

## Null subjects in the Lindisfarne Gospels as evidence for syntactic variation in Old English

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Outline of the talk:

1. Introduction and previous research
2. Null subjects in the Lindisfarne Gospels
3. Null subjects beyond the Lindisfarne Gospels: a new quantitative investigation
4. Towards an analysis
5. Summary and conclusions

### 1. Introduction and previous research

The possibility of referential null subjects (RefNSs) in Old English (OE) has been the subject of conflicting assertions:

- ⤴ ‘The phenomenon of referential *pro*-drop does not exist in Old English’ (Hulk & van Kemenade 1995: 245)
- ⤴ ‘Old English has *pro*-drop’ (van Gelderen 2000: 137)
- ⤴ *Pro*-drop ‘occurs (or survives) only spasmodically’ in OE (Mitchell 1985: 633)

⇒ So who’s right?

- ⤴ Examples have been known of for a hundred years: Pogatscher (1901) gives an extensive list, though some of his examples can be analysed as cases of coordination reduction (CR).
- ⤴ Variation exists across manuscripts, e.g. in *Caedmon’s Hymn*:

(1) *Nu scylun hergan hefaenricaes uard* (Cambridge UL MS. M, line 1)

(2) *Nu we sculan herian heofonrices Weard.* (Bodleian Library MS. T<sub>1</sub>, line 1)

now (we) must praise heaven.GEN guard

‘Now we must praise the lord of the heavenly kingdom’

- ⤴ Corpus Christi Oxford MS 279 (MS. O) shows signs of a correction to insert the pronoun!

### 2. Null subjects in the Lindisfarne Gospels

#### 2.1 The data

Berndt (1956) examines null subjects in the gloss to the Lindisfarne Gospels. He finds that RefNSs can be found at a non-trivial frequency.

*Referential pronominal subjects in finite indicative clauses in the gloss to the Lindisfarne Gospels, by person and number* (based on Berndt 1956: 65–68)

Text	Person	N	Overt	Null	Total
<i>Lindisfarne Gospels,</i> part 1	1	sg	212 (96.4%)	8 (3.6%)	220
		pl	53 (100.0%)	0 (0.0%)	53
	2	sg	103 (87.3%)	15 (12.7%)	118
		pl	206 (95.8%)	9 (4.2%)	215
	3	sg	116 (26.3%)	325 (73.7%)	441
		pl	108 (36.9%)	185 (63.1%)	293
	Totals		798	542	1340
<i>Lindisfarne Gospels,</i> part 2	1	sg	656 (98.6%)	9 (1.4%)	665
		pl	120 (99.2%)	1 (0.8%)	121
	2	sg	308 (93.3%)	22 (6.7%)	330
		pl	428 (95.7%)	19 (4.3%)	447
	3	sg	225 (18.3%)	1003 (81.7%)	1228
		pl	154 (24.5%)	475 (75.5%)	629
	Totals		1891	1529	3420

Examples:

- (3) *7 gefrægn fæder his*  
and asked father his  
'And **Jesus** asked his father ...'  
Latin: *et interrogauit patrem eius*  
WS: *And þa ahsode **he** his fæder*  
(Mark 9:21)
- (4) *7 gesomnadon efter sona menigo to him 7 suæ þe he gewuna wæs eftersona lærde hia*  
and collected after soon many to him and so that he used was after-soon taught them  
'And many people came to him, and **he (Jesus)** taught them as he was used to doing'  
Latin: *et conueniunt iterum turbæ ad eum et sicut consueuerat iterum docebat illos*  
WS: *þa comon eft menigu to him & swa swa he gewunode **he** hi lærde eft sona*  
(Mark 10:1)

We can note from Berndt's data that 3<sup>rd</sup> person RefNSs are **a lot** more common (both absolutely and proportionally) than 1<sup>st</sup> and 2<sup>nd</sup> person RefNSs. The difference is statistically significant (chi-square: 102.616 for part 1, 2000.153 for part 2; df=1, p<0.0001 for both.)

Examples with pronoun insertion:

- (5) *ðæs nam ic wyrðe fore-hlutende undoa ðuongas scóe is*  
 that.GEN NEG-am I worth down-bending undo.INF thongs shoes.GEN his  
 ‘I am not worthy to bend down and untie the thongs of his sandals.’  
 Latin: *cuius non sum dignus procumbens soluere corrigiam calciamentorum eius*  
 WS: *þæs ne eom ic wyrðe þ ic his sceona þwanga bugende uncnytte*  
 (Mark 1:7)
- (6) *ic wat hwæt ðu arð haligwer godes*  
 I know what **you** are holy-man God.GEN  
 ‘I know who **you** are – the Holy One of God!’  
 Latin: *scio quis és sanctus dei*  
 WS: *ic wat þu eart godes halga*  
 (Mark 1:24)

Another observation (not made by Berndt) is that RefNSs are more common in main clauses than in subordinate clauses.

