

**Anthony Kroch and Marjorie Pak**, University of Pennsylvania

## **The history of the English infinitive: some implications for the theory of grammar and grammar change**

From a comparative West Germanic perspective, one of the marked features of English syntax is the existence of 'to' infinitives with lexical subjects, the so-called ECM constructions of (1) and (2), which are not found in Old English or in other members of the subfamily:

- (1) It would be a mistake for Mary to leave early.
- (2) We believe John to have been responsible for the situation.

Historical syntacticians have long been interested in how ECM constructions arose and generative work has looked for triggers that might have induced learners to postulate a grammar that licensed them (see Fischer et al. 2000 and the references cited there). Since, from a modern perspective, the crucial feature of sentences (1) and (2) is their non-standard case-licensing, it is notable that early on, sentences like (1) appeared without 'for' and sentences like (2) did not require surface adjacency of the matrix verb and infinitival subject:

- (3) But a man to lyve pesibly ... is a gret grace ... (Imitatione Christi, 2.3,14)
- (4) ... whom to be prince of the paleis and of myche power thei knewen  
(Wycliffite Bible Esther 9.4)

In this paper, we present evidence from the Penn-Helsinki Corpus of Middle English that a crucial precondition for the evolution of these constructions was an ambiguity in the feature content of infinitival morphology. As is well-known, although modern English infinitives are purely verbal, Germanic infinitives in general vary between being verbal and being nominal. In Old English specifically, 'to' infinitives were even marked for dative case, reflecting the preposition+noun origin of the form. In the history of English, case-licensing of the subject by a 'to' infinitive became possible because 'to' lost its prepositional status while the infinitive retained its nominal feature. This case-licensing possibility continued for as long as the infinitive retained this feature. The feature was eventually lost, a development that can be documented independently of the ECM case, and as it was lost, the forms in (3) and (4) disappeared. The forms in (1) and (2) represent a reassignment of case licensing from the infinitive to the matrix verb or to 'for' and this reassignment allowed those forms to spread. One critical point for the theory of grammar in the development that produced (3) and (4) is that it only occurred when the Germanic case-marking system had collapsed in English. Our paper explores why this additional condition should have been necessary.

**Ellen Brandner**, Konstanz

## **Standard German *zu*: a junk morpheme?**

It has been observed by many researchers that the distribution of *zu* in Standard German infinitival syntax does not correlate exclusively with any single syntactic property. Furthermore, there is high variation between the Germanic languages in the usage of an infinitive marker. Also the diachronic development gives rise to a rather obscured picture. The question then arises how to treat such an element within Minimalism where it is assumed that functional elements normally play an important role in the building of the functional architecture of a clause. With the background of Alemannic infinitival syntax (and morphology) - which shows a rather consistent usage of the infinitive marker - I will discuss whether the concept of "junk", introduced by Lass (1990), can be successfully applied to (at least) parts of the Standard German distribution of *zu*. "Junk" means that linguistic material does not necessarily drop out of a language if it has lost (for some reasons) its original function but can be "re-employed" for other tasks, e.g. categorial identification. I will argue that there are two types of *zu* in Standard German which have fallen together on a morphological basis but have different grammars. One is basically "junk" namely those in optional coherent constructions, whereas another one indeed heads a functional projection which licenses a CP, replacing full CPs under e.g. factive verbs. Evidence for this division comes from the comparison between Standard German and dialects (Alemannic) but also from diachronic data.

**Ulrike Demske**, Saarland University

## **Infinitival Complementation in Old High German**

Ever since the influential work by Bech (1955/57), the concept of (in-)coherence has figured prominently in developing appropriate analyses of infinitival constructions in Present-Day German. In particular, there continues to be debate how the (in-)coherence of infinitival constructions relates to the categorial status of the infinitival complements in question - current views holding either that there is a two-way distinction between coherent constructions with infinitival VP-complements and incoherent constructions with infinitival CP-complements or that both, incoherent and coherent infinitival constructions select CP-complements with the latter undergoing some kind of restructuring process. Recently, this two-way distinction has been called into question by Reis (2001) and Wurmbrand (2001), both suggesting a graded notion of (in-)coherence resulting in at least a four-way distinction of infinitival constructions, feeding the question of an appropriate analysis anew.

