



*On the Development of the Infinitival
Marker zu 'to' in the History of German.
A corpus-based analysis*

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What is this talk about?



Following Bech (1955/57) three different types of non-finite verbal forms are distinguished in Modern German:

1st Status	2nd Status	3rd Status
<i>sprechen</i> (‘speak’)	<i>zu sprechen</i> (‘to speak’)	<i>gesprochen</i> (‘spoken’)

Table 1: Non-finite verbal forms according to Bech (1955/57)

In our talk we focus on infinitival forms (= 1st and 2nd status), in particular on the development of 2nd status complements.

What is this talk about?



The presence/absence of the infinitival marker depends on distributional properties of a particular infinitive-embedding predicate:

[2] *Der Held muss das Land *zu verlassen*
the hero must the country to leave.INF
'The hero has to leave the country'

[3] *Der Held ist verpflichtet, das Land *(zu) verlassen*
the hero is obliged the country to leave.INF
'The hero is obliged to leave the country'

What is this talk about?



However, in older stages of German predicates requiring *zu* in Modern German could embed bare infinitives too. *Beginnen* ‘begin’ is a case in point:

[3] *Die Dinge beginnen *(zu) sprechen*
the things begin.3PL to speak.INF

‘The things begin to speak.’

(DeReKo, *Mannheimer Morgen*, 24/11/2000)

[4] *Bigunston ouh erist umbi sinan namun spreghan*
begin.3PL.PST also first about his name speak.INF

‘Then, they began to speak about his name.’ (Isi 524-5)

Leading questions



1. When did the 2nd status occur for the first time?
(Are there any differences among the infinitive-embedding predicates?)
2. When did 2nd status complements start gaining ground over 1st status complements?
(Under what circumstances?)
3. When did 1st status complements disappear?

Roadmap



1. Introduction
2. Infinitive-embedding predicates: synchronic facts
 - 2.1. *Gedenken* ('intend')
 - 2.2. *Bitten* ('request')
 - 2.3. *Beginnen* ('begin')
3. A case-study: diachronic observations
 - 3.1. 1st status versus 2nd status
 - 3.2. The diachrony of *zu* 'to'
4. Discussion
5. Concluding remarks

Infinitive-embedding
predicates:
synchronic facts

Infinitive-embedding predicates: overview



	Predicate	Status	Syntactic orientation	Semantics
1.	<i>gedenken</i> (‘intend’)	2	subject control	intentional predicate
2.	<i>bitten</i> (‘request’)	2	object control	manipulative predicate
3.	<i>beginnen</i> (‘begin’)	2	subject raising	phase predicate

Table 2: Overview of the infinitive-embedding predicates under investigation

A case-study: diachronic observations

Diachronic background

According to Abraham (2004) *zu* underwent a grammaticalization process: from a locative-allative [P]reposition to an [Inf]initive [P]article:

