: Corpus evidence from spoken English, Dutch, and German

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Speakers of Germanic languages tend to PRIORITIZE sentence constituents whose content and form was planned with little processing effort: “Easy” constituents are more likely assigned to early (anterior) positions than constituents that were harder to plan, provided the grammar allows sufficient linear-order flexibility. Well-known factors promoting anterior placement are CONCEPTUAL ACCESSIBILITY (including TOPIC-COMMENT and ANIMACY) and LEXICAL ACCESSIBILITY (FREQUENCY, PRIMING). Empirical work on these information-structural effects tend to focus (pro)nominal constituents—presumably because nouns and pronouns enjoy much intraclausal freedom of position. In the present contribution, we show that finite verbs, too, are subject to effects of accessibility, in spite of very restricted placement options.

The work to be reported here began as fallout from a corpus study on a different topic (Kempen & Harbusch 2017). As part of that study, we had counted frequencies of verbs functioning as head of a main clause (always finite: “Main-Fnt”), of a finite subordinate clause (“Sub-Fnt”), or of a non-finite subordinate clause or VP (“Non-Fnt”). Below, we refer to this variable as “ClauseType”. The data had been extracted from three corpora consisting of syntactically annotated spoken sentences extemporaneously and unscriptedly produced by native speakers of German (VERBMOBIL), Dutch (CORPUS GESPROKEN NEDERLANDS), and English (SWITCHBOARD; for corpus details and references, see Kempen & Harbusch 2017). Prior to the present project, we had lemmatized the inflected verbforms and calculated the total frequency (“TotFreq”) of each verb lemma by adding its Main-Fnt, Sub-Fnt and Non-Fnt occurrences. Pairs of homonymous or polysemous lemmas had been treated as a single lemma (e.g., the TotFreq of Eng. *be* includes all its occurrences, whether as auxiliary, copula or main verb). The result is a list of 7531 unique verb lemmas (German: 1083; Dutch: 3884; English: 2564).

We ranked the lemmas by TotFreq and calculated, for each lemma, its proportion of Main-Fnt, Sub-Fnt, and Non-Fnt tokens (see Fig.1). This revealed a remarkable statistical interaction between TotFreq and ClauseType: Whereas the Sub-Fnt proportions are more or less constant—as expected *a priori*—, the Main-Fnt proportions appear to rise with increasing TotFreq of the lemmas. Stated differently, high-frequency verbs tend to be OVER-REPRESENTED IN MAIN CLAUSES, whereas their presence in finite subordinate clauses tends to align with their TotFreq. (By implication, low-frequency verbs are over-represented in non-finite clauses; the proportion of non-finite tokens equals 1 minus the sum of the finite proportions; not shown in Fig.1)

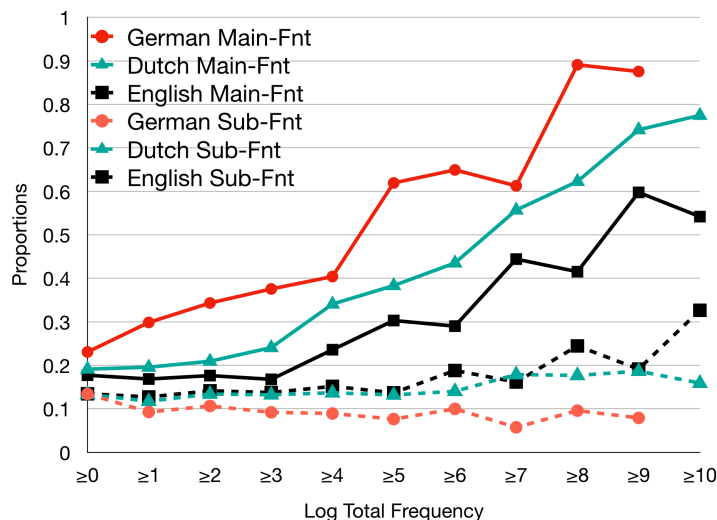


Figure 1. Main-Fnt proportions (continuous curves) and Sub-Fnt proportions (dashed curves) as a function of  $\text{Log}_e(\text{TotFreq})$ , ClauseType, and Language. The proportions are “un-weighted”: Every verb, however high its TotFreq, has the same influence on the calculated mean proportions.



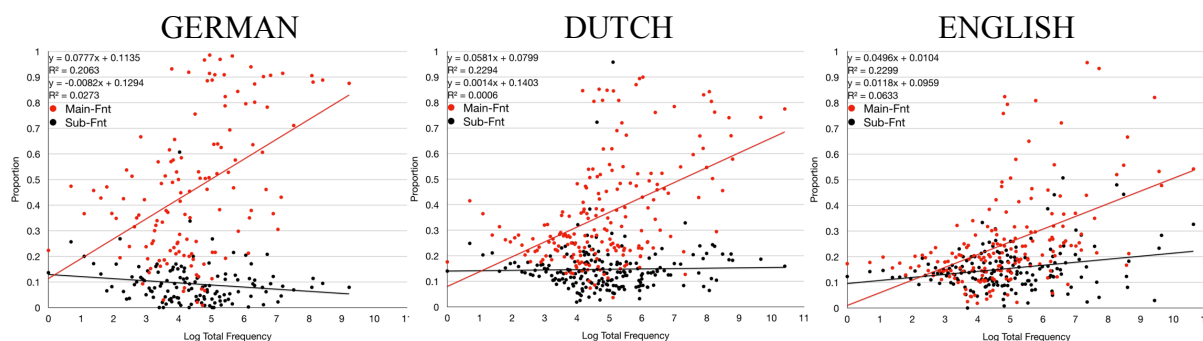


Figure 2. Effect of verb accessibility on MCB and ClauseType in the three target languages. Every red dot in a scatter diagram represents the mean Main-Fnt proportion of a GROUP of verbs that all have the same TotFreq in their corpus; likewise, every black dot shows the Sub-Fnt proportion of such a group. For instance, the average Main-Fnt and Sub-Fnt proportions of all hapax verbs (TotFreq=1) are depicted above the Log(TotFreq)=0 value (i.e., in the leftmost pair of a red and a black dot in each diagram); and the rightmost pairs of dots show the proportions of a single verb (*sein/zijn/be*). The trendline equations are shown in the top-left corners.

We refer to the rise of the Main-Fnt proportions with increasing TotFreq as MAIN-CLAUSE BIAS OF HIGH-FREQUENT VERBS—for short: “MCB effect”. The size of the MCB effects in each of the target languages is indexed by the combined differences (1) between the slopes of the linear trendlines (red minus black), and (2) between their intercepts (black minus red). Figure 2 reveals substantial cross-language differences regarding the MCB effect sizes: German > Dutch > English. Statistical analysis using Beta Regression confirmed significance of the TotFreq \* ClauseType \* Language interaction.

In our account of the two phenomena we focus on the contrast between German and Dutch on one hand, and English on the other—considering that the German vs. Dutch difference may very well be an artifact due to the smaller corpus size of, and the narrower range of topics addressed in, the German corpus compared to the Dutch one (the Dutch and English corpora are more similar in these respects).

We propose to account for the existence of the MCB effect, and for its cross-language size differences, in terms of a direct and an indirect processing consequence of verb accessibility. The DIRECT one follows from the ACCESSIBILITY–ANTERIORITY LINK that also explains other information-structural phenomena. High-frequent, hence rapidly accessible finite verbs are more likely to present themselves as candidate fillers for anterior clause positions than lower-frequent verbs. This benefits V2 clauses (German/Dutch Main-Fnts) more than V3 clauses (English Main/Sub-Fnts); and Vfinal clauses are unlikely to benefit at all (German/Dutch Sub-Fnts). The early availability of a suitable finite verb may have an INDIRECT consequence on the main vs. subordinate status of the clause-under-construction. If the proposition underlying a clause has autonomous illocutionary force (assertional, interrogative) it usually can be delivered not only as a main but also as a subordinate clause (cf. non-restrictive relative clauses). In such cases, early availability of the finite verb creates a favorable occasion for the clause to be realized in the form of a main clause, thus boosting the percentage of main clauses in the corpora, especially of main clauses with high-frequent verbs. The data pattern we obtained for the three languages fits in with this explanation.

In support of the first part of our hypothesis (the accessibility-antiority link), we refer to related corpus work we did using published treebanks for ancestral varieties of the target languages (Old High German, Old Saxon, and Old English). There, finite verbs have a wider range of placement options than in the present-day varieties. Indeed, in OHG, OS and OE main clauses, high-frequent verbs tend to occupy earlier positions than low-frequent verbs (Harbusch, Kempen & van Kemenade, 2019). Currently, we are exploring how, in strict SOV languages such as Japanese and Korean, accessibility-antiority effects on verbs get blocked.

### On 'to' in (some) infinitival complements (Ellen Brandner, University of Stuttgart)

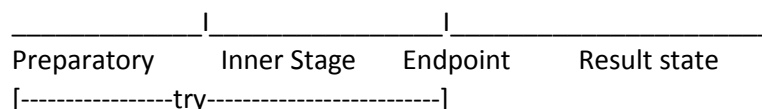
The paper deals with the syntax and semantics of the infinitival particle *zu/te/to* in West Germanic. According to common wisdom, it grammaticalized out of the respective allative preposition and is nowadays a 'pure functional' element, occupying the T-position in infinitival clauses (ICs). As the complements of modal verbs do not host a T-projection, its absence in this type of IC follows without further assumptions. Furthermore, after the completion of the grammaticalization process the particle is devoid of any semantic content and thus compatible with all types of temporal relations, even with those where the matrix verb implies anteriority of the embedded event (e.g. *regret*, *forget*) – something which would seem strange if the original notion of purpose and future-orientation, attributed to it – would still be active, see Haspelmath (1989), already Paul (1917). However, when considering diachronic data as well as data from contemporary dialects, this scenario must be doubted. First of all, the dichotomy between having the marker or not, correlating with the size of the IC in terms of functional structure is not as clear cut: in older stages of Dutch and German, there is a huge amount of variation, especially when it comes to so-called simultaneous verbs like *try* and *forget*, see Ijbema (2000) for a comprehensive overview for Dutch under a diachronic perspective, see already Demske (1994) for German. The same situation can still be found in the contemporary Alemannic dialects, see Brandner (2015), Schallert (2010). Newly gained data from the whole Alemannic area confirms this finding with an interesting additional observation: in the Alemannic speaking part of Germany (BW), nearly free variation can be found (with acceptance rates around 40% for bare infinitives). The optionality is also reflected in the areal distribution, i.e. there is no clustering in a certain region – which would otherwise speak for a parametric variation; in Switzerland (CH), (i) the amount of acceptance is smaller, and (ii) seems to be influenced by the closeness to the German border, i.e. a language contact phenomenon. With another type of IC, namely particle (= *für/zum*)-introduced purpose infinitives, a different areal pattern showed up with a clustering in the North-East, whereas again in BW no specific clustering can be detected. What this tells us is that we are obviously dealing with two slightly different types of phenomena. For the first case, I will suggest an analysis that explains the optionality (viz. the language contact phenomenon) via an inherent variability that can be traced back to the semantics of the respective matrix verbs. It will be modelled by using Ritter & Wiltschko's (2014) syntactic implementation of Hale's (2004) coincidence-feature. In the second case, we will see that the possibility of having a bare infinitive is directly related to the lexical item employed in the C-position, namely whether it is *für* – which stands merely for purpose – or *zum*, which is the genuine lexicalization of the coincidence feature, as will become clear below.

