



Null subjects and null D: historical evidence from Germanic

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Talk outline

- Empirical background: early Germanic languages as partial null argument languages
- Theoretical background: the relation between null arguments and null or absent D
- Evaluating the theory on the basis of Germanic data (historical English and Icelandic)

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Theme

- Using syntactic theory to gain insight into historically-attested languages, but also...
- the use of historically attested languages to test syntactic theories.
 - Minimally different systems, temporally adjacent (cf. dialect syntax and work on microsyntactic variation)
- Relates to big question in syntactic theory: what categories are there, and how universal?

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Null arguments in Germanic

- In previous work (Walkden 2014: ch. 5), I've made the case for the early Northwest Germanic languages as *partial* null argument languages in the sense of Holmberg & Roberts (2010).
- Summarizes, incorporates and builds on a lot of earlier work (esp. Rosenkvist 2009).
- No Gothic today due to differences (but see e.g. Fertig 2000, Ferraresi 2005, Walkden 2014: 158–164).

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Northwest Germanic

- The patterns reported here are characteristic of a range of early Germanic varieties (basically):
 - Old English (OE; some texts; van Gelderen 2000, 2013; Rusten 2010, 2013, 2014, 2015; Walkden 2013, 2016)
 - Old High German (OHG; Axel 2005, 2007; Axel & Weiß 2011)
 - Old Icelandic (OI; Hjartardóttir 1987; Sigurðsson 1993; Kinn, Rusten & Walkden 2016)
 - Old Norwegian (ON; Kinn 2015)
 - Old Saxon (OS; Walkden 2014: 190–195)
 - Old Swedish (OSw; Håkansson 2008, 2013)

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Examples

1) þonne bið on hrepre under helm drepen biteran strī le
then is in heart under helm hit bitter dart
'Then **he** is hit in the heart, under the helmet, by the bitter dart'
(OE; cobeowul,54.1745.1443; van Gelderen 2000)

2) Sume hahet in cruci
some-ACC hang-2PL to cross
'Some of them **you** will crucify' (OHG; Monsee Fragments XVIII.17;
Matthew 23:34; Axel 2007: 293)

3) þá skar Rognvaldr hár hans, en áðr var úskorit
then cut R. hair his but before was uncut
'Then Rognvaldr cut his hair, but **it** had been uncut before'
(OI; Nygaard 1906: 10)

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4) **þa** **var** **hanum** **sact**
then was him told
'Then **it** was told to him.'
(ON; OSHL, 21774; Kinn 2015)

5) **lîbes** **uueldi** **ina** **bilôsien,** **of** **he** **mahti** **gilêstien** **sô**
life.GEN would him take if he could achieve so
'**he** would take his life if he could'
(OS; *Heliand* 1442; Walkden 2014: 192)

6) **þar** **gierþi** **kirchiu** **apra**
there made church other
'There **he** built another church.'
(OSw; Håkansson 2013: 156)

Generalizations

- Null subjects in embedded/subordinate clauses are rare (though they do occur).
 - This can't be due to licensing by the verb in C à la Adams 1987.
 - It also can't be topic drop as in modern Germanic.
- Null subjects are much more frequent in the third person than in the first or second person.
 - Not an absolute effect – but statistically significant in chi-square tests in all of the early Northwest Germanic languages.
- Explanation not likely to be solely Latin or metre.

