

Refining the 'null argument cycle'

The place of partial null argument languages

George Walkden

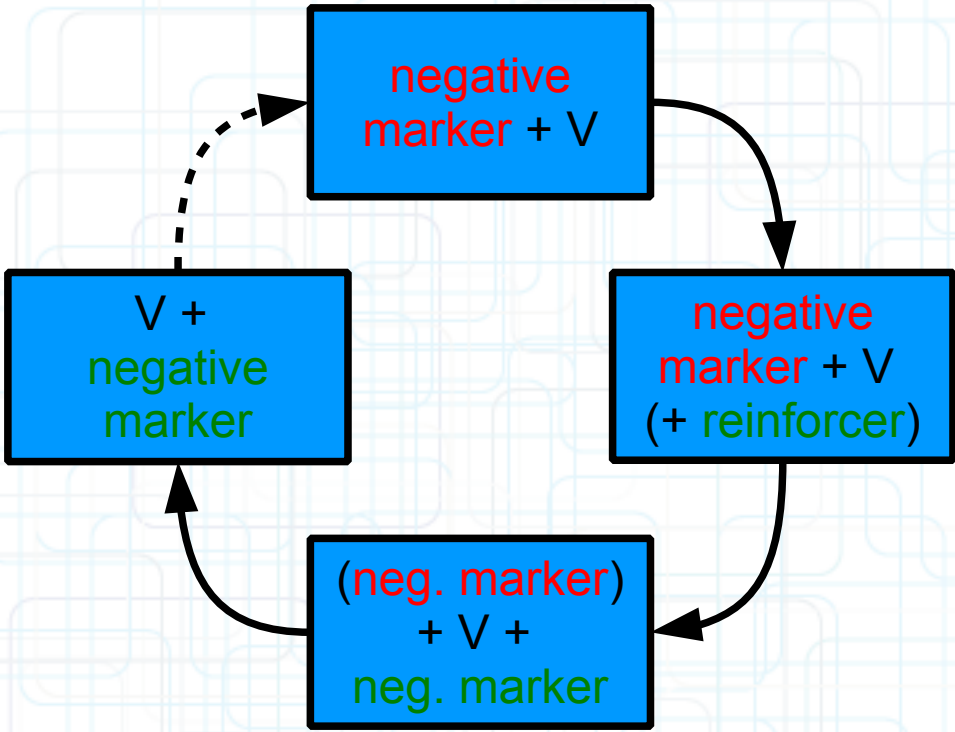
george.walkden@manchester.ac.uk

[http://personalpages.manchester.ac.uk/
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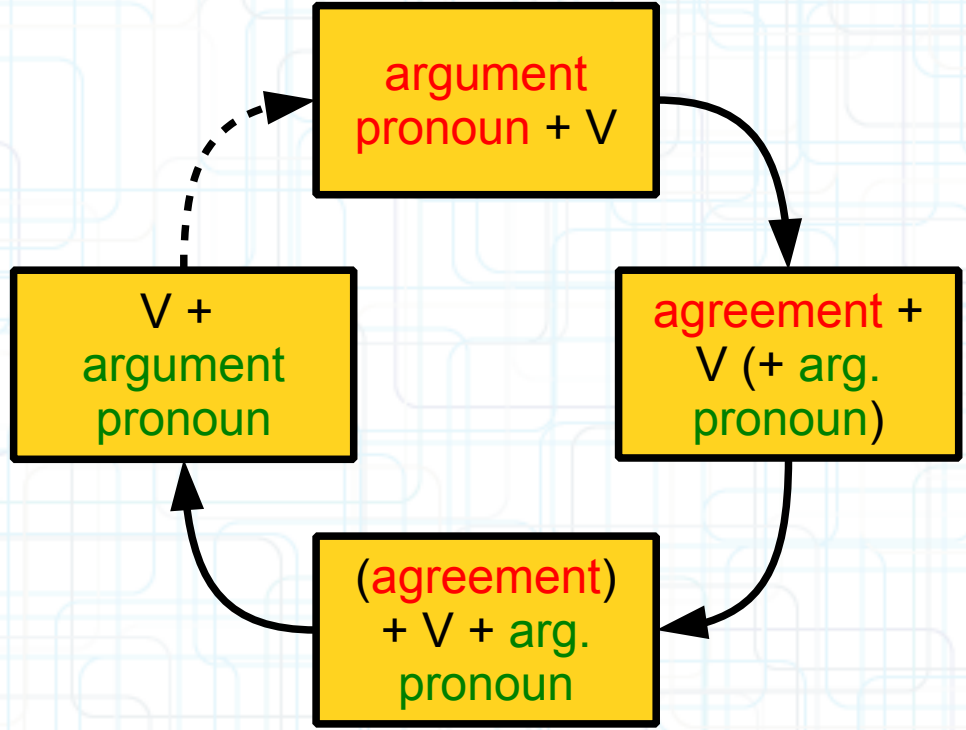
The ‘null argument cycle’