Ritter & Wiltschko (2014), while considering languages that were claimed to not have Tense at all (e.g. Halkomelem), suggest to model temporal relations in a more abstract way by postulating a category-neutral 'anchoring phrase' instead of a universal (verbal) Tense-Phrase. What is meant with this, is that temporal Anchoring is not necessarily bound to a verbal category (eventually the inflected verb) but can also be lexicalized by prepositions or pronouns, as discussed at length in Ritter & Wiltschko's work. What I will suggest here is that Germanic mixes the systems and thus uses verbal inflection for finite (i.e. deictic) Tense but prepositions for anaphoric (non-finite) Tense. The allative preposition *zu* is well-suited for this, as it is inherently complex, conceptualizing direction/path and in addition the endpoint at the same time. Transferred to tense, it thus can express temporal precedence as well as partial temporal overlap. To put it in syntactic terms, the AnchP must always be valued but there are only two values: whether the embedded is temporally co-extensive [+coin] or not [-coin]; (future and past are 'sub-values' of [-coin]). I will assume that the [+coin] as the default, is marked by the absence of a specification. This captures the (morphological) non-marking of the present (which is [+coin] with the utterance time) and the non-marking of the IC of modal and perception verbs which are both [+coin] with the matrix tense. Turning to the *forget/try*-class, the following contrasts shows that *try* – in contrast to modals has a temporal expansion of its own, which can be witnessed by the compatibility of the time adverbial with the achievement verb in (1a):

- (1) a. I tried to reach him (for hours)
- b. I reached him (\*for hours)
- c. I had to/was allowed to/was able to reach him (\*for hours)

- (2) a. I tried to work (for hours)  
 b. I worked (for hours)  
 c. I had to/was allowed to/was able to work (for hours)

Grano (2011:435) captures comparable facts by assuming a ‘mental preparatory’ phase with the verb *try*. At the same time, ‘try’ also covers the ‘inner stage’ – which refers to the event described by the lexical verb:



Given this, we can see immediately why this type of verb is underspecified w.r.t. to the [coin] feature: either the simultaneity of *try* with the Inner Stage is emphasized, i.e. [+coin], or the preparatory phase is conceived of as a separate time span, [-coin]; it thus seems that *try* is essentially compatible with both, accounting for the optionality as well as the language contact facts. However, what is not possible is an autonomous temporal reference depending on the matrix tense as in *John wants to leave (tomorrow)*, cf. the contrast *John tried to leave (#tomorrow)*, see Wurmbrand (2014). This has to do with the fact that the two temporal expansions belong nevertheless to only one event. Thus, the ‘shaky’ status of the infinitives under *try* can be traced back to the semantics of it. The uniformity in Standard (written) German (and Dutch) is therefore not the result of an endpoint of grammaticalization, but probably due to the effects of normative grammar.

Turning now to the second case, the purpose infinitives, the idea that the IM (zu) lexicalizes the [-coin] value can be applied here as well. A purpose infinitive is per se [-coin], as it is never selected by a matrix verb. Thus the expectation is that we find always a *zu*-marked infinitive. But this is not the case. Instead, in both regions, speakers produced the structures given abstractly in (3) for a purpose like [I need x, in order to...V]

(3)

construction	BW (N=502)	CH (N=228)	
a. [für ... zu V]	3,89	32,89	
b. [für ... Ø V]	0,2	1,75	
c. [zum ... zu V]	5,58	10,96	
d. [zum ... Ø V]	21,71	21,93	
e. [um ... zu V] (= Standard German)	37,45	18,86	

As is immediately evident, the possibility of a bare infinitive in a purpose clause co-varies with the complementizer. And indeed, it is the North-East, where CH uses *zum* in purpose clauses; in the other areas *für* is preferred. I will analyse the structure in (4d) as movement of the *zu*-marker from the Anch-head where it checks the [-coin] feature, to C<sup>0</sup>, see Postma (2014) for a similar construction in Brazil Pomeranian. *Für* on the other hand lexicalizes only purpose and thus, a structure without *zu* in the Anch-head is ruled out, as [coin] is not specified. A brief discussion of the pattern in (4c) with a seeming redundancy (two occurrences) will finish the paper with some speculations about whether the *zum*-form results from an incorporation process [z<sub>i</sub>-um z<sub>u</sub>], as suggested in Postma (2014) or whether it is simply dative marking with consequences for the categorial status of the infinitive.

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## Paratactic Negation in the History of German

Elisabeth Witzenhausen, Ghent University

In this talk, I want to present novel data of a corpus study on paratactic negation in Middle High German (MHG). I show that van der Wouden's (1997) theory of paratactic negation together with data from the Referenzkorpus Mittelhochdeutsch (ReM) favor an analysis of the old preverbal negative marker as a spell out of an affective or non-veridical feature of C in subordinate contexts.

**THEORETICAL BACKGROUND** Van der Wouden (1997) identifies two types of paratactic negation: an element of negative import, meaning sentential negators such as *not* or verbs such as *deny*, *doubt* or *forbid*, (i) triggers the occurrence of one or more negative morphemes in their complement clause or (ii) the negative element selects a special type of complementizer that may or may not be homophonous to a negation operator. At first glance, the instances of paratactic negation in (1) and (2) are of type (i), as there is no 'special type of complementizer' (ibid. 196).

- (1) Nikolaus von Straßburg: Predigten, early 14th century  
*Er zwiflete ovch daz vinser here (Jesus) (Christus) nit*  
 He doubted even that our Lord Jesus Christ NEG  
*geborn wre von einer megde*  
 born were by a maid  
 'He even doubted that the Lord Jesus Christ was born by a maid.'
- (2) St. Pauler Predigten, early 13th century  
*wer solt nv zwiveln si ne sin alle heilich di mit dem plyte*  
 Who shall now doubt they NEG are all sacred who with the blood  
*des almehtigen gotes werdent besprenget*  
 the allmighty god.GEN are splashed  
 'Who shall doubt that they are all holy who were splashed with the blood of the allmighty god.'

In contrast to this intuition, Breitbarth (2009) analyses preverbal *ne/en* in West Germanic languages as the head of PolP, which she identifies as Laka's (1990) negative complementizer, arguing for an upwards reanalysis of the former negative marker from containing [pol:neg] to a [pol:] feature only. Petrova (2018) argues for MHG that verbs with negative import such as *deny*, *forbid* or *doubt* in affirmative matrix clauses license *dass*-clauses with V<sub>end</sub> order, while overtly negated matrix predicates trigger V2 clauses with preverbal *ne/en* and proposes that the preverbal *ne/en* is reanalysed as an exponent of the Old High German complementizer *ni*.

**DATA** The results from my corpus investigation of various verbs with negative import confirm Petrova's (2018) distribution of *ne/en* in V2 and *niht* in V<sub>end</sub> clauses, but also draw a more fine grained picture. As table 1 shows for complement clauses to the verb *zwivelen* ('to doubt'), only 1/3 of the complement clauses contain a negative element (either single *ne/en* or single *niht*). There is only one clause, namely (1), where a verb final *daz*-clause ('that'-clause) appears with the adverbial *niht*. V2 clauses with preverbal *ne/en* as the only negative marking are the most common type of paratactic complement clause selected by *zwivelen* ('to doubt').

Century/Type of complement	Affirmative matrix clause	Negative matrix clause	Total
<b>1100-1150</b>	4	9	<b>13</b>
<i>ne</i>	2	4	6
without neg	2	5	7
<b>1150-1200</b>	<b>1</b>	<b>3</b>	<b>4</b>
<i>ne</i>		1	1
without neg	1	2	3
<b>1200-1250</b>	<b>7</b>	<b>2</b>	<b>9</b>
<i>ne</i>	2	1	3
without neg			
<b>1250-1300</b>	<b>1</b>	<b>2</b>	<b>3</b>
<i>ne</i>		1	1
without neg	1	1	2
<b>1300-1350</b>	<b>4</b>	<b>2</b>	<b>6</b>
<i>daz niht</i>	1		1
<i>ne</i>		1	1
without neg	3	1	4

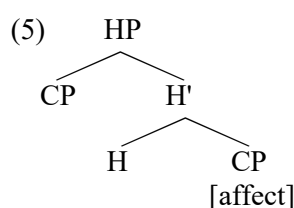
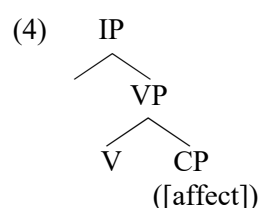
Table 1: Paratactic negation in complement clauses to the verb *zwivelen* ('to doubt') in the ReM corpus

Investigating other contexts for single preverbal *ne/en* in the ReM<sup>1</sup>, it becomes clear that single *ne/en* as paratactic negation almost exclusively appears in V2 clauses (175 of 178 clauses). Most of these clause (n=159) are adverbial clauses, such as (3) and only a few complement clauses (n=12).

- (3) Gottfried von Straßburg: Tristan, early 13th century  
*daz mich dehein ander wip iemer von dir gescheide*  
 that me any different women ever from you separate  
*wir n sin iemer beide der liebe unde der triuwe staete unde niuwe*  
 we NEG are always both the love and the faithfulness steady and new  
 'That no woman ever parts us, so that we will always be steady and fresh to both our love and faithfulness.'

Therefore, the analysis has to capture four main observations: (a) if semantically dependent clauses containing paratactic negation appear with single *ne/en*, they always include verb movement; (b) these dependent clauses almost exclusively have some negative element in their associated/main clause; (c) the assumed distribution between adversative predicates triggering one type of paratactic negation while negated (adversative) predicates trigger another type (Wallage 2005, Petrova 2018) cannot be sustained; (d) generally, paratactic negation is optional but seems more frequent in adverbial clauses when exceptive or concessive semantics are involved.

**ANALYSIS** While it seems tempting to simply assume that (1) and (2) are examples of two different negative morphemes appearing with paratactic negation, earlier approaches (cf. van der Wurff 1999, Wallage 2005 and Breitbarth 2009) as well as the clear distribution and syntactic behavior will be taken as starting point to discuss different accounts explaining the behavior of *ne/en* in contrast to *niht* in clauses with paratactic negation. I will argue along the lines of Breitbarth 2009 that *ne/en* can be analyzed as an exponent of the head of PolP. As Breitbarth takes PolP as part of the CP layer at the interface between clauses, I reinterpret PolP as an [affect] feature on C which causes *ne/en* to be spelled out on the finite verb. This affective or 'negative' C is argued to be selected either by a negative or negated matrix predicate or a silent discourse head coordinating the associated matrix clause and the dependent adverbial clause. I claim that while negated (adversative) predicates do not always select a C<sub>[affect]</sub> or PolP, as in (4), discourse heads which coordinate adverbial clauses and their associated clause (Cinque 2008, Koster 2000, De Vries 2009, Haegeman and Greco 2018) obligatorily do so (5). The use of *niht* and Modern German *nicht* in paratactic negation is argued to be a later development and to arise when V2 word order in subordinate clauses became more restricted (Reis 1997).



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<sup>1</sup> While the results for complement clauses were collected by searching for semantically negative verbs, I additionally took a random sample of 20% (n= 3929) of all clauses containing a negative particle in the ReM corpus (n=19645) and manually searched for clauses containing paratactic negation with single *ne/en*.

# VARIATION TRIGGERING REMORPHOLOGISATION IN KAAPs

Theresa Biberauer & Erin Pretorius

This paper compares the D-systems of Standard Afrikaans (SA) and Kaaps - the latter often simultaneously described as potentially the oldest and also the most heavily English- and more generally contact-influenced variety of Afrikaans (Hendricks & Dyers 2016). It is also known as *Cape Vernacular Afrikaans* (Hendricks 1978), and recently as *Afrikaaps* (Valley 2010, Williams 2016). Kaaps' morphosyntax has never been systematically investigated, a lacuna which the newly initiated SEcoKa (=Syntactic Ecology of Kaaps) project aims to fill. Here, we show how differences between the D-systems of SA and Kaaps exemplify ways in which variation arising in strongly vernacular contact varieties can be systematised to produce novel morphosyntactic distinctions, even in a highly deflected language like Afrikaans.

The pronoun systems of SA and Kaaps differ systematically in that Kaaps features oppositions between a set of *d*-initial and *d*-less forms, where SA has only *d*-initial forms. E.g. as 3<sup>rd</sup> person neuter pronoun, SA has *dit*, where Kaaps has *it* (1); SA features the already innovative (in comparison with Dutch) encliticised *dis* ('it's'), where Kaaps has *is* (2).<sup>1</sup>

- (1) **It** wasse goeie jaa vi ôs. (KAAPS; SA = **Dit** was 'n goeie jaar vir ons.)  
it was.a good year for us

'It was a good year for us.' (Trantraal Rapport Weekliks, 10/1/2016, p.15; Hendricks 2016:24)

- (2) **Is** stil innie voorhys virre oomblik. (KAAPS; SA = **Dis** stil in die voorhuis vir 'n oomblik.)  
is quiet in.the front.house for.a moment

'It's quiet for a moment at the front of the house.' (Trantraal 2018:33)

Furthermore, the SA definite article *die* is also *d*-less in Kaaps (cf. *wassie* in (3)), where articles generally encliticise onto preceding elements (cf. also *virre* > *vir* 'n' = 'for a' in (2)). Thus, two very salient definite D-elements that are *d*-initial in SA are *d*-less in Kaaps. Importantly, Kaaps does feature *d*-initial D-elements:

- (3) **Dai** wassie laaste kee wat ek vi Amelia gesien et. (KAAPS)

that was.the last time what I for Amelia seen have

'That was the last time I saw Amelia.'

(Trantraal 2018:24)

- (4) **Dais** waa POLITICAL ACTIVISTS soes Noam Chomsky my veloo. (KAAPS)

that's where political activists like Noam Chomsky me lose

'That's where political activists like Noam Chomsky lose me.'