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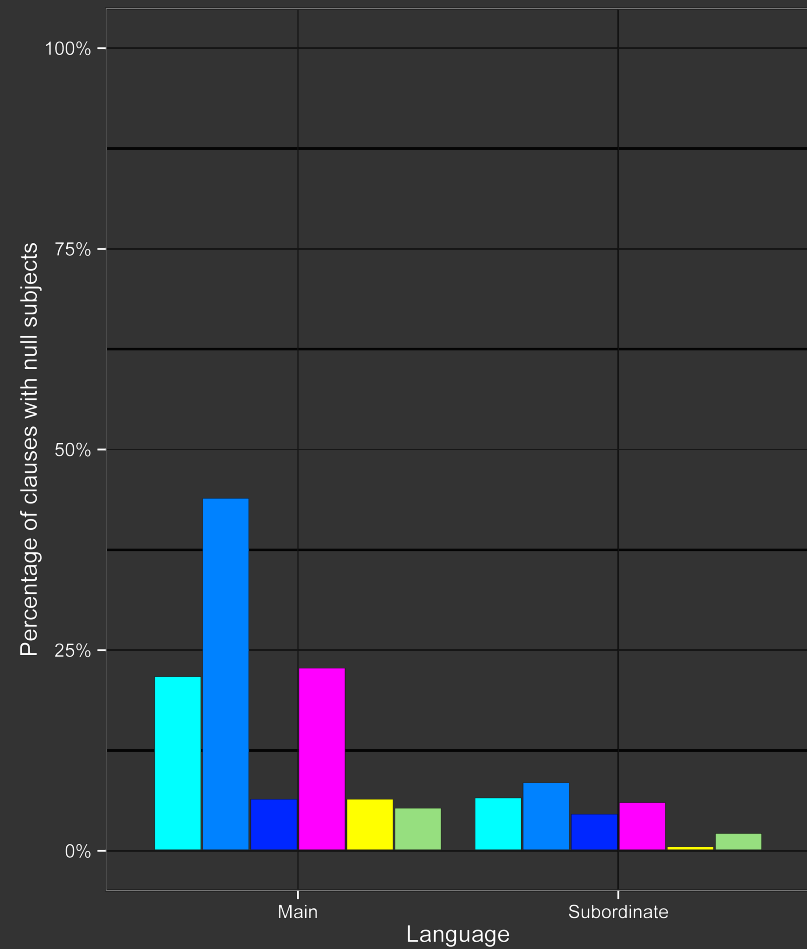
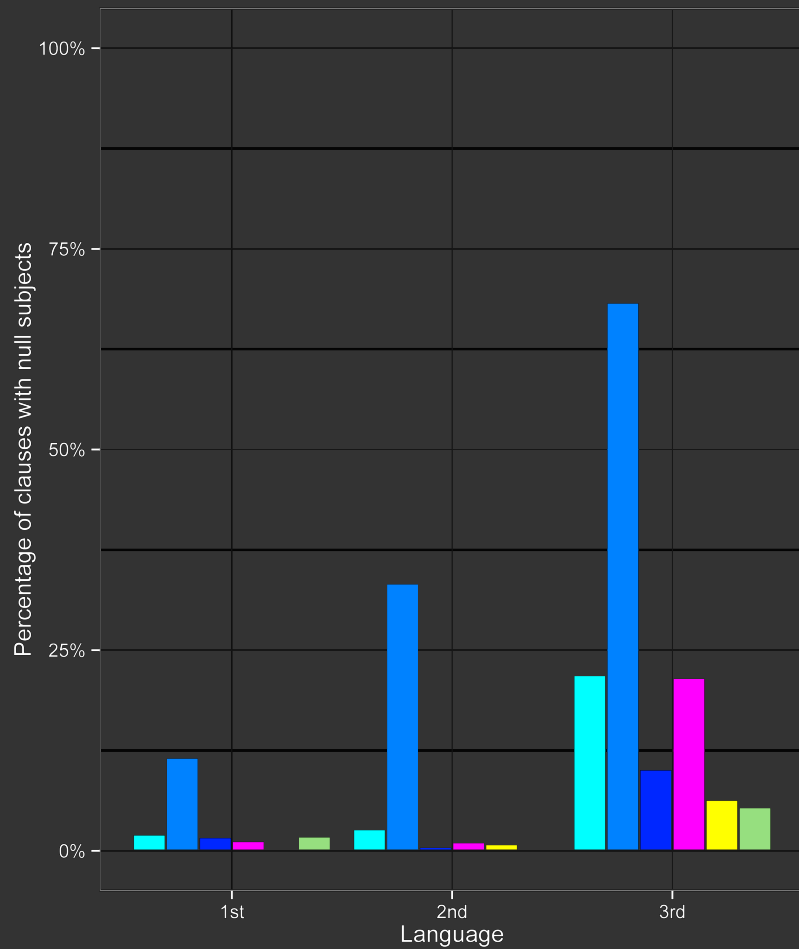
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Rich agreement?