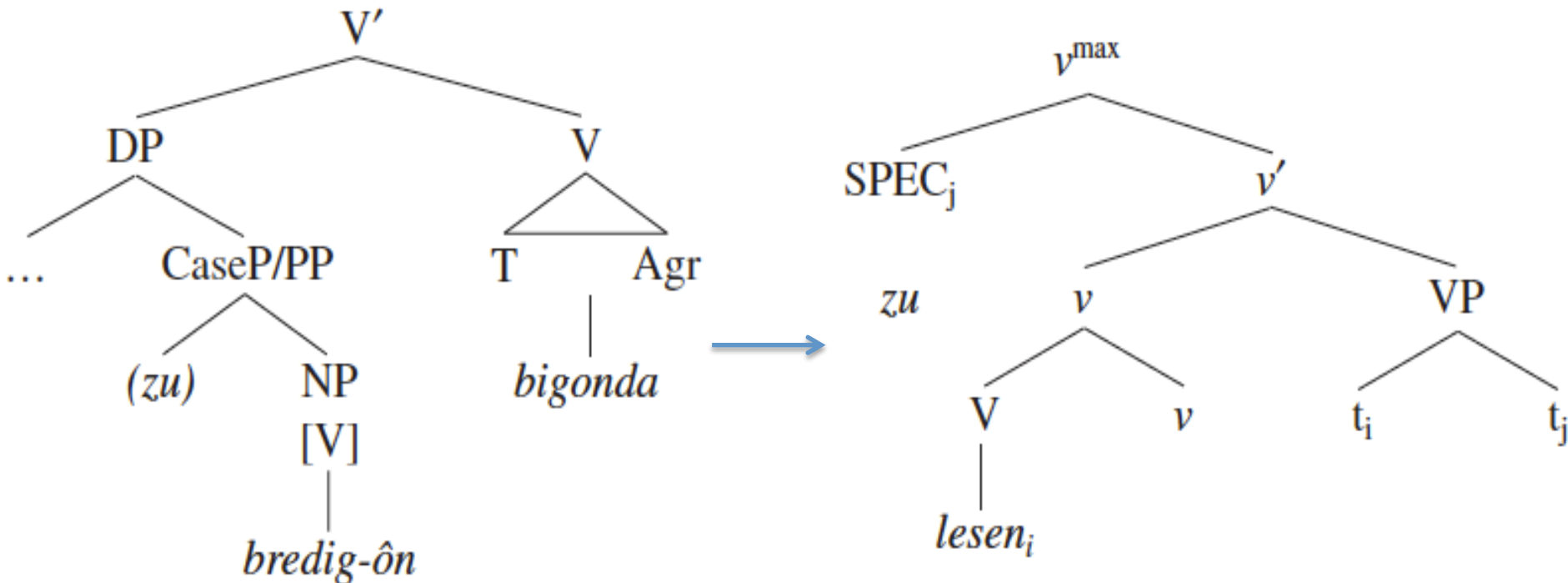


Figure 1: Grammaticalization of *zu* as infinitive particle according to Abraham (2004)

Sources

Tokens

Old High German (750 - 1050)
all available sources

426.022 (4,46%)



Middle High German (1050 - 1350)
Titus-DB, MHBDB, selected other sources

772.456 (8,08%)



Early New High German (1350 - 1650)
RefKorp FNHD, Mercurius-Korpus

775.484 (8,11%)



New High German (1650 - 1900)
Mercurius-Korpus,
COSMAS II: historical texts

7.584.625 (79,35%)

In total: 9.558.587

Our queries looked as follows:

- *beginnen* (be)g[i|a|u|o]n.*
- *bitten* (ge)?b[i|a|e]t(t)?(en)?
- *gedenken* (ge)d[e|a][n(c)?k|ch].*

Data



In our queries we ruled out cases in which a matrix predicate selects for an adverbial clause with a covert C–element, e.g. *um* (lit. ‘about’) ‘in order to’ in purpose clauses:

[5] *der mensch gebraucht des feuers sich zu wermen*
the man use.3SG the fire.GEN REFL to warm.INF

‘The man uses the fire in order to warm himself’
(Grimm & Grimm 1878: 1826-36)

- a) *der mensch* [_{VP} [_{V⁰} *gebraucht*] [_{DP} *des feuers*]] [_{CP} *sich zu wermen*]
- b) **der mensch* [_{VP} [_{V⁰} *gebraucht*] [_{INF} *des feuers sich zu wermen*]]