In this paper, I will tackle the question whether we find evidence in Old High German to distinguish different verb classes regarding (in-)coherence or even various degrees of coherence. Evidence to be considered includes extraposition, scrambling, pronoun fronting, adjacency of matrix predicate and infinitive as well as verbal case (= status), theta-marking properties of the matrix predicate and co-occurrence facts regarding auxiliaries and verbs selecting infinitival complements.

## References

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**Sjef Barbiers**, Meertens Instituut / Royal Netherlands Academy of Sciences

## **On the relation between verb cluster type and word order variation in dialect Dutch 3-verb clusters**

In the Syntactic Atlas of the Dutch dialects project we have tested all logically possible word orders in three types of 3-verb clusters: (i) modal1 – modal2 – V3 (MUST CAN.inf SWIM.inf, (ii) modal1 – perfective auxiliary2 – V3 (MUST HAVE.inf MADE.part), (iii) perfective auxiliary1 – modal/aspectual auxiliary2 – V3 (IS GO.inf SWIM.inf). All logically possible word orders turn out to occur in the 267 dialects under investigation, except the order 2 – 1 – 3 (e.g. MUST CAN.inf SWIM.inf) that is lacking in all cluster types (cf. Zwart 1995). In addition, the order 2 – 3 – 1 is only possible in cluster type (iii) (GO.inf SWIM.inf IS) (cf. Den Dikken 1994, Zwart 1995). Categorical conclusions about the other orders do not seem to be possible. In quite a few places the informants report the use of more than one order per cluster type.

This state of affairs raises the following questions: (i) Why is 2 – 1 – 3 impossible? (ii) Why is 2 – 3 – 1 only possible if the highest verb (i.e. 1) is a perfective auxiliary? (iii) Do we have to allow optionality in the grammar (contra Chomsky 1995)? I propose that all dialects under consideration share the same grammar in which four orders are derived from the base order 1 - 2 - 3 by optional VP movement. This VP movement is constrained by two conditions. The condition that movement should not destroy the original hierarchical relations excludes the 2 - 1 - 3 order. The condition that VP movement requires agreement between the triggering head and the moving VP explains why the order 2 - 3 - 1 is only possible with a perfective auxiliary as the highest head: only in that case is there [perfective] agreement between 1 and 2.

In the present proposal, the grammar determines which orders are possible, but it does not determine which and how many orders a speaker of a certain dialect will actually use. On the basis of the geographic distribution of the alternative word orders I argue that the explanation of the distribution of the various orders across speakers and dialects should be sought in extra-linguistic factors.

**H.Haider** , Salzburg

## **Optional Clause Union of Infinitival Complements - an OV effect**

Abstract:

Optional clause union constructions for otherwise sentential infinitival complements are well-known from German and Dutch. Descriptively fairly well covered, their grammar theoretic causality has not been modelled satisfactorily so far. It is still unclear or controversial as to

- why grammar theory allows for a perfectly optional choice between clause union and sentential complementation
- why this constructional freedom is found in OV languages only
- how the clause union syndrome is adequately modelled

In this contribution, I shall try to demonstrate that clause union infinitivals (and their syntactic properties) are predictable for OV languages, and excluded for VO languages. Clause union infinitivals are a facet of the verb clustering property of OV language which in turn can be derived from an UG-grounded universal property of syntactic structures in combination with the headedness option (head first - head last).

**Susi Wurmbrand**, Connecticut

## **Verbal complexes: Regular syntax, complex PF**

This talk addresses the question of which component of grammar is responsible for verb cluster formation and clause union effects. The main proposal will be that verb clusters and clause union constructions involve a very 'simple' syntax which directly mirrors the semantic interpretation of these constructions and that various reordering effects are derived by post-syntactic operations.