- Traditional account following Apollonius Dyscolus (~200 AD) and Taraldsen (1978) attributes null subjects to rich agreement (in languages like Italian, Greek...).
- But this can't account for the early Northwest Germanic facts.
 - Agreement is just too weak (syncretisms).
 - Differences between texts/dialects/lgs. not explained.
 - Predicts differences between sg. and pl. in OE & OS.
 - Null objects not explained.

Rich agreement?

OS, weak verb *nerian* 'to save':

N	Person	Present ind.	Past ind.	Present subj.	Past subj.
sg	1	nēri-u	nēri-d-a	nēri-e	nēri-d-i
	2	nēri-s	nēri-d-es	nēri-es	nēri-d-is
	3	nēri-ēd	nēri-d-a	nēri-e	nēri-d-i
pl	1/2/3	nēri-ad	nēri-d-un	nēri-en	nēri-d-in

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Analysis

- In Walkden (2014) I argued that these were *partial* null argument languages.
 - Hebrew, Finnish, Marathi: person split
- Barbosa (2011, 2013): partial null argument languages are a subtype of *radical* (East-Asian-type, “discourse-driven”) null argument languages.
 - Both permit null generic inclusives
 - Both exhibit locality effects in interpretation
 - No obviation effects
 - Null objects can be found

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Null generic inclusives

- 7) Ah John waa hai Jinggwok jiu gong Jingman
PRT John say in England need speak English
'John says that one/he needs to speak English in England.'
(Cantonese; Barbosa 2013: 11)
- 8) Oppilas tietää ettei tehtävää pysty ratkaisemaan
student knows that-NEG assignment can solve
'The student knows that the assignment can't be solved.'
(Finnish; Barbosa 2013: 5)
- 9) *ponne purh muð bitere hr□ cǝ oppe bealcet*
when through mouth bitterly retches or belches
'when one retches or belches bitterly through the mouth'
(OE; *colaece, Lch_II_[2]:15.1.1.2296*; Walkden 2014: 215)

Lack of obviation

10) Zhangsan_i shuo ta_{i/j} hui lai
Zhangsan say he can come
'Zhangsan said that he can come.'
(Mandarin; Huang 1982: 331)

11) Ram_i mhanala ki tyani_i ghar ghetla
Ram say-PST.3SM that he house buy-PST.3SN
'Ram said that he bought a house'.
(Marathi; Holmberg & Sheehan 2010: 131)

12) **Thô** he_i **thanan scolda ...** **sôkien** **lioht** **ôđar,**
when he thence should.3SG seek.INF light other
thô he_i **im** **iungron** **hêt** **gangan nâhor**
then he REFL disciples commanded.3SG go.INF nearer
'When he was about to die, he told his disciples to gather round'
(OS; *Heliand* 576–579; Walkden 2014: 201)

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Null objects

13)Ta kanjian le
he see ASP

'He saw him.'

(Mandarin; Huang 1984: 533)

14)Lo, ima šeli sarga
no mother my knit

'No, my mother knitted them.'

(Hebrew; Taube 2012: 319)

15)sa baugr skyldi vera hverjum hofuðsbani, er átti
the ring should be anyone.DAT headbane that had

'the ring would bring death to anyone who possessed it'

(OI; Sigurðsson 1993)

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Interim summary

- The early Northwest Germanic languages had null arguments.
- They don't seem to be Italian-type consistent/canonical null argument languages.
- They behave – as far as can be established – like (Chinese-type) radical null argument languages.