Third-person pronoun insertion in subordinate clauses:

- (7) *þte hia ne æwades t mersades hine*  
 that **they** NEG witness / announce him  
 ‘... that **they** should not tell anyone who he was.’  
 Latin: *né manifestarent illum*  
 WS: *þ hie hine ne ge-swutelodon*  
 (Mark 3:12)
- (8) *sua feolo t sua oft ðonne hia hæfdon uncuð aðlo*  
 so much / so often when **they** had unknown diseases  
 ‘those who had diseases’  
 Latin: *quotquot autem habebant plagas*  
 WS: *swa fela swa untrumnessa ... hæfdon*  
 (Mark 3:10)

But examples of RefNSs in subordinate clauses do exist:

- (9) *gif sodlice dead were*  
 if truly dead was  
 ‘... if **he** was truly dead.’  
 Latin: *si iam mortuus esset*  
 WS: *hwæðer **he** dead wære*  
 (Mark 15:44)

I don't have quantitative data breaking down the distribution of RefNSs by clause.

## 2.2 Accounting for RefNSs in the gloss to the Lindisfarne Gospels

### Hypothesis 1: Scribal error

- Might all the instances of RefNSs be due to scribal error?
  - This hypothesis is a non-starter. The percentages are simply too high.

### Hypothesis 2: Latin influence

- Latin was a language that had RefNSs. So perhaps the presence of RefNSs in the glosses is simply due to extremely literal glossing/translation.
  - This is unlikely, because of the specific distribution of RefNSs in the glosses. Why would the translator insert pronouns systematically only in the 1<sup>st</sup> and 2<sup>nd</sup> person, and only in subordinate clauses?
  - It is also unlikely because other texts with less connection to Latin (e.g. *Beowulf*, *Bald's Leechbook*) display the same distribution of RefNSs (see section 3).

### Hypothesis 3: Native phenomenon

- I will therefore assume that RefNSs were a native phenomenon in (at least some varieties of) OE.

## 3. Null subjects beyond the Lindisfarne Gospels

The availability of the YCOE (Taylor, Warner, Pintzuk & Beths 2003) and YCOEP (Pintzuk & Plug 2000) enables a large-scale quantitative investigation.

- ⤴ Search of all texts over 20,000 words in the YCOE, plus the YCOEP *Beowulf*
- ⤴ Aim: to find and count:
  - a) overt personal pronoun subjects
  - b) referential null subjects (RefNSs)
- ⤴ Carried out using CorpusSearch 2 (Randall, 2005–2007)
- ⤴ RefNSs are tagged distinctly (\*pro\*) from cases of CR (\*con\*) and null expletives (\*exp\*), so the search is fairly simple, though some tweaks had to be made.

▲ Cells which show a frequency of RefNSs of greater than 2% are in black with white text.

*Pronouns vs. RefNSs in OE finite indicative clauses in YCOE & YCOEP, by text and clause type:*

Text	Clause type	Overt	Null	Total
<i>Ælfric's Lives of Saints</i> (coaelive.o3)	Main	789 (99.2%)	6 (0.8%)	795
	Subordinate	1137 (99.4%)	7 (0.6%)	1144
	Conjunct	532 (96.4%)	20 (3.6%)	552
	Total	2458	33	2491
<i>Ælfric's Homilies Supplemental</i> (coaelhom.o3)	Main	585 (99.8%)	1 (0.2%)	586
	Subordinate	871 (99.8%)	2 (0.2%)	873
	Conjunct	501 (99.4%)	3 (0.6%)	504
	Total	1957	6	1963
<i>Bede's History of the English Church</i> (cobede.o2)	Main	719 (96.6%)	25 (3.4%)	744
	Subordinate	1038 (98.0%)	21 (2.0%)	1059
	Conjunct	377 (92.6%)	30 (7.4%)	407
	Total	2134	76	2210
<i>Benedictine Rule</i> (cobenrul.o3)	Main	144 (99.3%)	1 (0.7%)	145
	Subordinate	177 (98.3%)	3 (1.7%)	180
	Conjunct	29 (100.0%)	0 (0.0%)	29
	Total	350	4	354
<i>Beowulf</i> (cobeowul; from YCOE Poetry)	Main	190 (78.2%)	53 (21.8%)	243
	Subordinate	139 (93.3%)	10 (6.7%)	149
	Conjunct	24 (92.3%)	2 (7.7%)	26
	Total	353	65	418
<i>Blickling Homilies</i> (coblick.o23)	Main	436 (99.5%)	2 (0.5%)	438
	Subordinate	582 (99.1%)	5 (0.9%)	587
	Conjunct	345 (98.9%)	4 (1.1%)	349
	Total	1363	11	1374
<i>Boethius, Consolation of Philosophy</i> (coboeth.o2)	Main	902 (99.4%)	5 (0.6%)	907
	Subordinate	1095 (99.6%)	4 (0.4%)	1099
	Conjunct	260 (98.5%)	4 (1.5%)	264
	Total	2257	13	2270
<i>Ælfric's Catholic Homilies I</i> (cocathom1.o3)	Main	1271 (99.9%)	1 (0.1%)	1272
	Subordinate	1507 (99.7%)	4 (0.3%)	1511
	Conjunct	648 (99.1%)	6 (0.9%)	654
	Total	3426	11	3437