(Trantraal 2018: 9)

*Daai* is a contracted form of SA *daardie* (there.the = 'that'), which SA speakers also use colloquially, both as a deictic and as an anaphoric element. Importantly, SA speakers more typically use *dit* to signify anaphoric *that*; consider the SA counterpart of (5):

- (5) **Dis** waar politieke aktiviste soos Noam Chomsky my verloor. (SA)

This is not possible in Kaaps, where expletive & referential *it* are always lexically distinguished from anaphoric *that* in a way that they are not in SA (cf. (7)). Thus in Kaaps *d*- seems to be "morphologised" as a high/"CP"-level demonstrative (cf. Guardiano 2009), capable of signifying both deixis and anaphoricity (cf. Kayne 2018 on English *th*- signifying definiteness; cf. Oshima & McCready 2014 on speaker-**and**-hearer-distal *that* as an "equalising" anaphoric marker). Further, interviews revealed an exclusively anaphoric *h*-initial form in Kaaps, absent in SA:

- (6) Speaker A: Joe willie vi sy eie kos betaalletie.

Joe wants.not for his own food pay.have.not

'Joe doesn't want to pay for his own food.'

Speaker B: Ja- nee, **haai** man hou sy gelt styfvas.

yes-no that man hold his money tight-fast

'I agree, that man hangs onto his money tightly.'

Speakers who employ *haai* also have *hat* in place of complementiser *dat* ('that'). So in essence, this Kaaps D-system morpholexically marks 2 distinctions that are syncretised in SA:

<sup>1</sup> Data cited in this abstract originate from native speakers; data from published texts were checked with informants.

(7)	Kaaps	SA	Gloss
	[ʔ]-initial forms: <i>it</i> and <i>is</i>	<i>dit</i> and <i>dis</i>	3 <sup>rd</sup> person singular neuter
	[d]-initial forms: <i>dai</i>	<i>daa(rd)i(e)</i>	deictic <i>that</i>
	[h]-initial forms: <i>hai</i>	<i>dit</i>	anaphoric <i>that</i>

Importantly, there is inter-speaker variation regarding the precise circumstances in which the *h*-initial forms are used, with a range of distinct, but formally coherent microsystems emerging in modern-day Kaaps. Specifically, some appear to restrict the use of *haai* to anaphoric human or animate referents (as in (6)), using *daai* in all other deictic and anaphoric contexts; others restrict *haai* to singular anaphoric referents, using *daai* elsewhere; still others appear to employ *haai* in all anaphoric contexts, reserving *daai* for deictic use; and yet others make this two-way distinction, but employ only *daai* in clause-initial position (as in (3-4)).

We analyse the “remorphologisation” of the Kaaps D-system in the context of Biberauer’s (2017) Maximise Minimal Means (MMM), a Three Factors-oriented framework (Chomsky 2005), where a maximally impoverished UG (=Factor 1), together with the input (=Factor 2), and domain-general cognitive abilities (=Factor 3) synthesise G/grammar. MMM, which is essentially a theory about the nature of Factor 3, is a general cognitive learning bias that drives acquirers to minimise the postulation of formal features i.a. by maximising domains over which postulated (earlier acquired) features apply following a NONE>ALL>SOME algorithm. Key for our analysis is how MMM interacts with the input acquirers get of the 3<sup>rd</sup>-person neuter component of the D-system in SA and Kaaps, and therefore the distinction between early- and late-acquired properties is also important (cf. Tsimpli 2014). In the MMM framework, acquirers are taken to be sensitive to systematic departures from Saussurean arbitrariness - here: the distribution of *d*-, *h*- and *i*-initial forms, which differ between SA and Kaaps, but also within Kaaps – and we know that deictic forms are acquired early (by 2 years), whereas anaphoric forms are universally acquired later (cf. i.a. Shafer & Roeper 2000, van Kampen 2004, Kirby & Becker 2007). We thus expect *d*-initial *daa(rd)i(e)* to be acquired early in both SA and Kaaps, but Kaaps acquirers encounter oppositions with *i*- and *h*-initial pronouns, whereas SA acquirers encounter *d*-initial forms throughout. Based on these oppositions, Kaaps acquirers postulate a formal feature - say [+deictic] (we follow Biberauer 2017 in assuming a UG-given template for formal features) - to account for the distribution of *d*- onsets in the paradigm. Once postulated, MMM requires this feature to be maximally utilised, which involves assigning the negatively valued counterpart [-deictic] to some part of the input. We suggest that [-deictic] may correspond to anaphoric pronouns, so acquisition of the anaphoric forms “piggy backs” on acquisition of the deictic forms in Kaaps. Furthermore, once *d*- is analysed as a morpheme, the possibility is unlocked of postulating other formal features for other opposing (parts of) the remaining pronominal form – for instance, [+distal] for the *-aai* component of *daai*. Effectively, then, opposition of *d*- in the onset of the pronominal paradigm sets off a ‘cascade’ of remorphologisation in Kaaps, and the later-acquired anaphoric forms are “built on” the features encoded on deictics. In contrast, where SA acquirers encounter no formal oppositions in pronoun onsets in corresponding parts of the pronominal paradigm, no formal features are postulated, *d*- is not analysed as a separate morpheme, and the deictic / anaphoric, distal / proximal distinction must be lexically acquired.

In sum, intraspeaker variation – both between SA and Kaaps, and within Kaaps can be thought of in terms of NONE>ALL>SOME: the SA D-system revolves on NONE (no formal oppositions in onset, no formal features postulated); on the other hand, the Kaaps system revolves on SOME, and is built around [Fs] already in the system which have been postulated to account for the distribution of certain acquisitionally salient oppositions. Variation in Kaaps (e.g. in respect of the specific distribution of *d*- vs *h*-initial forms) then follows from the fact that acquirers regularise variable input in different ways, by postulating different types of SOME systems harnessing different already-acquired features

# Pragmaticalised determiners in American Norwegian

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In Norwegian as spoken in Norway (EurNo), the determiner *sånn* ‘such’ may, in addition to its basic comparative/deictic function, carry information about the speaker’s attitudes and speaker-hearer relations (Simonsen and Christensen 1980, Lie 2008, Opsahl 2009, Johannessen 2012; see von Heusinger 2011, Ekberg et al. 2015 on similar cases in other Germanic languages). Ex. (1a) illustrates a basic deictic use of *sånn*; the second type of use, hence referred to as *pragmaticalised* (pragm.), is shown in (1b–c). Pragm. *sånn* often marks hedging; it is used when the speaker is uncertain about the modified noun or wants to signal reservation (1b). A related function is “recognitional”; *sånn* invites the listener to co-construct the referent through shared knowledge (1c) (Ekberg et al. 2015). Pragm. *sånn* may replace the indefinite article (compare (1c) to (1a–b)).<sup>1</sup>

- (1) a. *Se der! En sånn sykkel vil jeg ha.*  
look there a such bike want I have  
‘Look over there! I want a bike like that.’ DEICTIC
- b. *...det var bare en sånn # e motgreie trur jeg...*  
...it was only a such eh counterthing think I...  
‘it was only sort of a counteraction-thing I think’ (NoTa, from Johannessen 2012) PRAGM, HEDGE
- c. *Jeg så på sånn program på TVNorge*  
I looked on such program on TVNorge  
‘I watched a programme on TVNorge [of the kind we both know]’ (Ekberg et al. 2015) PRAGM, RECOG

Lie (2008) and Johannessen (2012) argue that the now widespread use of *sånn* as a pragm. determiner (pragm. det.) is a recent development, but it is unclear how far back it dates, more exactly.

This paper explores pragm. det. in American Norwegian (AmNo), a heritage variety spoken by 2–5th generation immigrants in USA/Canada. Probing into this area can shed new light on the formal analysis of pragm. det. and their history. The data are spontaneous speech from CANS.<sup>2</sup>

I show that the use of *sånn* in AmNo is very limited, both in its basic function and as a pragm. det. Instead of *sånn*, AmNo speakers tend to use *slik* ‘such’, which also exists as an overall less common, but locally productive alternative to *sånn* in EurNo (cf. Table 1 for an overview).<sup>3</sup>

Table 1	AmNo	EurNo
<i>Sånn</i> + noun	5 (10%)	1740 (85.2%)
<i>Slik</i> + noun	25 (90%)	302 (14.8%)
Total	50 (100%)	2042 (100%)

*Slik* has not previously been included in discussions of pragm. det., although it is known from some EurN dialects, with similar functions as *sånn* (Johannessen 2012:152, n.3). In AmNo, *slik* can clearly be a pragm. det.; it is particularly common as a hedge accompanied by switching to English, hesitation and/or meta comments about the modified noun; cf. (2) (pauses marked by #):

- (2) *...jeg bruker ei slik # turkey cooker sa jeg*  
...I use a such turkey cooker said I  
‘...I use a # turkey cooker, I said’ (westby\_WI\_01gm) [AMNO: PRAGM, HEDGE]

<sup>1</sup>This has mostly been discussed in the context of young, urban, speakers in multilingual communities (Ekberg et al. 2015), but can be found in other settings too (see e.g. ex. (45) in Lie 2008).

<sup>2</sup>Corpus of American Nordic Speech, <https://tekstlab.uio.no/glossa2/cans>.

<sup>3</sup>EurNo data drawn from the Nordic Dialect Corpus (<https://tekstlab.uio.no/glossa2/ndc>), regions Østlandet, Vestlandet and Trøndelag. Queries cover all instances of *sånn/slik* directly followed by a noun, including cases where a pause or a hesitation marker intervenes. Sample size AmNo: 206,942 words. Sample size EurNo: 1,474,013 words.



The use of *slik* as a pragm. det. is presumably an inheritance from the dialects of the late 19th century emigrants and not an AmNo innovation; however, it can be noted that there are very few, if any, cases in which AmNo *slik* replaces the indefinite article like the EurNo ex. (1c).

Kinn and Meelen (2018), elaborating on Bennis et al. (1998), propose a three-step development of pragm. *sånn* in (Eur)No (and *zo'n* in Dutch): i) The original deictic *sånn* is a phrase that moves to Spec-FocP; D hosts a high indef. article, and Foc an optional low article (Corver and van Koppen 2009). ii) Hedging/recogn. readings arise via Agreement with logophoric features ( $\Lambda_{A/P}$ ) in the left-edge of DP (Sigurðsson 2014, cf. also Heim and Wiltchko 2017, Biberauer 2018 with ref.). iii) *Sånn* replaces the indef. art. in Foc through Spec-Head reanalysis (van Gelderen 2004); the art. in D is made redundant because Agr. with logoph. feat. suffices to introduce new referents.

- (3) i. [DP en [FocP *sånn*<sub>j</sub> [Foc (en)<sub>i</sub>] ] [XP sykkel (en<sub>i</sub>)[PredP *sånn*<sub>j</sub> ]]] DEICTIC  
 ii. [DP  $\Lambda_A$  en [FocP *sånn*<sub>[ $\Lambda:A$ ]] [Foc (en)<sub>i</sub>] ] [XP *motgreie* en<sub>i</sub>]] PRAGM, HEDGE  
 iii. [DP  $\Lambda_{A+P}$  [FocP [Foc *sånn*<sub>[ $\Lambda:A+P$ ]] ] [XP *program* ]]] PRAGM, RECOG, NO INDEF. ART.</sub></sub>

I argue that the use of *slik* in AmNo corroborates this scenario; I propose that *slik* in AmNo is at stage ii (there is Agreement with logophoric features, but indef. articles are generally not replaced; Spec-Head reanalysis has not taken place).

In terms of overall distribution, pragm. det. are rarer in AmNo than in EurNo. *Sånn* is only marginally present; *slik* is robustly attested, but not very frequent.<sup>4</sup> This may suggest that *sånn* as a pragm. det. was not established in the language of the early emigrants (although it might have existed in other dialects). *Slik* was presumably established, and although it is not highly frequent, its retention as a pragm. det. is interesting because features at the syntax/pragmatics interface are said to be vulnerable in heritage languages (Benmamoun et al. 2013:161ff). In the case of *slik*, it might be relevant that heritage speakers often struggle with lexical retrieval (e.g. Montrul 2008); this may have promoted the use of *slik* as a hedge, preventing loss.

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<sup>4</sup>41,388 tokens per *sånn*+noun in the AmNo sample; 8278 tokens per *slik*+noun. 847 tokens per *sånn*+noun in EurNo; 4881 per *slik*+noun. A high proportion of EurNo *sånn* in particular is presumably pragm. (Johannessen 2012).