- In the literature on syntactic change, cycles relating to null arguments have been proposed.
 - Rowlett (1998: 136): “Agreement Cycle”
 - van Gelderen (2011): “subject cycle” and “object cycle”
 - Faarlund (2011): “*pro* cycle”
 - cf. also Bopp (1816), Müller (1875), Givón (1976), Fuß (2004)
- Core intuition: Subject pronouns are reanalysed as verbal agreement, which can then be lost.

Jespersen's Cycle



Agreement Cycle



Problems

- The cycle as presented here really only accounts for:
 - “canonical” NALs in which agreement identifies the referent (e.g. Romance)
 - pronominal-argument languages (e.g. Navajo; Jelinek 1984)
 - non-NALs (e.g. English)
- Not accounted for:
 - Radical NALS (see Trutkowski 2012)
 - Partial NALS

Talk outline

- Null arguments in early Northwest Germanic (eNWGmc): the data
- Implications and analysis: eNWGmc as a partial null argument language (NAL)
- Refining the ‘null argument cycle’: where do partial NALs fit in?

Previous research

- Modern standard Germanic varieties are, by and large, non-NALs.
 - Abstracting away from ‘topic drop’.
 - NAL varieties: Bavarian, Övdalian, etc.
- However, it has often been observed, for individual eNWGmc languages, that referential null arguments do occur.
 - Old English
 - Old High German
 - Old Norse-Icelandic

Previous research

- **Old Norse/Icelandic (OI):** Nygaard (1894, 1906), Hjartardóttir (1987), Sigurðsson (1993); also Håkansson (2008) on Old Swedish
- **Old English (OE):** Pogatscher (1901), Berndt (1956), Mitchell (1985), van Gelderen (2000), Rusten (2010)
- **Old High German (OHG):** Eggenberger (1961), Axel (2005, 2007), Axel & Weiß (2011)
- **Old Saxon (OS):** Behrmann (1879)
- **Comparative:** only Rosenkvist (2009); no new data

- **OI:**
 - ok var Hoskuldr uti, er **Ø** reið í tún
and was H. outdoors when rode into field
'And Hoskuldr was outside when **he** rode into the field' (Sigurðsson 1993)
- **OE:**
 - þonne **Ø** bið on hrepre under helm drepen biteran stræle
then is in heart under helm hit bitter dart
'Then **he** is hit in the heart, under the helmet, by the bitter dart'
(cobeowul,54.1745.1443)
- **OHG:**
 - **Ø** steih tho in skifilin
stepped.3SG then into boat
'**He** then stepped into the boat' (*Tatian* 193.1; Axel 2007: 293)
- **OS:**
 - **Ø** gisâhun iro barn biforan ... qualmu sueltan
saw.3PL their children before murder.INSTR die
'**They** saw their children murdered before them' (*Heliand* 749–751)

eNWGmc texts overall

- Referential null subjects vs. pronouns:

Lang.	Text	Overt	%	Null	%	Source
OI	<i>1st Grammatical Treatise</i>	182	86.3	29	13.7	IcePaHC 0.9.1
OI	<i>Morkinskinna</i>	1291	93.4	91	6.6	IcePaHC 0.9.1
OI	<i>Þorláks saga helga</i>	578	97.8	13	2.2	IcePaHC 0.9.1
OE	<i>Bald's Leechbook</i>	207	81.8	46	18.2	YCOE
OE	<i>Beowulf</i>	353	84.4	65	15.6	YCOEP
OE	<i>Homilies of Wulfstan</i>	660	100.0	0	0.0	YCOE
OHG	<i>Isidor</i>	146	72.3	56	27.7	Eggenberger (1961)
OHG	<i>Tatian</i>	2614	71.2	1055	28.8	Eggenberger (1961)
OS	<i>Heliand</i>	2343	95.6	109	4.4	Manual search