<i>Ælfric's Catholic Homilies II</i> (cocathom2.o3)	Main	1071 (99.9%)	1 (0.1%)	1072
	Subordinate	1191 (99.7%)	4 (0.3%)	1195
	Conjunct	547 (98.7%)	7 (1.3%)	554
	Total	2809	12	2821
<i>Anglo-Saxon Chronicle C</i> (cochronC)	Main	51 (94.4%)	3 (5.6%)	54
	Subordinate	165 (100.0%)	0 (0.0%)	165
	Conjunct	200 (89.7%)	23 (10.3%)	223
	Total	416	26	442
<i>Anglo-Saxon Chronicle D</i> (cochronD)	Main	66 (88.0%)	9 (12.0%)	75
	Subordinate	197 (99.0%)	2 (1.0%)	199
	Conjunct	214 (88.4%)	28 (11.6%)	242
	Total	477	39	516
<i>Anglo-Saxon Chronicle E</i> (cochronE.o34)	Main	115 (95.8%)	5 (4.2%)	120
	Subordinate	246 (98.8%)	3 (1.2%)	249
	Conjunct	248 (93.6%)	17 (6.4%)	265
	Total	609	25	634
<i>Cura Pastoralis</i> (cocura.o2, cocuraC)	Main	721 (99.6%)	3 (0.4%)	724
	Subordinate	1504 (99.7%)	5 (0.3%)	1509
	Conjunct	339 (99.4%)	2 (0.6%)	341
	Total	2564	10	2574
<i>Gregory's Dialogues C</i> (cogregdC.o24)	Main	747 (99.7%)	2 (0.3%)	749
	Subordinate	1409 (99.7%)	4 (0.3%)	1413
	Conjunct	651 (99.7%)	2 (0.3%)	653
	Total	2807	8	2815
<i>Gregory's Dialogues H</i> (cogregdH.o23)	Main	240 (100.0%)	0 (0.0%)	240
	Subordinate	424 (100.0%)	0 (0.0%)	424
	Conjunct	117 (99.2%)	1 (0.8%)	128
	Total	781	1	782
<i>Herbarium</i> (coherbar)	Main	451 (100.0%)	0 (0.0%)	451
	Subordinate	119 (100.0%)	0 (0.0%)	119
	Conjunct	162 (100.0%)	0 (0.0%)	162
	Total	732	0	732
<i>Bald's Leechbook</i> (colaece.o2)	Main	90 (76.3%)	28 (23.7%)	118
	Subordinate	94 (94.0%)	6 (6.0%)	100
	Conjunct	23 (65.7%)	12 (34.3%)	35
	Total	207	46	253