**1 Introduction.** The *was für* ('what kind of') construction (WFC) has been the subject of an ongoing debate. By taking into consideration earlier stages of the construction, the presented analysis adds to this discussion by accounting for the case-inert 'preposition' *für*. I extend Roehrs & Sapp's (2018) analysis of quantifiers (following Blümel & Coniglio t.a.) to the WFC, since the agreement pattern and case properties of a predecessor construction parallel other quantificational constructions in older stages of German. I assume that the interrogative developed from a head-type quantificational construction to a phrase-type construction (crucially not violating the head-preference principle as the status of the interrogative does not change). Instability in the case and agreement system resulted in reanalysis as a predication phrase, headed by *für* ('for').

**2 Background.** The WFC is an adnominal wh-construction (1) in Germanic, Baltic and Slavic interrogatives, often associated with a KIND-interpretation (Pafel 1996, Leu 2015).

- (1) a. *Was für Bücher hast du gelesen?*  
 what for books have you read  
 'What (kind of) books did you read?' [German, adjacent]
- b. *Was hast du [t für Bücher] gelesen?*  
 what have you for books read  
 'What (kind of) books have you read?' [wh-extraction]

Peculiar properties of the WFC cross-linguistically include the sub-extraction of the interrogative pronoun as in (1b) and the case-inertness of *für*: In (2), the NP *ein Roman* bears subject-case marking (nominative) and not the accusative case usually assigned by the preposition *für*.

- (2) [*Was für ein* / \**einen Roman*]<sub>SUBJ</sub> *liegt auf dem Tisch?*  
 what for a.NOM / a.ACC novel lies on the table  
 'What kind of novel is lying on the table?'

**3 Findings.** I gathered historical data using four corpora that cover two language periods: the GerManC corpus, the Bonner Frühneuhochdeutschkorpus (both Early New High German, ENHG, 1350-1650) and the Referenzkorpus Mittelhochdeutsch and Titus corpora (both Middle High German, MHG, 1050-1350). The data suggest that the split version (1b) did not precede the adjacent version in (1a), contrary to earlier reports (i.e. Behaghel 1923). The element *für* never assigned accusative in the WFC, suggesting that *für* either never occupied a position that enabled it to assign case (as suggested by Leu 2015) or that it is not a preposition (Corver 1991, Pafel 1996). Modern WFC originated from a predecessor structure, consisting of the wh-element *was* and a genitive-NP as in (3). Note the lack of agreement between subject and the verb (vs. WFC in (3b)):

- (3) a. *was groser froiden do inne were.*  
 what great.GEN.PL pleasures.GEN.PL there in was.SG.PST.SUBJ  
 [..wonders what heaven is like..] 'what (kinds of) great pleasures therein might be'  
 [1352, Early New High German (ENHG)]
- b. *Was für Romane liegen auf dem Tisch?*  
 what for novels.NOM.PL lie.PL on the table  
 'What kind of novels are lying on the table?' [Modern German]

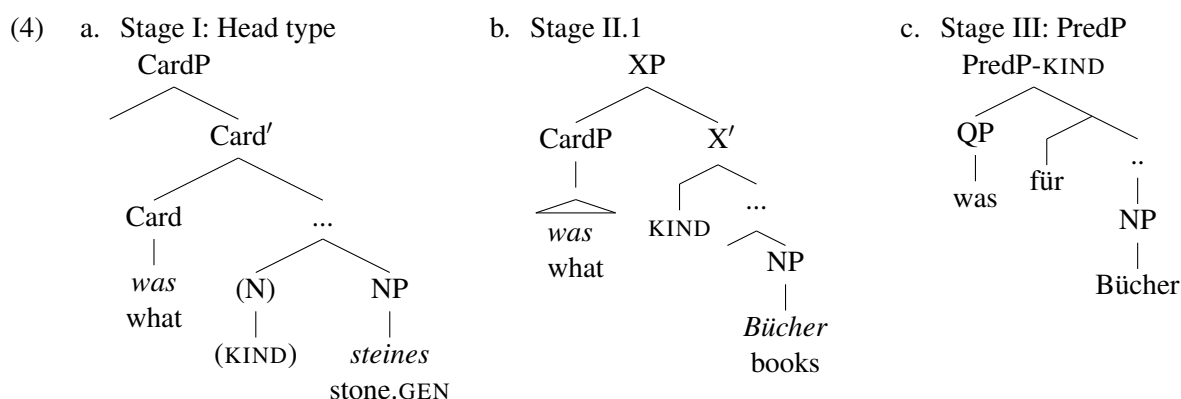
This predecessor construction occurred in KIND-wh-contexts from Old High German on and declined during the ENHG period (Stage II and III in Table 1). Co-occurring with the change in the agreement-pattern around 1500 was the emergence of case-inert *für* (Stage III). At Stage I, KIND-queries consisted of *what* and a bare genitive-NP. At stage II, the genitive case gave way to external case-marking (i.e. subject/ object case). At that time, agreement began to shift to agreement of the verb with the NP (as 3b; Stage II.2). The element *für* first occurred in Stage III.

Stage I (before 1350)	Stage II.1 (1350 - ca.1472)	Stage II.2 (around 1500 )	Stage III (from ca. 1500)
<i>was</i> + NP <sub>GEN</sub>	<i>was</i> + NP <sub>NOM/ACC/GEN</sub>	<i>was</i> + NP <sub>NOM/ACC/GEN</sub>	<i>was</i> + NP <sub>EXTERNAL</sub>
V - <i>what</i> agreement	V - <i>what</i> agreement	first cases of V - NP agreement	<i>was für</i> + NP <sub>EXTERNAL</sub> V - NP agreement

Table 1: From WGC to WFC.

This change parallels apparent irregularities in quantifying constructions in numerals cross-linguistically (e.g. Brattico 2011, Danon 2012) and in earlier stages of Germanic (Roehrs & Sapp 2018).

**4 Proposal.** Roehrs & Sapp (2018) claim that quantifiers in German developed from a head-type construction (quantifier heading CardP) to a phrase-type construction (CardP moves to the Spec of PredP). This can be extended to the WFC and its predecessor to explain the change in case and agreement behavior of the construction: Head-type quantifiers feature dependents in genitive, phrase-type quantifiers do not; the WGC, then, resembles the case facts of head-type quantifiers. Modern WFC parallels the case facts of phrase-type quantifiers, like regular quantifiers in Modern German (*mit wenig-en Freund-en*, ‘with some.DAT.PL friends.DAT.PL’).



The genitive case on the NP in (4a) results from a silent KIND-nominal in the complement of *was*, similar to modern partitive constructions (in line with Blümel & Coniglio t.a.) Along with other head - genitive constructions in German, the WGC was reanalyzed as a phrase-type construction in ENHG (4b), possibly due to an overall decline of genitive case in German (Weiß 2012). The ambiguous input of Stage II (conflicting case and agreement evidence) gave rise to the reanalysis of the construction as a predication phrase, temporarily headed by a silent copula. The interpretation of the interrogative as inquiring for a KIND of NP, in the predecessor construction rendered through the presence of the silent KIND-noun, is then re-established by predicating the properties of the noun to its subject, the interrogative pronoun (4c). Previous proposals for the WFC did not provide a full account for *für*, lacking an explanation for its function (as pointed out by Blümel & Coniglio t.a.). I argue that the element *für* was introduced as an overt predicator at Stage III, in analogy to other predication constructions like *sie halten ihn für einen Idioten* (‘they take him **for** an idiot’, Corver 1991). The role of *für* as a predicator accounts for its case-inertness (Pafel 1996, Kwon 2015 for Slavic).

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## AUXILIARY DEVELOPMENTS: A COMPARATIVE PERSPECTIVE ON MODERN AFRIKAANS

Theresa Biberauer, Cora Pots & Erin Pretorius

**Background:** From a comparative Germanic (Gmc) perspective, the modern English auxiliary system is typically viewed as an outlier: where the auxiliary-elements in other Gmc systems, including earlier stages of English, share their core morphosyntactic behaviour with lexical verbs (e.g. inflection, movement to C), modern English transparently has a distinctive class of grammaticalised auxiliaries - often described as **T-elements** - which exhibit properties (e.g. movement to C, and the other *NICE* properties of Huddleston 1976) not shared by either lexical or so-called “light” verbs (cf. much work since Lightfoot 1979). In this paper, we highlight a previously unnoticed set of facts about the behaviour of auxiliary elements in modern varieties of Afrikaans that point to an as yet undiscussed difference between the auxiliaries in these varieties compared to the rest of West Gmc. What emerges is another distinctive auxiliary system, whose individual components shed new light on the consequences of extreme deflection and, more generally, the formal make-up of the Afrikaans grammatical system.

**The data:** At first sight, Afrikaans temporal and modal auxiliaries seem to behave very similarly to their West Gmc counterparts: there is a class of temporal and aspectual elements (non-inflecting *het* - ‘have’; the BE-forms *wees/is/was* - ‘to be/be.3SG.PRES/be.3SG.PAST; passive *word* - ‘become’, which alternates with passive *wees* - ‘be’), which obligatorily linearise to the right of the lexical verb (V) in non-V2 structures (1), and a class of modal elements, which obligatorily linearise to the left of V in non-V2 structures (2), and which also participate in cluster-formation (3):

- (1) .... dat hulle die boek gelees **het**.  
that they the book read.PART have = ‘... that they have read the book’
- (2) ... dat hulle die boek **kon** lees.  
that they the book could read = ‘... that they could read the book’
- (3) ... dat hulle die boek **sou kon** gelees **het**.  
that they the book should could read.PART have  
‘... that they would have been able to have read the book’

Language-specific linearisation conventions aside, this is a typically West Gmc picture. In contrast to non-English West Gmc, however, Afrikaans lacks regular auxiliary selection, *het* (‘have’) being the sole “perfect”-marking auxiliary, as in English (we return to the scare quotes presently). Preterite loss (cf. Conradie 1999, Kirsten 2016) means that the analytic *het*+participle construction has become the default past-marking structure, with *het* consequently becoming far and away the most frequently used temporal-aspectual auxiliary (cf. i.a. Kroes 1982, Conradie 2007). In generative terms, this is significant as the absence of thematically and/or aspectually (i.e. v-)sensitive auxiliary selection (except in a small corner of the grammar involving SILENT predicates; Biberauer & Oosthuizen 2011) combined with the strong past-tense association would be expected to drive acquirers to analyse *het* as a T- rather than v-element of the kind that its counterparts in the rest of West Gmc appear to be. Furthermore, as Conradie (2007) and Zwart (2017) convincingly argue, clause-/cluster-final *het* exhibits the properties of a structurally deficient item, which incorporates into its leftward verbal host. More specifically, we show that final *het* in the spoken standard variety exhibits the same hybrid clitic and affix properties that Lowe (2016) identifies for English possessive ‘s, with its necessarily *h*-less counterpart in Kaaps plausibly instantiating further grammaticalised tense **inflection**. That is, final *het* is no longer an independently projecting head in any variety of modern Afrikaans. This highlights the fact that finiteness in these systems must be conceptualised in more articulated terms than is typically done on exclusively “C-oriented” approaches to the verb-movement component of V2, where the finite verb (Vf) is assumed to raise to C when C is appropriately specified, but to remain *in situ* when it lacks the relevant specification (cf. Vikner 1995, Holmberg 2015 for overviews).

“Reprojection”-type approaches (Koenenman 2000, Bury 2003, Biberauer & Roberts 2010), by contrast, allow us to differentiate between V2- and *in situ* Vf, the former requiring (in this case, C-related) structural specification absent in the latter. For the most high-frequency auxiliary in a robustly V2 language to grammaticalise into inflection is thus not incompatible with the maintenance of V2. As we will show by considering i.a. *ha*-deletion in Swedish (den Besten 1983, Julien 2000), the *afinite* construction in early Modern German (Breitbarth 2004), and the more general phenomenon of *root infinitives* (Wexler 1994, Rizzi 1994, Phillips 1995), the very striking difference between V2 and clause-final Vf *het* seems likely to mirror a parallel formal difference in other Gmc systems. Despite a radical morphosyntactic development, then, Afrikaans does in fact retain what seems to be a pan-V2 Gmc articulation of finiteness distinctions: V2 Vf is, in a relevant sense, considering the finiteness literature (cf. Nicolaeva 2008) “more finite” than clause-final Vf.

*Het* aside, closer investigation of the distribution of Afrikaans modal auxiliaries suggests further restructuring to compensate for the loss of Dutch tense and mood inflections. Consider the following (data from Harry Potter book 4 *Harry Potter en die beker vol vuur*):

- (4) Hy wag dat Ludo **moet** opstaan.  
 he wait that Ludo must up.stand = ‘He waits for Ludo to get up.’  
 = Hij wacht dat Ludo opstaat. [Dutch]
- (5) Nou bewe hulle effens terwyl hulle wag dat Durmstrang se geselskap **moet** opdaag.  
 now shiver they slightly while they wait that Durmstrang POSS group must arrive  
 ‘Now they’re shivering a bit while they wait for Durmstrang’s group to arrive.’  
 = Nu beven ze terwijl ze wachten op dat het gezelschap van Durmstrang opdaagt.