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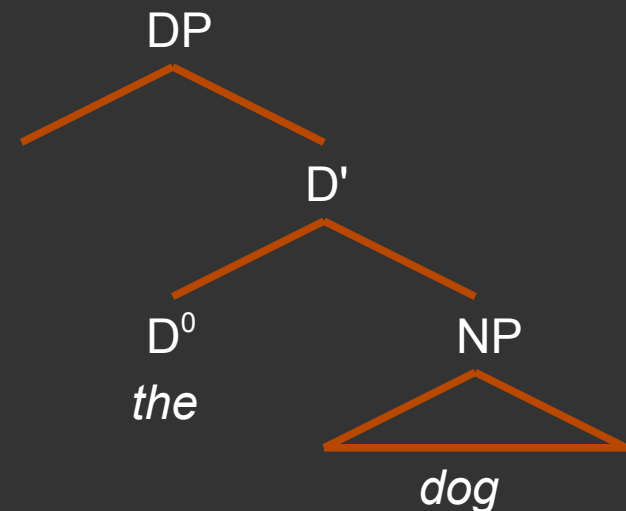
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The role of D: the background

- In GB/Minimalist syntactic theory, it is often held that nominal phrases are headed by a functional category D (Szabolcsi 1983, Abney 1987).
 - How universal is this?
 - Longobardi (1994): all arguments are DPs
 - Chierchia (1998), Bošković (2005, 2008, 2010): languages may vary



D-lessness in early Germanic

- Early Germanic languages are good candidates for languages without D.
 - No requirement for overt article
 - Possessor & demonstrative may co-occur
 - Flexible word order inside nominals
- Old English: debate in Yamamoto (1989), Crisma (1999), Wood (2007), Sommerer (2011)
- Old Norse: Lander & Haegeman (2014)

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Old English

16) **Gecyste** **þa** **cyning** ... **ðegn** **betstan**
kissed then king ... warrior best
'The king ... then kissed the best warrior'
No articles (*Beowulf* 1870; Sommerer 2011: 194)

17) **His** **þa** **æfestan** **tungan**
his that.NOM.PL pious tongue.F.PL
'that pious tongue of his'
Possessive & demonstrative (*Bede* 342.17; Wood 2007: 177)

18) **on wllancan** **þam** **wicge**
on splendid that.DAT horse.DAT
'on that splendid horse'
Adjective precedes demonstrative (*Maldon* 240; Wood 2007: 172)

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Old Icelandic

16) jarl var vinsæll við búendr
earl was friendly with farmers
'The earl was popular among the farmers.'
No articles (Lander & Haegeman 2014: 288)

17) hinn yngsta son þinn
the/that youngest son your
'your youngest son'
Possessive & demonstrative (Lander & Haegeman 2014: 291)

18) maðr sá blindi
man the/that blind
'the blind man'
Noun-demonstrative-adjective (Lander & Haegeman 2014: 295)

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D and null subjects (1)

- Bošković (2010): radical argument drop is possible only in NP languages.
 - Follows from proposed requirement that the number feature of D be overtly spelled out.
 - (Necessarily holds only in DP languages.)
 - Proposal: NP languages also lack TP.
 - If so, there can be no English-style EPP requirement in such languages.

D and null subjects (2)

- Barbosa (2013), following Tomioka (2003):
 - Key factor in radical argument drop is independent availability of bare NP arguments.
 - Null NP universally available
 - Pronouns are Ds (Postal 1969)
 - Requirement to spell out D will result in requirement for pronouns
 - *Not* crucially linked to lack of D as category – but it must be phonologically null

Predictions for diachrony

- If the absence of (overt) D is linked to the possibility of radical argument drop, and...
- ...if syntactic change is conceptualized as change in the weighting of 'competing' grammars associated with probabilities (Kroch 1994), then...
- ...where we find a higher proportion of bare definite NPs, we will find a higher proportion of null subjects.

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Experiment 1

- For Old English: numbers of bare nouns that are definite and referential.
- Sommerer (2011) manually investigates the first 250 bare nouns in 4 texts.
- I replicated this for *Beowulf*.