Disclaimer: Slight differences between searches exist...

eNWGmc variation

- Variation between texts/dialects:
 - Old English:
 - Found in *Beowulf*, *Bald's Leechbook*, *Bede's Historia*, the *Anglo-Saxon Chronicle*, the *Rushworth Glosses* and the *Lindisfarne Gospels*.
 - Not found in e.g. *Ælfric*, *Alfred*, *Wulfstan*.
 - Anglian dialect feature? (Walkden 2012a)
 - Old High German:
 - Found in e.g. *Isidor*, *Tatian*.
 - Not found in later OHG such as *Notker* (Axel 2007: 298).

eNWGmc by person

OI: Morkinskinna

Person	Overt N	%	Null N	%
1sg	269	99.3	2	0.7
1pl	79	95.2	4	4.8
2sg	185	99.5	1	0.5
2pl	13	100.0	0	0.0
3sg	562	90.1	62	9.9
3pl	183	89.3	22	10.7

OS: Heliand

Person	Overt N	%	Null N	%
1sg	262	100.0	0	0.0
1pl	61	100.0	0	0.0
2sg	247	99.2	2	0.8
2pl	230	99.1	2	0.9
3sg	1089	94.5	63	5.5
3pl	454	91.5	42	8.5

OE: Beowulf

Person	Overt N	%	Null N	%
1sg	75	97.4	2	2.6
1pl	21	100.0	0	0.0
2sg	26	96.3	1	3.7
2pl	10	100.0	0	0.0
3sg	172	80.4	42	19.6
3pl	49	71.0	20	29.0

OHG: Isidor

Person	Overt N	%	Null N	%
1sg	36	94.7	2	5.3
1pl	2	40.0	3	60.0
2sg	3	60.0	2	40.0
2pl	1	100.0	0	0.0
3sg	15	34.1	29	65.9
3pl	4	25.0	12	75.0

Early NWGmc by person

OI: *Morkinskinna*

Person	Overt N	%	Null N	%
1sg	269	99.3	2	0.7
1pl	79	95.2	4	4.8
2sg	185	99.5	1	0.5
2pl	13	100.0	0	0.0
3sg	562	90.1	62	9.9
3pl	183	89.3	22	10.7

OS: *Heliand*

Person	Overt N	%	Null N	%
1sg	262	100.0	0	0.0
1pl	61	100.0	0	0.0
2sg	247	99.2	2	0.8
2pl	230	99.1	2	0.9
3sg	1089	94.5	63	5.5
3pl	454	91.5	42	8.5

OE: *Beowulf*

Person	Overt N	%	Null N	%
1sg	75	97.4	2	2.6
1pl	21	100.0	0	0.0
2sg	26	96.3	1	3.7
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3pl	49	71.0	20	29.0

OHG: *Isidor*

Person	Overt N	%	Null N	%
1sg	36	94.7	2	5.3
1pl	2	40.0	3	60.0
2sg	3	60.0	2	40.0
2pl	1	100.0	0	0.0
3sg	15	34.1	29	65.9
3pl	4	25.0	12	75.0

Generalizations, 1: person

- Null subjects are much more common in the 3rd person than in the 1st and 2nd.
 - Fisher's exact tests, 3rd vs. non-3rd:
 - *First Grammatical Treatise* (OI), *Morkinskinna* (OI): **p<0.0001**
 - *Beowulf* (OE), *Bald's Leechbook* (OE): **p<0.0001**
 - *Isidor* (OHG), *Tatian* (OHG): **p<0.0001**
 - *Heliand* (OS): **p<0.0001**
 - Cf. also de Smet (1970) on Old Dutch; Håkansson (2008) on Old Swedish.
 - Number does not have a consistent effect.

eNWGmc by clause type

Ol: 1st Gramm. Tr.