As (5-6) show, Afrikaans employs *moet* (‘must’) where a modal-less structure suffices in Dutch. This “extra” use of *moet* is particularly widespread in irrealis contexts, but we also find “extra” subjunctive-oriented uses of *wil* (‘want/will’) and *kan* (‘can/might’). In general, then, Afrikaans employs modals more readily and for different purposes than Dutch. As with *het*, this is a distributional consideration which has various knock-on consequences for the formal make-up of the grammar. One of these is that Conditional Inversion (CI), which targets all finite verbs in West Gmc, appears only to be readily accepted with fronted modals in the Afrikaans of younger speakers (who, unlike earlier generations, generally have little or no direct or indirect knowledge of Dutch or German). Thus once available (6a) is today preferentially realised as (6b) or (6c), both of which feature a conditional-associated modal:

- (6) a. **Reën** dit, word die vertoning afgestel. (Ponelis 1993:318)  
 rain it become the performance cancelled  
 ‘If it rains, the performance is off.’
- b. **Sou** dit reën, word die vertoning afgestel.  
 should it rain become the performance cancelled
- c. As dit **sou** reën, word die vertoning afgestel.

This restriction of V-to-C in CI is significant if we call to mind the diachrony of this phenomenon in the history of English (Biberauer & Roberts 2016a,b): like Afrikaans, Old English systematically permitted V-to-C, regardless of verb-type; as the peculiar auxiliary system referenced at the start of our abstract fell into place, the opportunities for lexical verbs to raise to C diminished, with the result that the class of V-to-C raising elements gradually became the class of T-to-C raising elements, with further restrictions to the most pertinent subjunctive-marking forms (*had*, *were*, *should*), and, ultimately in some varieties (including South African English), complete loss of CI following. In the Afrikaans case, inflectional changes again produce a key change in the distribution of modals, a subset of which then become specialised for CI. In both grammars, then, CI V-to-C entails what one might think of as a nanoparametric V-to-C specification, distinct from the V-to-C specification that holds in the system more generally - a “full” one in the case of Afrikaans, and a (non-historically) “residual” one in English (cf. again Biberauer & Roberts 2016a,b).

## **Islands in Scandinavian and beyond: Theoretical implications**

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Based on formal acceptability judgment experiments, Kush, Lohndal & Sprouse (2018, in press) and Bondevik (2018) demonstrate significant differences in extraction possibilities in English and Norwegian when it comes to embedded questions, relative clauses, adjuncts, and complex NPs. More specifically, Kush, Lohndal & Sprouse (in press) find that embedded questions and relative clauses are not uniform syntactic islands for topicalization, but complex NPs are. Unexpectedly they also find evidence suggesting that conditional adjunct clauses may not be islands. In this talk, these findings will be situated in a broader theoretical setting. I will start by reviewing formal approaches to islands and variation with the goal of outlining what the ingredients of a syntactic analysis of islands are. Then I will apply these tests to the Norwegian data and discuss to what extent our findings are compatible with these ingredients. An important argument will be that some of the clustering effects assumed in earlier formal work do not hold and that a more fine-grained approach to islands cross-linguistically is necessary.

## POSTER SESSION

June 15, 2019; 12:45 – 14:30  
*Level K7*

# Modeling syntactic variation with weighted grammars – a case study of auxiliary inversion in German verb clusters

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In German verb clusters, the verbs are normally serialized according to the rule “selected verb precedes selecting verb”. There are, however, certain lexically specified deviations from this rule. For example, when a modal verb occurs in the perfect tense, the perfect auxiliary must occur before the modal verb. According to prescriptive grammars, this so-called ‘auxiliary inversion’ must put the auxiliary into the cluster-initial position. Acceptability experiments show, however, that native speakers accept the auxiliary in all positions preceding the modal verb; only the cluster-final position is consistently rejected. This is illustrated in (1) for three-verb clusters and in (2) for four-verb clusters.

- (1) dass Peter den Wagen (hatte) reparieren (hatte) müssen (\*hatte).  
 that P. the car had repair had must had  
 ‘that Peter had to repair the car.’
- (2) dass der Wagen (hatte) repariert (hatte) werden (hatte) müssen (\*hatte).  
 that the car had repair had be had must had  
 ‘that the car had to be repaired.’

Based on unpublished experimental data as well as corroborating corpus evidence, I will propose how the gradient judgments found for the different orders can be accounted in a grammar formalism using weighted constraints. The experimental material of a magnitude estimation experiment investigating 4-verb clusters is illustrated in Table 1. The results are shown in Figure 1. Major findings are: (i) Aux=1 received the highest ratings. (ii) Orders with AUX medial positions were judged as slightly less acceptable. (iii) The AUX final order was judged as degraded. (iv) Orders in which the lexical verb followed the modal verb received still lower ratings.

Table 1: A Sample Sentence Set for Experiment 1.

Ich glaube, dass die Schubkarre schon letzte Woche ... I think that the wheelbarrow already last week V < Mod Mod < V		
Aux=1	... <b>hätte</b> repariert werden MÜSSEN had repaired be must	... <b>hätte</b> MÜSSEN repariert werden
Aux=2	... repariert <b>hätte</b> werden MÜSSEN	... MÜSSEN <b>hätte</b> repariert werden
Aux=3	... repariert werden <b>hätte</b> MÜSSEN	... MÜSSEN repariert <b>hätte</b> werden
Aux=4	... repariert werden MÜSSEN <b>hätte</b>	... MÜSSEN repariert werden <b>hätte</b>
Translation for all conditions: ‘I think that the wheelbarrow had to be repaired already last week.’		

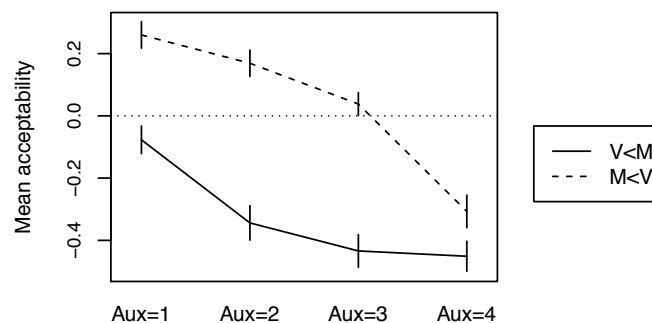


Figure 1: Mean acceptability scores obtained with magnitude estimation in Experiment 1.



Table 2: Percentages of sentences recalled with aux in position 1, 2 or 3 in Experiment 2.

response	4-Verb Cluster		3-Verb Cluster	
	Aux=1	Aux=2	Aux=1	Aux=2
1	93.6	84.3	94.2	84.8
2	5.0	11.9	5.8	1.5
3	1.4	3.7	0.0	0.0

A further experiment elicited verb clusters using a production-from-memory task. A typical finding with this task is that infrequent structures are restored to high-frequency structures on recall (e.g., passive to active voice). Participants heard a sentence, then had to add two numbers, and then had to recall the sentence. Sentences as in (1) and (2) were tested with the auxiliary either in first or second position. Table 2 shows how often the auxiliary was recalled in either first, second or third position depending on the size of the verb cluster and the position of the auxiliary in the sentence heard for recall. As expected given that Aux=1 is the Standard German order, most sentences were recalled with Aux=1, even when the input had Aux=2. However, a number of responses occurred with Aux=2, especially when this was the input position, and even with Aux=3 in the case of 4-verb clusters, although this position was not included in the input. The result of the production study were confirmed by a corpus study of the deWac corpus (Baroni et al., 2009). AUX initial clusters account for the vast majority of corpus examples. Clusters with the auxiliary in a medial position also occur, but with only low frequency. Clusters with AUX final order are practically absent from the corpus.

In sum, comparing acceptability ratings and corpus frequencies reveals two mismatches that have also been found in other domains of grammar (e.g., Featherston, 2005). First, a slight acceptability advantage for a certain syntactic variant can lead to a strong frequency advantage. Second, syntactic variants with (basically) zero frequency can still vary in acceptability.

Mismatches of this kind have been used to argue that there is no principled relationship between acceptability and frequency. I will show that this argument only holds when acceptability is related to language use on the level of global sentence frequencies, as in Stochastic OT (Boersma and Hayes, 2001), but not when this relationship is considered on the atomic level of individual constraints. In particular, the seeming discrepancies between judgment and frequency data can be reconciled using OT-style grammars based on Harmony (see Pater, 2009). Simulations using the Praat program (Boersma and Weenink, 2016) show that the observed frequencies can be predicted from the experimental acceptability judgments.

This analysis derives the two kind of mismatches between acceptability ratings and production frequencies as follows. First, because the mapping between constraint weights and corpus frequencies is non-linear, small differences in acceptability can appear as huge differences in corpus frequencies. This non-linearity also accounts for the second type of mismatch. Syntactic variants with zero or near-zero corpus frequencies can still show significant differences with regard to their acceptability because below a certain acceptability value all structures are predicted to occur with zero frequency even if these low acceptability still vary substantially.

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Boersma, P. and Hayes, B. (2001). Empirical tests of the gradual learning algorithm. *Linguistic Inquiry*, 32:45–86.

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Pater, J. (2009). Weighted constraints in generative linguistics. *Cognitive Science*, 33:999–1035.

## Adversative *aber* in adverbial clauses in historical German

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The use of the adversative particle/connector *aber* ‘but, however’ in adverbial clauses has so far only been mentioned in passing in the literature (e.g., Métrich/Courdier 1995:280; Pasch et al. 2003:533), mostly in connection to its so-called postinitial use in main clauses (1), recently analysed in Catasso (2015). The curious property of this particle/connector is that while it occurs inside the adverbial clause, either immediately after the complementizer or later, its scope includes the entire complex sentence, contrasting the totality of main and subordinate clause with a proposition in the external context; indeed, adversative *aber* can also occur preceding the entire complex sentence, (2). The present paper proposes an analysis for this adversative use of *aber* in adverbial clauses, with a study of historical (ReM, FnhdC) and present-day (DeReKo) corpora of German as empirical base.<sup>1</sup>

There is a diachronic change in the ordering possibilities of clause-internal *aber* relative to other constituents: since the Early New High German period (ENHG; 1350-1650), pronouns must, and full DPs may precede *aber*, while in Middle High German (MHG), pronouns could also follow the particle, (3). Métrich/Courdier (1995) and Pasch et al. (2003) treat adversative *aber* in adverbial clauses as a variant of postinitial *aber* in main clauses (1), but the fact that postinitial *aber*, marking contrastive or shifting topics according to Catasso (2015), (4), is incompatible with familiar topics, (4b), shows that adversative *aber* rather aligns with the lower post-finite *aber* (e.g. *Noch verschlingt (aber) der Mining-Prozess (aber)...* in (1)). An analysis as a modal particle (MP) can be rejected out of hand: MP-*aber* is restricted to exclamative main clauses (*Der Kaffee ist aber heiß! / Ist der Kaffee aber heiß!* ‘Oh wow, the coffee is really (unexpectedly) hot!’), and while other MPs can occur in certain types of subordinate clauses (namely those that have an independent illocutionary force; Thurmair 1989), they cannot occur in central adverbial clauses (Coniglio 2007), such as the conditional clauses in (2) and (3).

The current paper proposes that adversative *aber* in adverbial clauses in PDG can occupy two positions: adjoined to CP and adjoined to the launch position of the world operator moving to the clausal left periphery in temporal and conditional clauses (Mood<sub>irrealis</sub>P for Haegeman 2009; 2010). Though the status of adjunction in the theory may require more reflection, this can account for the fact that *aber* in subordinate clauses semantically takes scope over the entire complex clause: Developing further a proposal by Endo/Haegeman (2014), according to which the internal properties of adverbial clauses determine their external syntax (‘adverbial concord’), it is argued that if features of Mood<sub>irr</sub>P determine the relationship with the matrix clause, so do any modifiers of Mood<sub>irr</sub>P. The position of postinitial *aber*, as the head of a high TopP preceeding FocP, is not available in (central) adverbial clauses. Historically, though, pronouns can occur in a low left-peripheral Topic position (Frascarelli/Hinterhölzl’s Top<sub>Fam</sub>P; FinP according to Haegeman 2010). A diachronic change in the positions available to pronominal subjects (with Top<sub>Fam</sub>P becoming unavailable for pronominal subjects over time) accounts for the different subject positions across time:

<sup>1</sup> <https://www.linguistics.rub.de/annis/annis3/REM/>, <https://korpora.zim.uni-duisburg-essen.de/annis/>, and <https://cosmas2.ids-mannheim.de/cosmas2-web/>, respectively.