In the first part of the talk, I will compare syntactic clustering analyses--i.e., analyses that assume the formation of a complex verbal cluster in the syntax--with a VP complementation analysis. Arguments for a complex head analysis and against VP complementation will be shown to be only apparent and solutions to the apparent problems will be provided which will be in accordance with a VP complementation structure. Moreover, I will conclude that, in contrast to a VP complementation analysis, a syntactic complex head analysis makes the wrong predictions for i) constituency, ii) modification, and iii) event structure properties.

In the second part of the talk, I will outline a non-syntactic approach to verb clusters, whereby (at least certain) clustering effects are obtained by post-syntactic (PF) movement, which is driven by language specific inversion rules. The argument for PF movement will come from the observation that operations which will be argued to be morphological in nature feed verb clustering.

**Sam Featherston and Wolfgang Sternefeld, Tübingen**

## **The relatedness of the third construction and long passives in German**

Abstract:

In this talk we will report on our studies of coherence phenomena in German infinitival complement clauses. This work has two main aims: First, we wished to explore which factors affect the acceptability of the phenomena known as the "third construction" (1) and the "long passive" (2).

(1) In der Werkskantine heißt es über den Manager, dass er den Neffen bestreitet unbegründet zu bevorzugen.

(2) In der Werkskantine heißt es, dass der Neffe unbegründet zu bevorzugen bestritten wird.

We tested such factors as the NP-type status and Case of constituents, the adjacency of the verbs, and active/passive status of the infinitive. This provided a firm basis on which to carry out the second stage.

The second aim was to test whether exactly the same set of verbs permit the two constructions. For these purposes we carried out two studies collecting judgements of carefully controlled materials, containing 16 verbs on a continuum from "good" coherent verbs (versprechen, beabsichtigen ...) to bad coherent verbs (genießen, zugeben ...).

**Markus Bader & Tanja Schmid, Konstanz**

## **The perceptual complexity of intraposed infinitivals**

This talk will address the possible role of perceptual complexity for the grammar of intraposed infinitival complements. The talk will be based on a broad investigation of infinitival complementation in German, with a special focus on long-distance passive (cf. (1)).

(1) ... dass der Wagen zu reparieren versucht wurde.

that the car to repair tried was

"... that it was tried to repair the car."

We will present several experimental and corpus results addressing the following questions:

- Are seemingly "graded" results better explained in terms of a symbolic grammar applied by perceptual mechanisms, or should gradedness be directly built into the grammar?
- How deterministic is the grammar in generating the various variants of intraposed infinitivals? Provided that the syntax can generate more output variants than actually observed (or observed at a time), can the exclusion of certain variants be relegated to constraints on interface conditions which are outside narrow syntax?

**Jack Hoeksema, Groningen**

## **Nonverbal material in the Dutch verb cluster: a word order pattern in decline**

Abstract:

Particles and small phrases may appear in Dutch verb clusters. Over a period of 3 centuries, several trends can be noticed in the use of this word order option: (1) from the early 18th century onward, this option is mainly found with idiomatic combinations; (2) only certain syntactic phrases are allowed (PPs, not DPs); and (3) phonological heaviness plays an ever-increasing role. I will treat these findings as evidence for a syntactic component with violable output filters.

**Hans-Martin Gärtner und Joanna Blaszczak, Potsdam, Berlin**

## **Intonational phrasing, discontinuity, and the scope of negation**

Abstract:

We discuss several cases of English and German negative quantifiers taking extended scope. We argue that these scope extensions are sensitive to linear and prosodic continuity, a fact which we capture in terms of "Condition on Extended Scope Taking" (CEST). We provide two formalizations of CEST, one couched in minimalist terms and another within the framework of "Combinatory Categorical Grammar" (CCG). We compare and contrast the resulting systems and suggest that although the differences are clearly discernible it is too early to judge which of the competitors should be preferred.