Quantitative data

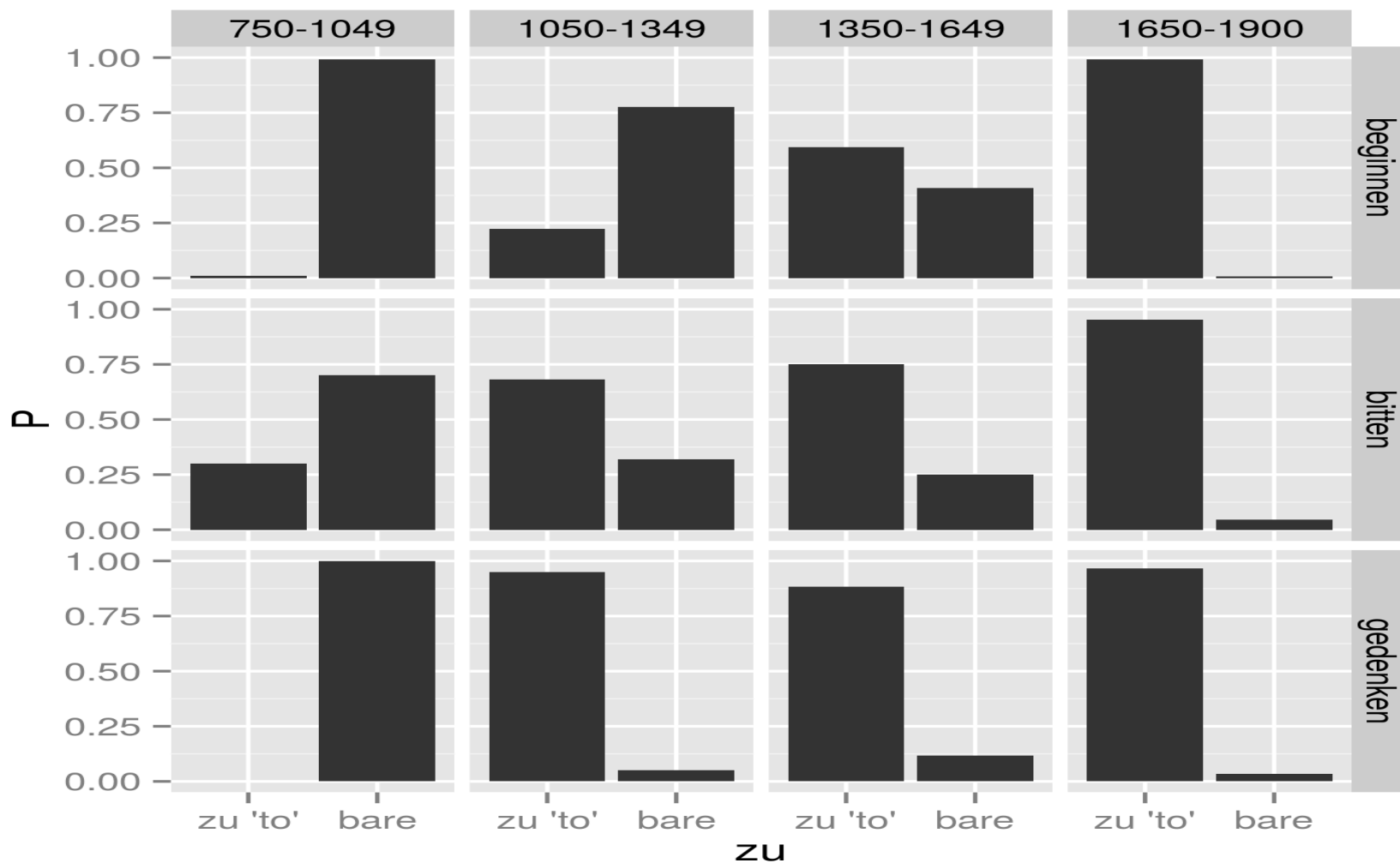
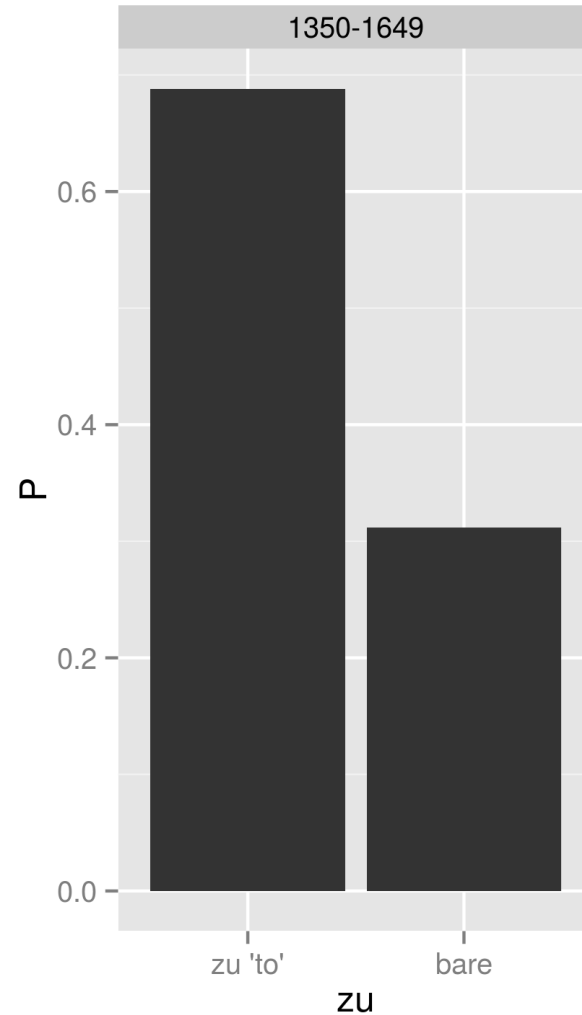
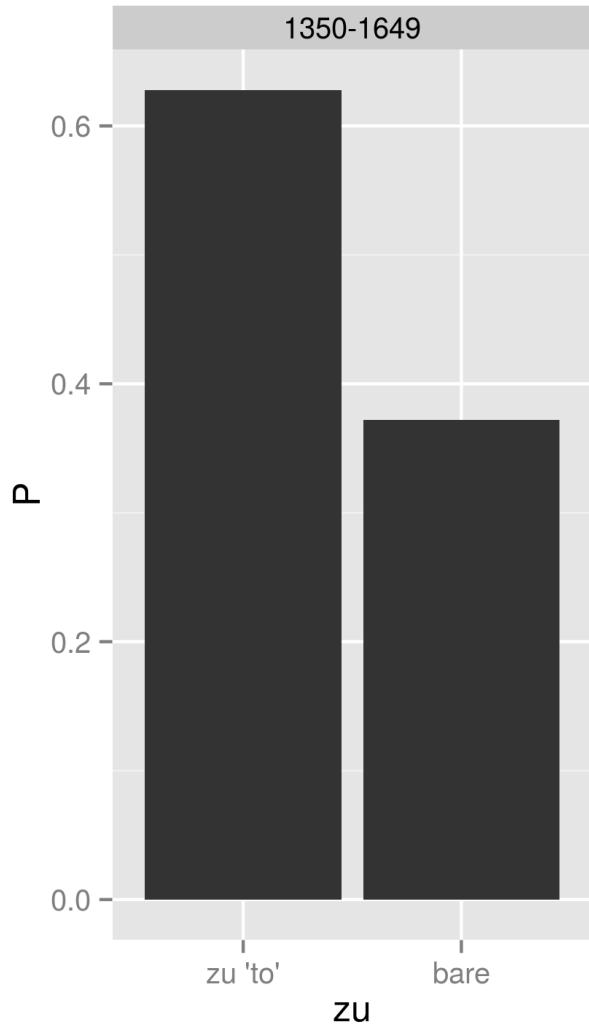