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Bare referential NPs

- Prediction seems to be borne out (preliminarily):

Text	N definite bare common nouns	% definite bare common nouns	N null subjects (Walkden 2013)	% null subjects
<i>Cura Pastoralis</i>	11/250	4.4%	10/2575	0.4%
<i>Boethius</i>	12/250	4.8%	13/2270	0.6%
<i>Orosius</i>	17/250	6.8%	28/1378	2.0%
<i>Bede</i>	31/250	12.4%	76/2210	3.4%
<i>Beowulf</i>	87/250	34.8%	65/418	15.6%

- Clear correlation: Spearman's $\rho = 1$, $p < 0.0001$.

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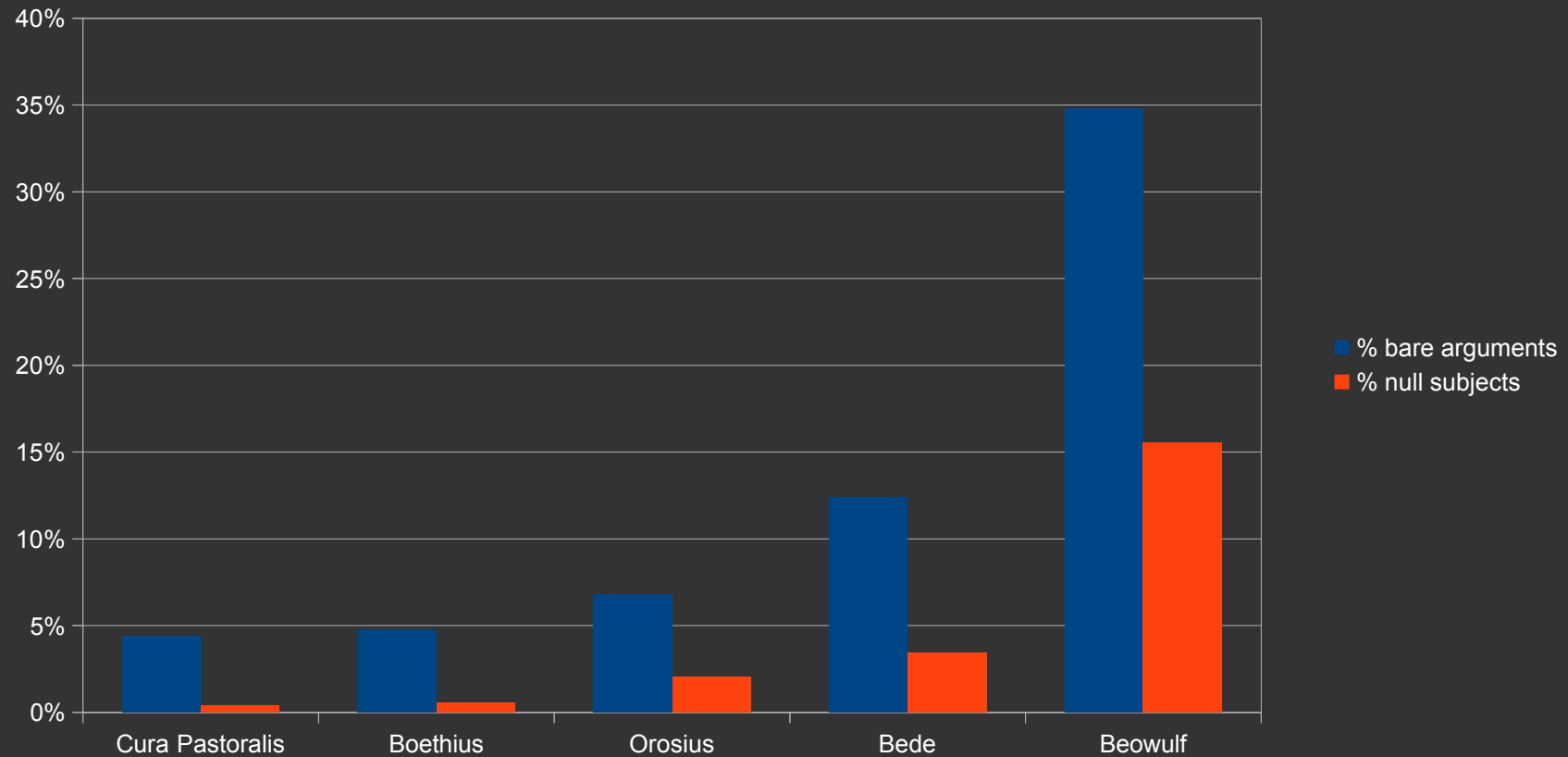
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Bare referential NPs