<i>Martyrology</i> (comart3.o23)	Main	182 (99.5%)	1 (0.5%)	183
	Subordinate	242 (98.8%)	3 (1.2%)	245
	Conjunct	206 (98.1%)	4 (1.9%)	210
	Total	630	8	638
<i>Orosius</i> (coorosiu.o2)	Main	344 (99.7%)	1 (0.3%)	345
	Subordinate	707 (99.3%)	5 (0.7%)	712
	Conjunct	299 (93.1%)	22 (6.9%)	321
	Total	1350	28	1378
<i>Heptateuch</i> (cootest.o3)	Main	748 (99.9%)	1 (0.1%)	749
	Subordinate	804 (99.9%)	1 (0.1%)	805
	Conjunct	450 (98.9%)	5 (1.1%)	455
	Total	2002	7	2009
<i>Vercelli Homilies</i> (coverhom)	Main	464 (98.9%)	5 (1.1%)	469
	Subordinate	609 (99.3%)	4 (0.7%)	613
	Conjunct	393 (98.3%)	7 (1.8%)	400
	Total	1466	16	1482
<i>West-Saxon Gospels</i> (cowsgosp.o3)	Main	1411 (99.7%)	4 (0.3%)	1415
	Subordinate	1139 (99.7%)	3 (0.3%)	1142
	Conjunct	820 (99.4%)	5 (0.6%)	825
	Total	3370	12	3382
<i>The Homilies of Wulfstan</i> (cowulf.o34)	Main	128 (100.0%)	0 (0.0%)	128
	Subordinate	351 (100.0%)	0 (0.0%)	351
	Conjunct	181 (100.0%)	0 (0.0%)	181
	Total	660	0	660

### 3.1 Differences between texts

- ▲ Most texts show a frequency of overt pronouns of 98–100% in all clause types.
  - RefNSs were (probably) ungrammatical by the grammars underlying them.
- ▲ *Ælfric's Lives of Saints* and *Orosius*: RefNSs only frequent in conjoined clauses.
  - Some kind of modified co-ordination reduction, as proposed for Old Norse by Faarlund (1990: 104)?
- ▲ Bede's *History of the English Church, Beowulf, Bald's Leechbook*, and the C, D and E manuscripts of the *Anglo-Saxon Chronicle* all exhibit null subjects to a greater extent.
  - What's the unifying factor?

*Hypothesis: RefNSs are an Anglian (Northumbrian/Mercian) feature*

- All of the texts that exhibit RefNSs also arguably exhibit Anglian features.
  - Berndt (1956: 78–82) notes that the proportion of RefNSs is considerably higher in the Lindisfarne and Rushworth glosses than in the West-Saxon Gospels.
  - The OE *Bede* and *Bald's Leechbook* and the D and E manuscripts of the Anglo-Saxon Chronicle, though traditionally assigned to West Saxon, display Anglian features (Fulk 2009: 96). See also Ingham (2006) on negative concord.
  - Though it is agreed that *Bald's Leechbook* in its transmitted form was composed in Winchester (Meaney 1984: 236), Wenisch (1979: 54) argues on a lexical basis that an Anglian (probably Mercian) original must have existed.
  - As for *Beowulf*, Fulk (1992: 309–325) notes a number of Anglian lexical and morphological features.
  - The classic West Saxon texts (e.g. most of the works attributed to Alfred, Ælfric, Wulfstan & friends) do not permit RefNSs.
- The converse does NOT seem to hold: if a text exhibits Anglian features, that doesn't mean that it will also exhibit RefNSs (see e.g. the *Herbarium*).
- Berndt (1956: 82–85) considers but rejects the hypothesis of dialectal variation, instead suggesting that the relevant criterion is closeness to the West Saxon 'standard'.
  - However, his argument rests on the claim (justified on functional grounds) that the systematic use of first and second person pronouns was an innovation in colloquial OE.
  - As comparative data from the other early Northwest Germanic languages shows, this is unlikely to have been the case.

**3.2 Differences in syntactic distribution**

- ⤴ As with the Lindisfarne glosses, in all of the texts that robustly exhibit RefNSs, null variants are more common in main clauses than in subordinate clauses.
  - Effect of main vs. subordinate clearly significant (Fisher's exact test;  $p < 0.0001$ )
  - Similar to results found by Axel (2007) for Old High German, by Håkansson (2008) for Old Swedish, and by me (in progress) for Old Saxon.
- ⤴ In all of the texts that robustly exhibit RefNSs, 3<sup>rd</sup> person null variants are more common.
- ⤴ In all texts I have checked, effect of 3<sup>rd</sup> vs. non-3<sup>rd</sup> person is statistically significant (e.g. for *Beowulf* and *Bald's Leechbook*, Fisher's exact test,  $p < 0.0001$ ).
- ⤴ Referential null **objects** are also found in OE (Ohlander 1943, van der Wurff 1997):

(10) *se here ... gesæt þæt lond and gedælde*  
 the army invaded the land and divided  
 'The army ... invaded the country and divided (it) up'  
 (cochronC,ChronC\_[Rositzke]:881.1.762)

- (11) *hie ... leton holm beran / geafon on garsecg*  
 they let sea bear gave on ocean  
 ‘They let the sea bear (him), gave (him) to the ocean’  
 (cobeowul,4.47.41–42)

I have not attempted a quantitative investigation of RefNOs, due to the difficulty of deciding what constitutes a true RefNO as opposed to e.g. Modern English *I have eaten*.