Figure 2: *Beginnen*, *bitten* and *gedenken* as infinitive-embedding predicates in the history of German

Quantitative data II



Beginnen, bitten and gedenken as infinitive-embedding predicates

All verbs selecting infinitive clauses

Diachronic observations



- There is a solid empirical evidence for grammaticalization of *zu*. All three predicates used to select for 1st status complements.
- In OHG the 1st status outnumbered the 2nd status, whereas in New High German a reverse scenario is to be observed.
- However, there are differences as to when the three predicates began to favor 2nd status complements. While *beginnen*'s 2nd status complements got of the better of their 1st status counterparts first in ENHG, both *gedenken* 'intend' and *bitten* 'require' favored the 2nd status already in MHG.

Discussion



What does the quantitative data reveal about the development of *zu* as infinitive particle?

Previous approaches



REFERENCE	APPROACH	OUR DATA
1. Haspelmath (1989)	Grammaticalization: A semantic path	No (see also Demske 2001)
2. Smirnova (2011)	Directives: Coexistence of <i>that</i> -clauses and <i>to</i> - infinitives ?Absence of bare infinitives	No (see also Speyer 2015a)
3. Speyer (2015b)	Aspectual distinction: <i>to</i> -infinitives: perfective bare infinitives: imperfective	No

Concluding remarks



- ✓ The main aim of this talk has been to show, in particular from an empirical perspective, that *zu* grammaticalized into an infinitive marker.
- ✓ The grammaticalization process started already in OHG and its last traces are to be observed in the 19th century.
- ✓ The transition from MHG to ENHG is the most important step in the development of *zu*. While in MHG 1st status complements still outnumber their 2nd status counterparts, ‘to’-infinitives get the better of bare infinitives in ENHG.
- ✓ The differences among the three predicates seem to follow from their semantics and syntactic status.

Secondary references

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Thank you for your
attention!

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