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Experiment 2

- 'Quick and dirty' method for larger corpora: proportion of noun-containing nominal phrases that are bare nouns.
- Advantage: can be automated.
 - Historical Icelandic: IcePaHC (Wallenberg et al. 2011)
 - Historical English: YCOE, YCOEP, PPCME2, PCMEP
- But yields messy data, as you'll see!

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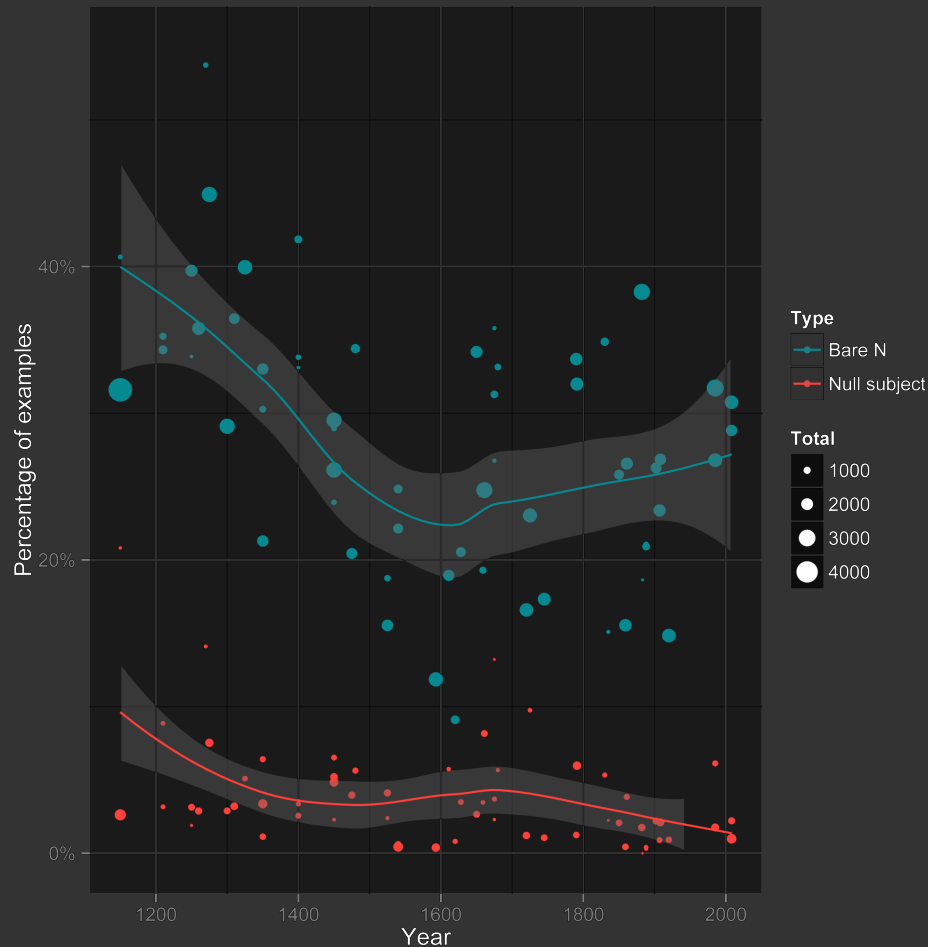
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The rise of the article: Icelandic



- Correlation (Spearman's $\rho = 0.49487$, $p < 0.0001$)
- Texts with most bare nouns also have most null subjects (*First Grammatical Treatise, Grey Goose Laws*)
- Both phenomena bounce back