	SpecCP	C	Top <sub>Fam</sub> P	TP	Mood <sub>irr</sub> P	vP
MHG	OP <sub>W</sub>	<i>so/ob/Vfin</i>	pron	<aber> pron	<aber> T <sub>OP<sub>W</sub></sub>	full DP
PDG	OP <sub>W</sub>	<i>wenn/Vfin</i>	–	pron/full DP	<aber> T <sub>OP<sub>W</sub></sub>	full DP

In MHG, *aber* separates the thematic from the rhematic domain (similar to *þa/þonne* in Old English; e.g. Van Kemenade/Milicev/Baayen 2008), forcing rhematic DPs to occur in a low position. Structures with a (subject) pronoun preceding *aber* are superficially ambiguous between [<sub>TopP</sub> pron [*aber* [<sub>TP</sub> ...]]] and [<sub>TP</sub> pron [*aber* [<sub>MoodP</sub> ...]]]. Only structures like (3) —a minority pattern in MHG in both asyndetic (V1-) and syndetic adverbial clauses— would constitute evidence for the availability of Top<sub>Fam</sub>P/FinP. This original information-structuring function was lost on the way to PDG (cf. Métrich/Courdier 1995), leading to a collapse of subject positions in TP and vP (e.g. Hartmann 2008), and a fixation of adversative *aber* as adjoined to the launch position of OP<sub>W</sub>, Mood<sub>irr</sub>P.

## Data

- (1) *Noch aber verschlingt der Mining-Prozess enorme Energiemengen.*  
 still PRT devours the mining process enormous energy amounts

‘Currently, however, the mining process devours enormous amounts of energy.’  
 ([https://www.deutschlandfunk.de/blockchain-stories-5-digital-und-dreckig.807.de.html?dram:article\\_id=435999](https://www.deutschlandfunk.de/blockchain-stories-5-digital-und-dreckig.807.de.html?dram:article_id=435999))

- (2) (*Aber wenn (aber) Partikeln (aber) funktionalen Köpfen entsprechen, wird*  
 PRT if PRT particles fPRT functional heads correspond.to is  
*das durchaus angenommen [...]*  
 this indeed assumed

‘If, however, particles correspond to functional heads, this is indeed assumed ...’  
 (adapted from Volodina & Weiß 2010: 25; [http://www.annavolodina.de/dokumente/Vortrag\\_GGS\\_naemlich\\_7-05\\_\\_lit.pdf](http://www.annavolodina.de/dokumente/Vortrag_GGS_naemlich_7-05__lit.pdf))

- (3) Middle High German (*Stadtbuch Augsburg*, 1276-81)  
*wil aber er sin niht tvn . so so mag in der vogt niht genoeten /*  
 wants PRT he it.GEN NEG do so so may him the reeve NEG force  
*vmbe den schaden ze clagenne*  
 for the damage to sue

‘If, however, he does not want to do it, then the reeve may not force him to sue for the damage.’

- (4) *Der Dieb wollte schnell fliehen.*  
 the thief wanted quickly escape

- a. *Das Tor aber war gut bewacht.* b. *Er (\*aber) schaffte es nicht.*  
 the gate PRT was well guarded he PRT made it NEG

(adapted from Lenker 2014:32)

## Selected References

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## A *n*(umber) of things: linking morphemes in Dutch and German

*Paula Fenger (UConn) & Gísli Rúnar Harðarson (U. of Iceland)*

The expression of number (#) within the noun phrase has been argued to vary between a high (*num*) and a low position, which Kramer (2014), i.a., associates with *n*, providing the root with a syntactic category. We argue that Linking Morphemes (L) in Dutch and German provide new evidence for such a split, and moreover, for a low expression of # in languages that are normally considered to have high #. We argue that L is realized in the absence of *num* when *n* bears # and an additional feature. Under this approach, the different properties, i.e. containment, variation across different contexts, and double marking, can be accommodated. By taking L to instantiate *n*, the presence or absence of L can be taken as a diagnostic of the size of non-head elements. Combined with recent work on Germanic compounds (Harðarson 2016, DeBelder 2017) this makes a prediction about the order of modifiers in compounds, which we show is borne out.

**L's crosslinguistically.** The properties found for Dutch and German L correspond to the split found for high and low number cross-linguistically (Acquaviva 2008, Kramer 2016), table 1.

<b>Tab. 1:</b> Properties of #	num-#	<i>n</i> -#	German L	Dutch L
(i) Selectional restrictions	✗	✓	✓	✓
(ii) Non-deterministic	✗	✓	✓	✓
(iii) Idiosyncratic meaning	✗	✓	✓	✓
(iv) Occurs in derivational contexts	✗	✓	✓	✓
(v) Multiple # marking	✗	✓	✓	✓

(i) Generally, the choice of L inside compounds is more restricted than for PL markers, but are homophonous: The markers can overlap, (1), but do not have to (2). In Dutch *-s*-L can occur with *-en*-PL, but *-en*-L only appears on *-en*-PL nouns outside of compounds. Note that plural interpretation is not obligatory, (1d). The same holds for German, although the set of L is larger and also appears to include case markers. Moreover, German has a PL that is exclusively associated with a high position, *-s*. (ii) Usually, the choice of L depends on the non-head element, (1c-d), however the choice of L is not necessarily fixed, (2) (Hoekstra 1996, DeBelder 2013, 2017, Agust 1975, Krott et al. 2007). (iii) the choice of L can conditions a special meaning of the non-head element (2c). The same holds for German (a.o., Becker 1992, Neef 2009).

- |                             |  |   |   |
|-----------------------------|--|---|---|
| (1) a. kat<br>cat<br>'cat'  | b. katt- <b>en</b><br>cat-PL<br>'cats'     | c. katt- <b>en</b> -luik<br>cat-L-shutter<br>'cat flap' | d. katt- <b>en</b> -droll-en<br>cat-L-turd-PL<br>'cat turd' |
| (2) a. hond<br>dog<br>'dog' | b. hond- <b>en</b> /*s<br>dog-pl<br>'dogs' | c. hond- <b>s</b> -dol<br>dog-L-crazy<br>'rabid'        | d. hond- <b>en</b> -voer<br>dog-L-food<br>'dog food'        |

(iv) L can be used to derive adverbs, when used outside of compounds (De Belder 2013).  
(v) Multiple #-marking is observed in certain dialects with low *-er* and high *-s* plurals: the diminutives splits #-marking. German has more evidence for two #-positions: some dialects only have PL inside DIM, and *-s* only occurs outside DIM.

- |   |  |
|---|--|
| (3) a. kind- <b>er</b> -tje-s<br>child-PL-DIM-PL<br>'little children' (St. Dutch) | b. Kind- <b>er</b> - ke- s<br>child- PL- DIM- PL<br>'little children' (Low Rhenisch, Ott 2011) |
|---|--|

**Germanic *n*#.** Based on the properties shown in table 1, we assume the following DP structure:

- (4) [DP [D [NumP Num [ATOMIC, α, +/-DISCRETE] [nP n [+/-ATOMIC, α] [✓ ] ] ] ]

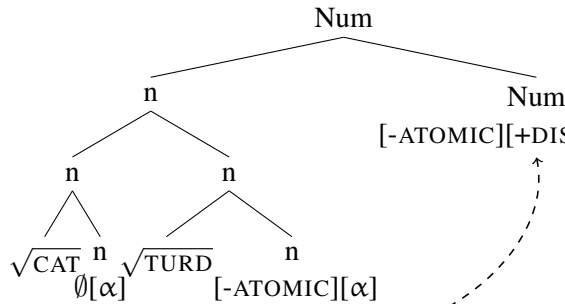
Following Harbour (2011), Cowper and Hall (2014), we argue number is formed by [ATOMIC], distinguishing if a referent is a single entity, and [DISCRETE], determining countability; crucially there is an implicational relationship: [+ATOMIC] implies [+DISCRETE], [-ATOMIC] is compatible with either value of [DISCRETE]. We assume [ATOMIC] originates on *n*, and gets copied onto *Num*. We predict overlap between L and PL (Dutch), separate L and PL (German), and double PL (tab1-v). We also assume *n* hosts a class feature (De Belder 2013), tab. 2, accounting for the selectional restrictions, tab1-i. L is the spell out of an interplay between features on *n*.

Tab 2a. German class F & L	$\alpha$	$\beta$	$\gamma$	$\delta$
-er	+	+	+	+
-e	+	+	+	
-en	+	+		
-∅	+			

Tab 2b. Dutch class F & L	$\alpha$	$\beta$
-er	+	+
-en	+	
-s		

**Deriving L-compounds.** Compounds are formed by adjoining the non-head element directly to the head of the compound in syntax after being formed in separate workspaces (Piggott & Travis 2013). The non-head is unspecified for [ATOMIC], allowing it to be interpreted as either singular or plural, and the head is specified for [-ATOMIC]. Following Ritter (1991), *Num* is then merged, resulting in the structure in (6, deriving 1d), where the features of *n* are copied. At spell-out, the VI rules in (6) apply. In Dutch, haplology excludes the double *-en* marking on *turd*. In case of the non-deterministic L and PL mismatches tab.1-ii), we propose that the compound structure serves as a context for deleting a class feature.

(5)



(6)

Vocabulary Insertion rules

- a.  $\sqrt{\text{CAT}}$  → *kʌt*
- b.  $\sqrt{\text{TURD}}$  → *drɔl*
- d. [+ATOMIC] → ∅
- e. [ $\beta$ ] → /əɪ/
- f. [ $\alpha$ ] → /ə(n)/
- g. [+NOMINAL] → /s/

**Element size and bracketing restrictions.** Our proposal predicts when L is present in compounds. It has been argued that compounding is layered and the size of the element determines the layer at which it can be attached (Harðarson 2016, DeBelder 2017), e.g. only elements of the same size can be compounded. Hence roots, (7a) cannot occur outside of categorized material. If the absence of L indicates the absence of *n*, bracketing effects are expected: (7a) should not appear structurally peripheral to an element carrying L, since L signals *n*. This is borne out, (8), (9), where only a right or left branching structure is allowed, based on L's location.

(7)

- a. \*kleer  
cloth

Intended: sing. of clothes

- b. kle(e)r-en  
cloth-L/PL

'clothes'

(8)

- boer- en klee - kast
- farmer- L cloth - closet
- [x-L[y z]]: 'closet for farmers'
- \*[x-L-y[z]]: 'closet for farmer's clothes'

(9)

- klee- kast- en -maker
- cloth- closet- L -maker
- \*[x-[y-L-z]]: closet maker of clothing
- [x-y-L[z]]: 'maker of wardrobes'

**Conclusion.** This approach allows for the unification linkers and inflectional suffixes in West Germanic and provides a novel direction for exploring compound structure.

## Prepositional object clauses in German and Dutch

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**The issue.** One of the major issues in the Germanic OV languages Dutch (NL) and German (DE) is whether or not complement clauses are base-generated in the right-periphery as complements (Kayne 1994; Zwart 1993; Haider 1997), as adjuncts (Koster 1978; Culicover & Rochemont 1990; Webelhuth 1992) or moved there via some rule of extraposition (for different proposals see Rosenbaum 1967; Baltin 1982; Müller 1995; Buring & Hartmann 1997; Goebbel 2007). In this talk we address this question based on prepositional object clauses (=PO-clauses), see (1).

- (1) a. dass Carl sich (**darüber**) freut, [dass er ein Geschenk bekommen hat] DE  
that C. REFL PROFORM is-happy that he a present gotten has
- b. dat Jan (**erover**) klaagde [dat Marie hem steeds plaagt] NL  
that Jan about.it complained that Marie him always teases  
'that Jan complained about it that Marie teases him all the time.'  
(Broekhuis & Corver, 2015, 726)

PO-clauses in both languages occur with a prepositional proform (DE: weak: *drunter*, *driüber*, etc.; strong: *darüber*, *darauf*, *davon*, etc.; NL: weak: *ervan*, *erover*, etc., strong: *daarvan*, *daarover*, etc.), which is optional with some verbs.