#### 4. Analysis

Traditional account of RefNSs following Taraldsen (1978) attributes them to the possibility of identification by rich agreement. But this can’t account for the OE facts (*pace* van Gelderen 2000).

Verb paradigm for the simple present and past tenses in Old English: *nerian* (‘to save’)

N	Person	Present ind.	Past ind.	Present subj.	Past subj.
sg	1	ner-ie	ner-ed-e	ner-ie	ner-ed-e
	2	ner-est	ner-ed-est		
	3	ner-eþ	ner-ed-eþ		
pl		ner-iaþ	ner-ed-on	ner-ien	ner-ed-en

- ⤴ OE agreement is just too weak (cf. e.g. Müller 2005): no person distinctions in the plural!
- ⤴ Differences between texts/dialects are mysterious under an agreement-driven account.
- ⤴ An agreement-driven account would predict RefNOs to be impossible, contrary to fact.

Is OE a ‘radical null argument’ language like Japanese and Imbabura Quechua? Neeleman & Szendrői (2007, 2008) suggest that such languages require agglutinating morphology on pronouns.

#### OE pronoun paradigm

	Nom	Acc	Dat	Gen
1 sg	iċ	mċ, meċ	mċ	mċn
2 sg	þū	þċ, þec	þċ	þċn
3 sg m	hē	hine	him	his
3 sg n	hit			
3 sg f	hċo, hċo	hċie, hċi	hire	
1 du	wit	unc	uncer	
2 du	ġit	inc	incer	
1 pl	wċ	ūš, ūšic	ūš	ūre
2 pl	ġċ	ċow, ċowic	ċow	ċower
3 pl m	hċie, hċi		him, heom	hira, hiera, heora, hiora
3 pl n				
3 pl f				

#### How rich is rich agreement?

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 OE. ✗ But also in modern German and Icelandic.

Müller (2005): RefNSs are present unless system-wide syncretisms in verb paradigms exist. – ✗ Predicts no RefNSs in OE (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 OE and Finnish, and ✓ not in German or Icelandic. ✗ But also in all modern French.

There is no feature value or combination of values such that they define a nonsingleton set of forms in which all members share phonetic material (cf. Neeleman & Szendrői 2007: 706). So if Neeleman & Szendrői are on the right track, OE wasn't a radical null subject language.

However, other languages are like OE in not fitting very well into the traditional null subject typology:

- ⤴ In formal and written Finnish, for example...
  - ...1<sup>st</sup> and 2<sup>nd</sup> person pronouns can always be left unexpressed in finite contexts.
  - ...3<sup>rd</sup> person pronouns can be left unexpressed when 'bound by a higher argument, under conditions that are rather poorly understood' (Holmberg 2005: 539).
  - ...referential objects may also be unexpressed in similar contexts.
- ⤴ Hebrew has a similar distribution in the past and future (Vainikka & Levy 1999: 615)
- ⤴ Also Marathi, Russian, Brazilian Portuguese?
- ⤴ These could be classed as 'a separate type of null-argument language' (Holmberg & Roberts 2010: 10–11).

*Hypothesis: the relevant varieties of OE are 'mirror-image Finnish'*

- My proposal: the varieties of OE that permit RefNSs are essentially the mirror image of Finnish and Hebrew.
- Are there any other languages with null subjects in the third person only?
  - Yes:
    - Shipibo (Camacho & Elías-Ulloa 2010)
    - Old North Russian (Kwon 2009)
    - Other early Germanic languages (Rosenkvist 2009, Walkden to appear)

## 5. Summary and conclusions

- ⤴ The OE gloss to the Lindisfarne Gospels robustly displays a peculiar pattern of referential null subjects.
  - RefNSs are rarer in the 1<sup>st</sup> and 2<sup>nd</sup> persons than in the 3<sup>rd</sup> person.
  - RefNSs are rare in subordinate clauses.
- ⤴ Referential null subjects were (I have argued!) a native feature of this variety.
- ⤴ Zooming out: some OE texts reflect a null-subject-permitting grammar. Some don't.
  - So Hulk & van Kemenade (1995: 245), van Gelderen (2000: 137) and Mitchell (1985: 633) were all right, after all.
- ⤴ Referential null subjects are (I have argued!) an Anglian dialect feature.
- ⤴ OE null subjects cannot be accounted for by rich agreement, but the relevant varieties of OE may be analysed as a partial null subject language like Finnish or Hebrew.

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