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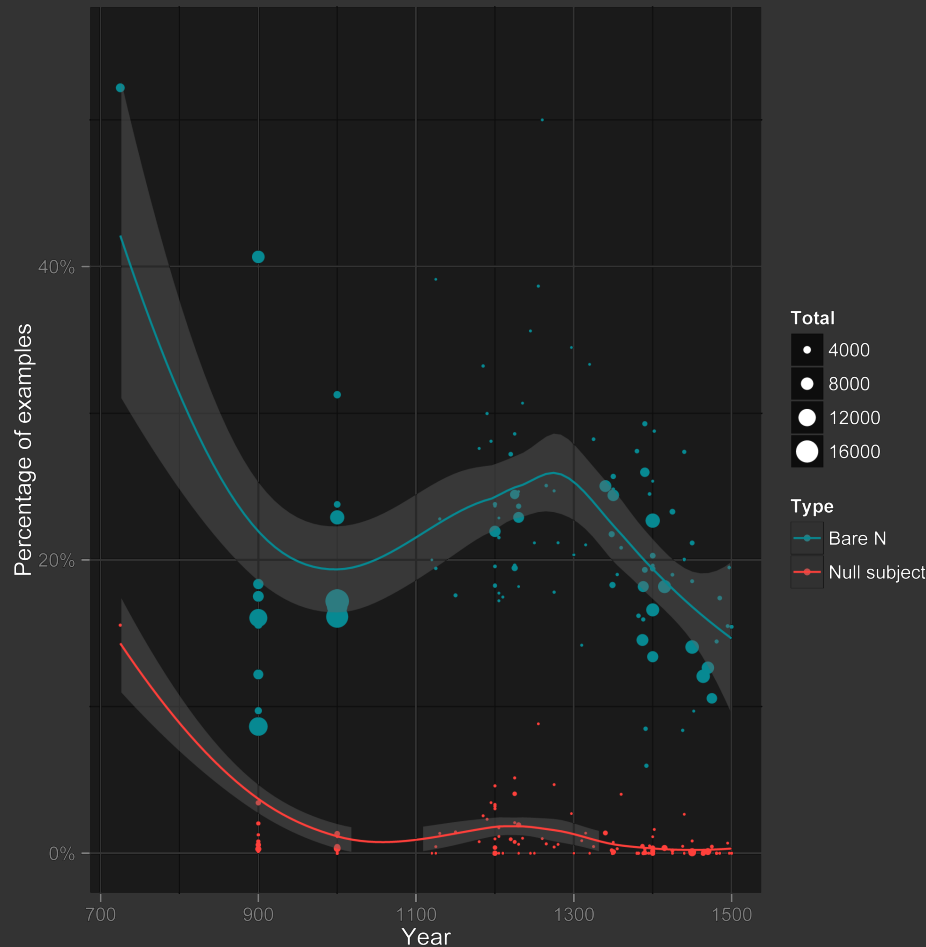
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The rise of the article: English



- Correlation (Spearman's rho = 0.28879, p=0.00232)
- Again a “bounce” in both (cf. Walkden & Rusten to appear)
 - Dialectal effect?
- Very high percentages of both: Bald's Leechbook, *Beowulf*

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- In the early Northwest Germanic languages investigated, the rise of obligatory overt D seems to go hand in hand with the loss of null subjects.
- This is just what we'd expect under the accounts of Barbosa (2011, 2013) and Bošković (2010), and would be mysterious otherwise.
- Results still preliminary – more investigation needed!

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Thank you for listening!

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How rich is rich?

- Rohrbacher (1999: 116): RefNSs are present if 'in at least one number of one tense of the regular verb paradigms, the person features [1] and [2] are both distinctively marked'
 - ✓ Predicts RefNSs in early NWGmc. ✗ But also in modern German and Icelandic.
- Müller (2005): RefNSs are present unless system-wide syncretisms in verb paradigms exist.
 - ✗ Predicts no RefNSs in early NWGmc (as Müller acknowledges).
- Tamburelli (2006: 443): RefNSs are present if 'each of the possible feature types [\pm speaker, \pm addressee, \pm singular – GW] appears in both a positive and a negative setting within the paradigm'
 - ✓ Predicts RefNSs in early NWGmc and Finnish, and ✓ not in German or Icelandic. ✗ But also in standard French.

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