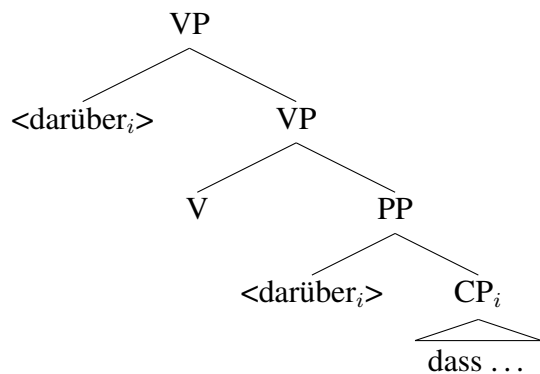
**Main data.** (D1) In DE the strong proforms can form a constituent with the clause and appear clause initially (Vorfeld=VF), in the middle field (=MF) or extraposed (Nachfeld=NF), see (2) (Breindl 1989). This is impossible for DE weak forms (Eisenberg 2013) and for all NL forms (Haslinger 2007). (D2) The clause cannot precede the proform (Buring 1995; Sternefeld 2009) see (3) (except in left dislocation structures, which we assume to be base-generated). (D3) For both languages, with those verbs that allow the proform to be dropped, it can only be dropped, when the clause is extraposed, see (4) (Webelhuth 1992; Bayer 1995).

- (2) a. Darüber/\*drüber dass Maria kommt, freut sich Hans schon seit Tagen. DE  
PROFORM that M. comes happy.is REFL H. already for days
- b. weil Hans sich darüber/\*drüber, dass Maria kommt, freut
- c. Hans hat sich gefreut darüber/\*drüber, dass Maria kommt.
- (3) a. \*Dass Maria kommt, freut Hans sich darüber. DE
- b. \*weil Hans sich, dass Maria kommt, freut darüber
- c. \*Gefreut, dass Hans kommt, hat sich Hans darüber schon lange.
- (4) a. Hans freut sich (darüber), dass Maria gewonnen hat. DE  
H. happy.is REFL PROFORM that M. won has
- b. Dass Maria gewonnen hat, \*(darüber) freut sich Hans. DE
- c. ??[Dat Marie hem steeds plaagt], klaagde Jan. NL  
that Marie him always teases complained Jan  
(Broekhuis & Corver, 2015, 726)

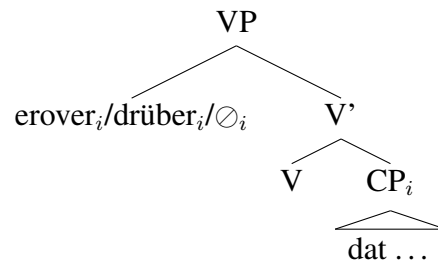
**Analysis.** Following Haider (1997, 2010); Inaba (2007), we take extraposed complement clauses to be base-generated to the right (contra a. o. Müller 1995; Buring & Hartmann 1997) as complement to the verb (which will be discussed in more detail). With PO-clauses DE allows for the two options in (5) and (6), whereas all forms in Dutch PO-sentences only allow for (6). In (5) the proform and clause form a constituent, but the proform can move into the MF. In (6) the proform is a true correlate and fills the argument position together with the clause (see Zifonun et al., 1997; Haider, 2010 for ideas along this line.).

This difference in structure allows to account for D1: the PP in (5) can move as a constituent into the MF or VF, whereas no such constituent is available in (6).

(5) DE strong forms



(6) DE weak forms, NL proforms, and all null forms



The clause cannot move across the proform on its own as a result of the co-indexation with the proform in both (5) and (6) (D2). This is in parallel to what we find with relative clauses or complement clauses to nouns, which cannot precede their head nouns either (Müller, 1995):

(7) \*Dass Maria kommt, freut Peter sich über die Tatsache DE  
that M. comes is.happy P. REFL on the fact

D3 is due to the availability of a null form, which has to be base-generated in front of the verb, so it only appears in (6). As a result, the clause cannot move across the correlate (as with D2) and is stuck in the NF.

Further support for the analysis in (6) comes from the restriction on the position of the weak form in DE, which has to be adjacent to the verb:

(8) a. weil Jan sich sehr darüber/drüber geärgert hat, dass Maria kommt DE  
because J. REFL very PROFORM annoyed has, that M. comes  
b. weil Jan sich darüber/\*drüber sehr geärgert hat, dass Maria kommt

In NL this is similar, though NL has an additional option of extracting *er* and stranding the preposition in the verb-adjacent position, as in (9):

(9) a. Jan heeft er de hele dag naar gezocht. NL  
Jan has there the whole day for looked  
b. \*Jan heeft ernaar de hele dag gezocht. (Broekhuis, 2013, 331)

**Extensions.** In both structures the clause is not a direct object argument of the verb (even when the proform is null), predicting an extraction restriction both with and without an overt proform. As the judgments for long-extraction are subtle we are currently developing a questionnaire study on extraction from extraposed PO-clauses with and without the proform.

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## There seems to be one path:

### The diachronic development of Germanic modal copular constructions

Marjolein Poortvliet (Charles University, Prague)

Copulas are claimed to be the product of grammaticalization, in which lexical items develop into copulas and possibly into auxiliaries and affixes (Van Gelderen 2015, Lohndal 2009). As such, copulas are assumed to follow the diachronic developmental path as given in 1.

#### 1. lexical item > syntax > morphology

This describes the development of copulas in rather broad brushstrokes, painting a general picture of copula grammaticalization cross-linguistically. In this poster talk, I show the more detailed grammaticalization patterns that can be found when we zoom in on copular constructions in three Germanic languages, by:

- Describing the diachronic syntactic developments of Dutch, German and English copular verbs of appearance, i.e. *seem*, *lijken*, *schijnen*, *scheinen*. I illustrate these syntactic developments using corpus data (1100 to 1800) from each language (Diewald and Smirnova 2010, Whitt 2015, De Haan 2007, Gisborne and Holmes 2007, by Vliegen 2011).
- Proposing a shared grammaticalization path found in these languages. Even though the history of modal copular constructions has been touched upon in the literature for each language individually, a comparison shows that the grammaticalization paths of copular constructions with modal verbs are highly similar, see 2.

#### 2. lexical item > copular construction > [+that, +INF, +like] > parenthetical construction

This path states that the copular verb develops from a lexical intransitive item (see 3, here meaning ‘to befit’) into a copular item, marked by the required presence of an adjective (see 4). The next step is that of complementation, in which the verb starts to take *that*-complements (see 5), infinitival complements or *like*-complements, not necessarily in that order. The final step in the syntactic grammaticalization process is the emergence of the copular verb in parenthetical constructions (see 6). The below examples are from English, but I show that the same patterns are found in Dutch and German.

3. *Hire **semes** curteys forto be, for she is fayr so flour on tre.*  
‘It befits her to be courteous, as she is fair as a flower on a tree.’ (13th c.)
4. *the thinges that whilom **semeden uncerteyn** to me*  
‘The things that used to seem uncertain to me.’ (Chaucer, 14th c.)
5. *And yif I turne ayein to the studies of men, who is he to whom it sholde **seme that** he ne scholde nat oonly leven thise thinges, but ek gladly herkne hem?*  
‘And if I turn again to the study of men, who is it to whom it should seem that he should not only allow these things but also gladly hear them?’ (Chaucer, 14th c.)



6. *The first **the semeth** is harde...*

‘The first one, it seems to you, is hard...’

(Aelred of Rievaulx, ca. 1450)

- Providing a formal analysis of this diachronic path in Construction Grammar, in which the copular construction is considered a conventionalized chunk of language with identifiable syntactic and semantic features. This analysis focuses first on the host class, which undergoes reanalysis (from adverb to adjective) to later become subject to expansion (from adjective to complement clauses). The last step, the emergence of the parenthetical construction, follows from the use of the *that*-complement: the optionality of the complementizer makes movement within the sentence possible, in line with the *Matrix Clause Hypothesis* (Thompson and Mulac 1991, reminiscent of *slifting*, Ross 1973).

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**German Passives and English Benefactives: The Need for Non-canonical Accusative Case**  
Vera Lee-Schoenfeld (University of Georgia) & Nicholas Twiner (Queen Mary University of London)

In German passivization, there are two different case alternations. In (1) and (2a), the *werden* ‘be’ passive, ACC(usative) alternates with NOM(inative), and, in (1) and (2b), the *kriegen* ‘get’ passive, DAT(ive) alternates with NOM. Due to the presence of a passive voice head, and thus the absence of an external argument, no structural ACC is available for the Theme DP in (2b) (Burzio 1986). Hence the need for a non-canonical ACC case feature.

- (1) Jan hat ihm einen Stift geschenkt  
Jan.NOM has him.DAT a.ACC pen given  
‘Jan gave him a pen (as a gift)’
- (2) a. Ihm wurde ein Stift geschenkt  
him.DAT was.PASS a.NOM pen given  
b. Er kriegte einen Stift geschenkt  
he.NOM got a.ACC pen given  
‘He was given a pen (as a gift)’

Note also that, just like main verb *kriegen*, passive Aux *kriegen* assigns a Recipient (or more generally, an Affectee) role to its argument, but the DAT that comes with this role must not be available. Otherwise, we would not get NOM-marking on this argument.

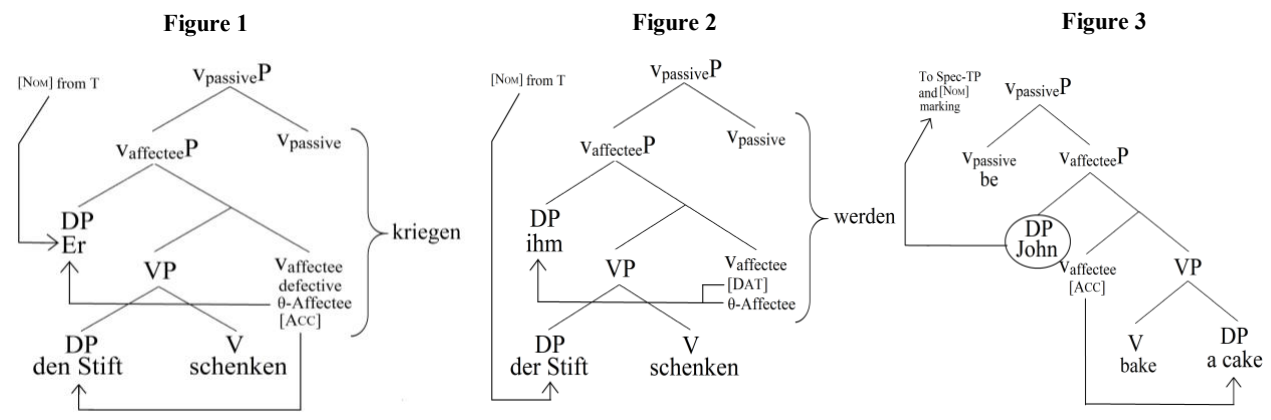
Turning to English benefactive verbs, as in (3-4), the structural ACC case feature associated with agentive *v* is assigned to the highest DP in the verbal domain. Under passivization, only the structurally case-marked ACC argument, the Theme DP in (3) and the Recipient DP in (4), can become the NOM-marked subject. Thus, again, a non-canonical ACC case feature is needed to be assigned to the Theme DP in (4b).

- (3) a. I baked a cake  
b. A cake was baked
- (4) a. I baked John a cake  
b. John was baked a cake / \*A cake was baked John

Both phenomena can be explained by the addition of ACC case features to applicative heads (cf. Hallman 2015). Just like agentive *v* structurally values the case feature on an internal argument in its c-command domain before the external argument is merged, these ACC-licensing applicative heads value the case of a DP already in the structure before the applicative argument is merged. Following Broekuis & Cornips (2012), we take the *kriegen* passive to be a syntactic transformation based on the availability of DAT case. Unlike Alexiadou et al. (2013), we maintain that DAT is assigned by the applicative head and that a defective applicative head combined with a passive voice head results in the *kriegen* passive. More specifically, the DAT-NOM alternation of the Recipient DP is the result of a defective applicative head failing to assign the inherent DAT associated with Affectee roles and the inclusion of a passive *v*, as in Figure 1. Presenting a unified account of German passive voice, we base the difference between *kriegen* and *werden* passive on the features of the selected applicative (affectee) head. The ACC-NOM alternation in the *werden* passivization of double object constructions occurs when a non-defective, non-ACC-licensing affectee head cooccurs with a passive voice head, as in Figure 2. The proposed assignment of non-canonical ACC case also accounts for the variation in English benefactive constructions, as seen in

examples (3-4). Because the affectee head assigns ACC to the Theme DP, the Goal DP is free to move into Spec-TP and receive NOM case, shown in Figure 3.