**Marcel den Dikken**, CUNY Graduate Center

## **Some issues in the morphosyntax of Germanic *to*-infinitives**

**1** The Frisian alternation in (1) (reported in Den Dikken & Hoekstra 1997:1062) is instructive in a number of ways. First, the fact that the placement of the past participle *kontrolearre* at the left edge of the verbal cluster is entirely oblivious to what is happening to its right suggests that *kontrolearre* is not itself part of the verbal cluster (as discussed in Den Dikken & Hoekstra's paper). Secondly, the infinitival marker *te* brings about a special morphological marking (-*n*) on the infinitive that immediately follows it, even when *te* is surface-optional (cf. (1b)). This suggests that the Frisian infinitival marker, in contexts in which it appears to be optional on the surface, is systematically present throughout the morphosyntax, imposing its morphophonological restrictions on its host, but is subject to deletion in the PF-component under certain circumstances. Thirdly, the infinitival marker and its associate -*n* apparently 'migrate' through the cluster, strictly as a couple, showing up consistently on the right-hand member, regardless of whether their host is syntactically selected by a verb taking a *te*-infinitival complement (here, *hoeve* 'need'; *wurde* 'become' does not select infinitives).

**2** 'Migrant' *to*-marking (and its concomitant morphological marking on the *to*-marked verb) is not confined to clusters with 'inverted' order: it occurs in clusters with 'English' orders as well. The facts in (2a,c) (from Cooper 1989) show this, and also illustrate that Swiss German reproduces the special marking seen in Frisian infinitives preceded by the infinitival marker: the *la/laa* alternation is conditioned in the same way as the  $\square$ /*-n* alternation in Frisian. Swiss German also presents a *z*-omission construction that it will be helpful to compare with the *te*-omission facts in Frisian (1), cf. the pair in (3), where (3a) is a standard German example and (3b) is its Swiss counterpart; (3b) has a different verb order and just a single *z*, in front of V2.

**3** One might take the 'migration' of the infinitival marker as an indication of its syntactic autonomy. However, 'migration' is not the prerogative of the infinitival marker in West-Germanic: the present-participial morpheme (-*end*, adorned in (4a,c) with an agreement-schwa) can be found attached to the 'wrong' host as well, as in the Dutch example in (4a), where an 'English-order' verbal cluster is used as a prenominal attributive modifier; the attested form in (4a), while not perfect, is better than any of its alternatives in (4b,d). On minimalism's lexicalist approach to inflectional morphology, present-participial -*end* cannot be taken to be syntactically autonomous. 'Migration', therefore, is not an argument for syntactic autonomy on the part of the infinitival marker; the parallel with (4a) could in fact be pushed in the opposite direction: 'migration' is an indication that the infinitival marker is part and parcel of the infinitival inflectional morphology (Haider).

**4** There are other reasons to believe that the West-Germanic infinitival marker (unlike its English and Scandinavian counterparts) is not syntactically autonomous, instead forming an integral part of a complex head. One is that, on the assumption that the infinitival marker is part and parcel of the infinitival inflectional morphology, a principled account can be given for the correlation, in Dutch (cf. Den Dikken 2003), between (i) the (im)possibility for a double-particle or N,V complex to undergo Verb Second as a unit and (ii) the (im)possibility for a double-particle or N,V complex to have the infinitival marker at the left edge of the complex, cf. (5),(6). We can derive the descriptive generalisation in (5) with the aid of the hypothesis (Bech 1955, Haider 1988, 2002) that the infinitival marker *te/zu* is an inflectional affix, base-generated inside the complex verb (not the lexicalisation of a VP external

functional head). The placement of the infinitival marker *vis-à-vis* non-inflectional material gives the language user an explicit clue with respect to the location of the inflection inside the complex verb. Only if inflection is *peripheral* can a complex verb *move* as a unit.

**5** If complex verbs can only move as a unit if inflection is peripheral (as evidenced by the placement of the infinitival marker), that suggests that neither of the alternate word orders of (7a) and (7b) results from movement of the (complex) infinitive or past participle. This conclusion, if upheld under scrutiny, has important repercussions for the analysis of the word-order variation in the West-Germanic verbal cluster and beyond.

