On the development of the infinitival marker *zu* 'to' in the history of German. A corpus-based analysis.

Introduction. In this talk, we will examine the development of the infinitive marker *zu* 'to' in the history of German and provide a corpus-based analysis of its licensing conditions from (O)ld (H)igh (G)erman (750 - 1050) to (M)odern (G)erman (1900 -). The main focus is on three matrix predicates: (i) the subject-to-subject raising use of *beginnen* 'begin', (ii) the subject control predicate *gedenken* 'intend' and (iii) the object control verb *bitten* 'ask'. The main objective of this talk is to show that although all these three predicates require the presence of *zu* in MG when an infinitive is embedded, *zu*-infinitives prevailed in different language periods (*beginnen*: 19th cent., *gedenken*: 13th cent., *bitten*: 15th cent.). As it turns out, these differences follow from their syntactic orientation (raising vs. control) and, simultaneously, from their semantics (inceptive vs. desiderative vs. directive).

Puzzle. Infinitive complements in Modern German can be divided into two groups. The majority of infinitive-embedding predicates selects for infinitives headed by *zu*. In [1] *beginnen* embeds the infinitive *sprechen* 'speak' and *zu* may not be dropped:

[1] *Die Dinge beginnen *(zu) sprechen* (DeReKo, *Mannheimer Morgen*, 24/11/2000)
the things begin.3PL to speak.INF
'The things start to talk (to us).'

To the second group belong predicates licensing infinitives without *zu*. AcI verbs, as *hören* 'hear' in [2], are a case in point:

[2] *Das Eis war schon gebrochen, als sie den Österreicher zum ersten Mal (*zu) sprechen hörte* (DeReKo, *Braunschweiger Zeitung*, 17/2/2006)
the ice be.3SG.PST already break.PTCP when she the Austrian for.the first time to speak.INF hear.3SG.PST
'The ice was already broken up when she heard the Austrian speak for the first time.'

Following Biskup (2014) and Wilder (1988), we argue that *zu* merges as a C-head with an empty specifier position in the left periphery of the embedded clause. Accordingly, if complements to AcI verbs are TPs (cf. Haider 2009: 272-353) and if *zu* spells out as a C-head, then this accounts for why *zu* is not licit in AcI complements - there is no position for it. Remarkably, in older stages of German both predicate groups could occur with bare infinitives, cf. [3] for *beginnen* and [4] for *hören* from OHG:

[3] *Bigunston auh | erist umbi sinan | namun sprehhan*
begin.3PL.PST also first over his name speak.INF
'They began talking about his name.' (Isi 524-5)

[4] *Tho ward hímil offan, then fáter hort er spréchan*
then become.3SG.PST heaven open the father.ACC hear.3SG.PST he speak.INF
'When the heaven opened, he heard the God speak.' (Otf I, 25: 15)

The absence of *zu* in [4] is not surprising. As elaborately discussed in Speyer (2001, 2015), although AcI complements have changed their syntactic size over time (from CPs to TPs/vPs), they never switched to *zu*-infinitives. The example given in [3], in

turn, deviates from what we have already observed in [1]. In the OHG example *zu* is missing and its lack has been traced back to the grammaticalization of the local-allative preposition *zu* - depending on the approach - into a verbal prefix (Abraham 2004, Haider 2009, Sternefeld 2008) or into an infinitive complementizer (Biskup 2014, Wilder 1988). However, to the best of our knowledge there are no studies illustrating how this grammaticalization process proceeded in the entire history of German language (750 – 1900) and with respect to particular matrix predicates.

Data. In total, we have extracted and analyzed approx. 3000 examples from all stages of German. As far as OHG sources are concerned, we looked into *Boethius >>De consolation philosophise<<* and *Psalter* by Notker der Deutsche, *Isidor*, *Evangelienbuch* by Otfrid von Weißenburg, *Tatian* as well as *Willirams Kommentar des Hohen Liedes*. As for other language periods, we extracted the date from larger corpora (e. g. *Mittelhochdeutsche Begriffsdatenbank* (MHG), *Referenzkorpus Frühneuhochdeutsch* (ENHG), *DeReKo* (NHG)).

Diachronic analysis. Figure 1 demonstrates how infinitives selected by *beginnen* developed in the history of German as well as to what extent and how long bare infinitives competed with their *zu*-counterparts. Whereas in OHG the majority of the embedded complements occurred without *zu*, *zu*-infinitives began to gain ground in the period from 1350 to 1500, i. e. in ENHG. Though this process was completed first in the 19th cent. In comparison to complements selected by *gedenken* and *bitten,* which started taking regularly *zu*-infinitives from the 13th and 15th cent. onwards, the 19th cent. appears to be surprising. Based on this contrast, we argue that *zu* was grammaticalized already in the oldest stages of German as infinitive complementizer and that its licensing conditions are to be deduced from the syntax and semantics of matrix predicates. Hence, even if *zu* is absent on the surface, we claim that it is realized in the internal syntax as a covert C-head. In addition, the approach taken here also nicely accounts for why *zu* could assign a case value to the embedded T-head (Genitive in *nes*-, Dativ in *ne*-, and Instrumental in *nu*-infinitives). If *zu* merges as a C-head, it automatically becomes responsible for case. Given feature inheritance, it passes down its features to T acting as a probe for a goal.

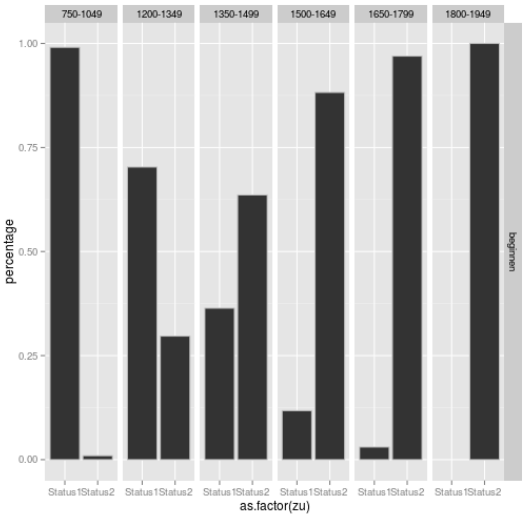

Fig. 1. *Beginnen* and its infinitive complements in the history of German

Selected references: W. Abraham (2004): The grammaticalization of the infinitival preposition - Toward a theory of 'grammaticalizing reanalysis', in: *Journal of Comparative Linguistics* 7(2): 111-170. P. Biskup (2014): *For*, *zu* and feature inheritance, in: *Linguistische Arbeitsberichte* 92: 423-40. H. Haider (2009): *The Syntax of German*. Cambridge: Cambridge University Press. Ch. Wilder (1988): On the German infinitival marker *zu* and the analysis of raising constructions, in: *Lingua* 76: 115-175.