In line with Kratzer's (1996) Voice head proposal, we assume that passive  $v$  is spelled out as the passive Aux. Alexiadou (2005) likewise claims the English *get* passive is a lexicalization of the Voice/ $v$  head. We extend these analyses to cover the spell-out of the German *kriegen* passive. Without a defective affectee  $v$ , the presence of the passive  $v$  leads to the spell-out of the passive Aux as *werden* (see Figure 2). But when there is a defective affectee  $v$  and a passive  $v$ , the spell-out of the passive Aux is *kriegen* (see Figure 1). A defective affectee  $v$ P meets the selectional requirements of only a passive  $v$ , not an active (agentive)  $v$ , which has as a consequence that our non-canonical ACC is never available in combination with structural ACC, and ungrammatical double-ACC generations like *\*Ich gebe dich.ACC den.ACC Stift* ('I give you the pen') do not converge. The verbal heads combine (whether it be via covert head movement, spanning, or contextual specification), and, if no active  $v$  is included, V is spelled out as a participle, in line with Taraldsen 2015. Under this approach, because the main V in both German passive constructions is included in the same extended projection as the affectee  $v$ , the Affectee argument receives its theta-role uniformly, regardless of the case it ends up with. And despite alternating with NOM, the DAT Affectee argument is still inherently case-licensed, not structurally.



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## The prepositional nature of the North Germanic complementizer

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We argue that the usual subordinate declarative finite complementizer in North Germanic, *at/att/að*, is prepositional, in a formal sense, and that this accounts for (i) why it appears as a complement to functional prepositions and (ii) why it appears as an adjunct to pronouns. These traits distinguish it from the standard subordinate declarative finite complementizer in West Germanic, *that/dass/dat*.

### 1. CPs as arguments in NG and WG

It is sometimes claimed that North Germanic CPs are DP-like, in that they occupy DP position, more so than in other languages. Compared to West Germanic languages, this is only partly true. The behavior of CPs in subject and object positions is comparable across the two branches of Germanic (henceforth NG and WG). For example, in both branches, subordinate finite CPs fairly freely appear as thematic subjects and objects, when the semantics of the verb allows it, in peripheral positions (Koster 1978), as in (1–2).

- (1) a. Dat hij komt is noodzakelijk (WG, Dutch)  
b. Att han kommer är nödvändigt (NG, Swedish)  
*that he comes is necessary*
- (2) a. Er erinnert sich, dass er vergessen hat (WG, German)  
b. Hann rifjar upp að hann hafi gleymd (NG, Icelandic)  
*he remembers that he has forgotten*

### 2. CPs not in same positions as DPs, in NG and WG

In neither WG nor NG can CPs occupy subject position as identified by inversion.

- (3) a. \*Is dat hij komt noodzakelijk? (WG, Dutch, Koster 1978)  
b. \*Är att han kommer nödvändigt? (NG, Swedish)  
*is that he comes necessary*

CPs are also resisted in the subject position of small clauses, in keeping with the preference for clause-peripheral position (Stowell 1981).

- (4) a. \*I made that I would leave early clear (WG, English)  
b. \*Jeg gjorde at jeg skulle dra tidlig tydelig (NG, Norwegian)  
c. I made (it) clear that I would leave early  
d. Jeg gjorde (det) tydelig at jeg skulle dra tidlig

Both NG and WG allow CPs in non-case positions which are disallowed for DPs

- (5) a. I am thankful \*(for) your help. (WG, English)  
b. Jeg er glad \*(for) hjelpen din. (NG, Norwegian)  
c. I am thankful (\*for) that you helped.  
d. Jeg er glad (for) at du hjalp.

In neither WG nor NG can ordinary subordinate finite CPs refer to individuals, hence they cannot generally appear as indirect objects (setting aside headless relatives).

### 3. Functional P with CP in NG, not WG

There are two ways in which NG CPs appear to be more nominal than WG CPs. The first is that in NG languages, CPs can appear freely as the complements to functional prepositions. This has already been illustrated without comment in (5c) vs. (5d), where Norwegian but not English allowed the preposition *for* before CP. The pattern is more general; NG allows essentially any functional preposition with finite CP, while WG is far more restrictive.

- (6) a. Jeg tenkte på at det var sopp i skogen (NG, Norwegian)  
 b. \*I thought about that there were mushrooms in the forest (WG, English)  
 c. Jeg henviste til at det var sopp i skogen  
 d. \*I referred to that there were mushrooms in the forest  
 e. Jeg var ristet av at det var sopp i skogen  
 f. \*I was shaken by that there were mushrooms in the forest

CP with functional P is highly restricted in WG. There are words like *before* and *since* which can appear as P (*before lunch*) or as a subordinating complementizer (*before we ate*), but they are different in not taking the complementizer, combining with TP directly (*\*before that we ate*). Emonds (1985) argues for a general unification of P and C, partly on the basis of such words. According to van Riemsdijk (1990), words like *before* are lexical (P), as opposed to *to*, *for*, *with*, *of*, *by* and so on which are functional (p).

#### 4. CP appositive to pronoun in NG, not WG

A second difference between NG and WG is that in NG, CP can freely appear appositive to a pronoun, in argument positions ((7b) contrasts with (3b)).

- (7) a. Det at han kommer er nødvendig. (NG, Norwegian)  
*it that he comes is necessary*  
 b. Er det at han kommer nødvendig?  
*is it that he comes necessary*

WG has CP extraposition with pronoun replacement, including cases in which the pronoun ends up adjacent to the CP, as in (8a), but the *pn*+CP sequence is not a constituent; cf. (8b).

- (8) a. I regret it that you failed.  
 b. \*It that you failed, I regret.

#### 5. NG *at/att/að* is part of the extended projection of P

We argue that the two differences between WG and NG both receive simple explanations if the subordinate declarative finite complementizer in North Germanic, *at/att/að*, is prepositional, in the sense that it occupies a place in the extended projection of P.

That there are functional positions in extended projections of P is prefigured in Jackendoff (1977). Van Riemsdijk (1990), Koopman (2000), Svenonius (2010), and others have proposed extended projections for P in which different projections have principled positions. We identify a position for *at/att/að* in a version of those proposed extended projections.

PPs can be the complements of verbs, and certain PPs can be subjects; so the distribution of *at/att/að* is consistent with that of PPs more generally. The resistance of NG CP to subject position is due to a finer-grained featural incompatibility (Stowell 1981, in terms of case; Alrenga 2005, in terms of EPP).

The WG complementizer *that/dat/dass*, on the other hand, shares with NG *at/att/að* the resistance to case, but does not have a position in the extended projection of P; it occupies a high position in the extended projection of V (Rizzi 1997). Though its featural content overlaps with that of D, it lacks the component of case, and so cannot be substituted for DP with functional prepositions in WG.

Second, we argue that *at/att/að*-CPs are of the right type to adjoin to pronouns, in NG, while *that/dat/dass*-CPs are not. Thus (7) is like (9), where a PP adjoins to a pronoun.

- (9) Det med Jens var nødvendig. (NG, Norwegian)  
*it with Jens was necessary* ('the matter having to do with Jens was necessary')

In this way, we explain two differences between NG and WG in terms of a single categorial difference between *at/att/að* and *that/dat/dass*.

## ***Have-doubling and the grammaticalization of *have* in West Germanic***

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**1. Introduction.** West Germanic languages feature a range of singular *have*-participial constructions, in which one form of *have* combines with a morphologically past participle. These include the present perfect constructions found in all varieties as well as resultative and eventive constructions in varieties like modern English (see e.g. Harley 1998). In addition, these languages contain *have*-doubling constructions like those in (1).

- (1) a. *I have had John locked up (by Mary).* (English)  
b. *Ik heb vandaag nog niet gerookt gehad.*  
I have today still not smoked.PTCP had.PTCP  
'I have not yet smoked today.' (South-eastern Dutch; Koenen et al. 2011: 37)

The *have*-doubling construction in (1a) can be straightforwardly analysed as the combination of a present perfect and a resultative or eventive *have* construction. (1b) is an instance of the so-called perfect doubling construction attested in modern German (e.g. Rödel 2011), historical German (e.g. Buchwald-Wargenau 2012), and south-eastern Dutch dialects (Koenen et al. 2011). In contrast to (1a), it has proven an analytical puzzle, none the least due to the proximity of its semantic interpretation to that of present perfects. In this talk, I present new data on *have*-doubling constructions from a previously understudied variety, historical Dutch. This leads me to propose a new restructuring-based syntactic analysis for both doubling and singular *have*-participials and, more broadly, shed new light on the grammaticalization of *have* as an auxiliary.

**2. Corpus study.** I present the first large-scale corpus study of *have*-doubling in historical Dutch. The corpus contains 512 instances of *have*-doubling constructions found in an approx. 83,000,000 word collection of texts from authors born between 1050 and 1649. These instances were analysed according to both distributional and formal characteristics. Based on distributional (frequency, genre, geographical) characteristics, I show that the construction is robustly attested in historical Dutch. Indeed, this is crucially the case in the Hollandic varieties which formed the basis for modern Standard Dutch but where the construction is no longer attested. Based on a further analysis of formal (syntactic, semantic) characteristics, I present evidence for different types of *have*-doubling in historical Dutch: the resultative and eventive variants exemplified in (1a) but moreover the perfect doubling variant of (1b).

**3. Analysis.** My departure point is Brandner and Larsson's (2014) proposal that perfect doubling constructions are a combination of two semantically distinct present perfects. According to the standard typological classifications, I assume that one of these present perfects functions as a true perfect/anterior requiring current relevance whilst the other functions as a temporal past, lacking current relevance. I argue that the true perfect use of the present perfect is found in English, German, Dutch dialects and modern Standard Dutch, whilst the temporal past use is found in all varieties but English.

Distancing the present analysis from Brandner et al.'s Kaynian approach, I propose a formal analysis based on Wurmbrand's (2001) graded restructuring account. The core of that account is that there are different types of restructuring (functional, semi-functional, lexical) configurations dependent on the type of clausal position the matrix verb merges into. Whilst her account primarily focuses on German infinitives, Wurmbrand does propose that present perfect *have* can merge in two distinct functional projections (ModP, AuxP) without any semantic distinction. In contrast, I argue that *have* merging in the lower projection (ModP) results in a true perfect, whilst *have* merging in a higher position, which I will argue to be TP rather than AuxP, results in a past. Supporting evidence for this proposal includes interactions between *have* and modal verbs. For example, a present perfect *have* embedding a modal has an actuality entailment (e.g. Hacquard 2006), consistent with a temporal past's lack of current relevance. Moreover, this proposal is satisfying from a theory-internal perspective: Wurmbrand already

posits that distinct merger positions for modals correspond to distinct interpretations, the current account extends this to present perfect *have*'s, thereby implying a systematic one-to-one mapping between merger site and interpretation. I further propose that, like the perfect doubling construction, other *have*-participial constructions in modern West Germanic are successfully analysed under Wurmbrand's account. Indeed, drawn together, these constructions demonstrate the full range of restructuring configurations she proposes: as well as present perfects which are functional restructuring configurations, I propose that resultative and eventive *have* constructions are lexical and semi-functional restructuring configurations respectively. This shows the applicability of Wurmbrand's largely infinitive-focused account to a broader range of participial constructions.

Whilst this analysis correctly rules out perfect doubling constructions in English, it does predict that perfect doubling should be possible in all varieties proposed to have both types of present perfect. This includes modern Standard Dutch, where the construction is not attested. However, I make the novel claim that the lack of perfect doubling constructions in that variety is only apparent and results from a PF operation which blocks the spell out of the embedded participial form of *have*. This proposal is favourable from a Minimalist perspective by localizing variation away from the computational system and LF. Moreover, I show that, far from being stipulative, this proposal is empirically supported by a range of parallel verbal constructions in modern Standard Dutch where a covert, structurally second head has also been posited, like perfect passives (e.g. *het boek is verkocht* (\**geworden*); van Bart et al. 1998) which feature only one overt auxiliary. Indeed, further empirical support for this proposal is that varieties which attest perfect doubling show a strong tendency for perfect passives with two overt auxiliaries. In sum, the entire analysis shows that variation in West Germanic *have*-participial constructions can be reduced to restrictions on the merger and spell-out of *have*.

**4. Implications for grammaticalization.** The current account builds upon raising approaches to grammaticalization. Adopting Cinque's universal hierarchy of functional projections, Ijbema (2002) argues that further grammaticalization of functional items results from the merger position of a functional element shifting to a higher functional head. For instance, under Ijbema's account, the further grammaticalization of Germanic perfects involves a shift from T(Anterior)/Asp<sub>perfect</sub> to T(Past). Following van Craenenbroeck and van Koppen's (2017) account of Dutch perception verbs, I argue for a Wurmbrandian raising approach to the grammaticalization of *have* in West Germanic. This account has a number of advantages over Ijbema's account. Firstly, it makes a raising approach to the grammaticalization of *have* viable given the broader advantages of a Wurmbrandian-based approach over a Cinquian one, none the least the reduced structural architecture required. Secondly, the empirical coverage of a raising approach is increased: whereas Ijbema's account covers just the further grammaticalization of present perfect *have*'s, the current account also incorporates the resultative and eventive constructions, tracing its entire grammaticalization path(s).

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