## Examples:

- (1) a. kontrolearre hoeve \*(te) wurden 3B1BteB2+n (Frisian)  
 check-PPTC need-INF to become-INF+n
- b. kontrolearre wurde (te) hoeven 3B2BteB1+n  
 check-PPTC become-INF to need-INF+n  
 both: 'need to be checked'
- (2)
- a. er hät versproche, d Chind studiere z laa (Swiss German)  
 he has promise-PPTC the kids study-INF to let-INF(LONG)
- b. er hät versproche, d Chind la z studiere  
 he has promise-PPTC the kids let-INF to study-INF  
 'he promised to let the children study'
- c. ohni s Schtüürrad mit bedne Händ müese z verlaa  
 without the steering-wheel with both hands must-INF to leave-INF(LONG)
- (3)
- a. er hat versprochen, den Hans zu erreichen zu probieren  
 he has promise-PPTC the Hans to reach-INF to try-INF
- b. er hät verschproche, de Hans probiere z erreiche  
 he has promise-PPTC the Hans try-INF to reach-INF
- (4)
- a. ?een niet kunnen zingende band (Dutch)  
 a not can-INF sing-PRESPTC-AGR band
- b. ?\*een niet zingen kunnende band  
 a not sing-INF can-PRESPTC-AGR band
- c. \*een niet kunnende zingen band  
 a not can-PRESPTC-AGR sing-INF band
- d. \*\*een niet kunnend zingene band  
 a not can-PRESPTC sing-INF-AGR band

(5) particles and incorporated nouns can be carried along under V2 iff they can felicitously follow the infinitival marker (surfacing between infinitival marker and V-stem)

(6)

DOUBLE-PARTICLE VERB TYPE	V2 OF COMPLEX VERB	INF-MARKER PRECEDING PRT
Type I ( <i>voor-aan-melden</i> >preregister=)	□	□
Type II ( <i>her-af-drukken</i> >reprint=)	□	□
Type IIIa ( <i>voor-ver-kopen</i> >advance-sale=)	□	□
Type IIIb ( <i>door-ver-kopen</i> >sell on=)	□	□
Type IIIc ( <i>over-ver-hitten</i> >overheat=)	?	?
Type IV ( <i>her-ver-delen</i> >redistribute=)	□	□

(7)

a.    dat    Jan    z'n    dochter    {wil    vooraanmelden/vooraanmelden    wil}  
       that    Jan    his    daughter    wants    preregister-INF    preregister-INF    wants

b.            that    Jan    his    daughter    has    preregister-PTCpreregister-PTChas  
 dat    Jan    z'n    dochter    {heeft    vooraangemeld/vooraangemeld    heeft}

## Josef Bayer, Konstanz

### Adjacency in infinitive constructions

German *zu*-infinitives appear to arise optionally in intra- and in extraposed position. Closer inspection reveals various differences, however, which suggest that intra- and extraposed infinitives are formally distinct syntactic entities. One central feature on which this talk will concentrate is the fact that unscrambled intraposed *zu*-complements disallow extraposed (or stranded) material. i.e. there is a ban on the configuration  $*[[\dots t_x \dots zu V] X] V$  which is suspended when the *zu*-complement is displaced. It will be argued that scrambled or extraposed sentential *zu*-infinitives are headed by a covert complementizer while their intraposed counterparts are not. The question is whether the adjacency effect derives from clause union by virtue of head movement or head recursion. Comparative data suggest that the answer is no: Head-final languages which lack clause union and also allow intraposed finite complements show the adjacency under the same circumstances as German. The theoretical proposal that will be made here is that intraposed infinitives (and in other languages also intraposed finite clauses) are licensed in a spec-head configuration in which the formal features of the complement are expressed by a final functional head that must not be obliterated by following material. Consequences for the grammar of infinitives as well as for complementation in general will be discussed.