Type	Overt N	%	Null N	%
Main	55	96.5	2	3.5
Sub	102	80.3	25	19.7
Conj	25	92.6	2	7.4

OS: Heliand

Type	Overt N	%	Null N	%
Main	969	93.4	68	6.6
Sub	1277	99.4	8	0.6
Conj	97	74.6	33	25.4

Ol: Morkinskinna

Type	Overt N	%	Null N	%
Main	428	93.4	30	6.6
Sub	508	95.3	25	4.7
Conj	355	90.8	36	9.2

OHG: Isidor

Type	Overt N	%	Null N	%
Main	61	56.0	48	44.0
Sub	85	91.4	8	8.6

NB: Eggenberger doesn't distinguish conjunct clauses.

OE: Beowulf

Type	Overt N	%	Null N	%
Main	190	78.2	53	21.8
Sub	139	93.3	10	6.7
Conj	24	92.3	2	7.7

OE: Leechbook

Type	Overt N	%	Null N	%
Main	90	76.3	28	23.7
Sub	94	94.0	6	6.0
Conj	23	65.7	12	34.3

Generalizations, 2: clause type

- In all the early West Germanic languages (but not OI), null subjects are much more common in main clauses than in subordinate clauses.
 - Fisher's exact tests, main vs. subordinate:
 - *Beowulf* (OE): **p<0.0001**; *Bald's Leechbook* (OE): **p=0.0003**
 - *Isidor* (OHG), *Tatian* (OHG): **p<0.0001**
 - *Heliand* (OS): **p<0.0001**
 - *Morkinskinna* (OI): **p=0.2130**; *First Grammatical Treatise* (OI): **p=0.0031** (wrong way!)
 - Cf. also Håkansson (2008) on Old Swedish.

Is V2 relevant?

- Are null subjects permitted in subordinate clauses only when V2 (Adams 1987 for Old French, Axel 2007 for OHG)?
- **No.**
 - OE: 6/10 in *Beowulf* and 2/6 in *Bald's Leechbook* not V2.
 - OHG: 4/8 in *Isidor* not V2; difference in verb position between clauses with overt pronominals and clauses with null pronominals is not significant ($p=0.2666$).
 - OS: 7/8 in the *Heliand* not V2.
- Instead: null subjects as a main clause phenomenon (Walkden 2012)?

- **OI:**
 - dvergrinn mælti, at sa baugr skyldi vera hverjum hofuðsbani, er átti \emptyset
dwarf.DEF said that the ring should be anyone.DAT headbane that owned
'The dwarf said that the ring would bring death to anyone who possessed it'
(Sigurðsson 1993)
- **OE:**
 - hie ... leton holm \emptyset beran / geafon \emptyset 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; van Gelderen 2000)
- **OHG:**
 - denne varant engilâ uper dio marhâ, wechant deotâ, wîssant \emptyset ze dinge
then travel angels over the lands wake people lead to judgement
'Then angels fly over the lands, wake the people, lead them to judgement'
(*Muspilli* 79–80; Lockwood 1968: 215)
- **OS:**
 - huuand it rotat hîr an roste, endi regintheobos farstelad \emptyset , uurmi auuardiad
because it rusts here to rust and thieves steal worms spoil
'because it rusts away, thieves steal it, worms spoil it ...' (*Heliand* 1644–5)

'Non-syntactic' explanations

- Could the occurrence of null subjects be 'merely' due to the influence of Latin/metrical requirements/register?
 - Syntactic distribution (much more common in 3rd than in 1st or 2nd persons, less common in subordinate clauses) makes this unlikely.
 - Distribution across texts makes this unlikely.
- We're dealing with a native phenomenon.

Analysis: rich agreement?

- Traditional account following Apollonius Dyscolus (~200 AD) and Taraldsen (1978) attributes null subjects to rich agreement. But this can't account for the eNWGmc facts.
 - eNWGmc 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.

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

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.

Analysis: radical NALs?

- Are the eNWGmc languages ‘radical’ NALs like Japanese and Imbabura Quechua?
- Neeleman & Szendrői (2007, 2008) suggest that such languages require agglutinating morphology on pronouns.
- For eNWGmc, this doesn’t seem like a plausible analysis.

OS pronouns:

	Nominative	Accusative	Dative	Genitive
1 sg	ik	mik	mī	mīn
2 sg	thū	thik	thī	thīn
3 sg m	hīē	ina	imu	is
3 sg n	it			
3 sg f	siu	sia	iru	ira

Partial NALs

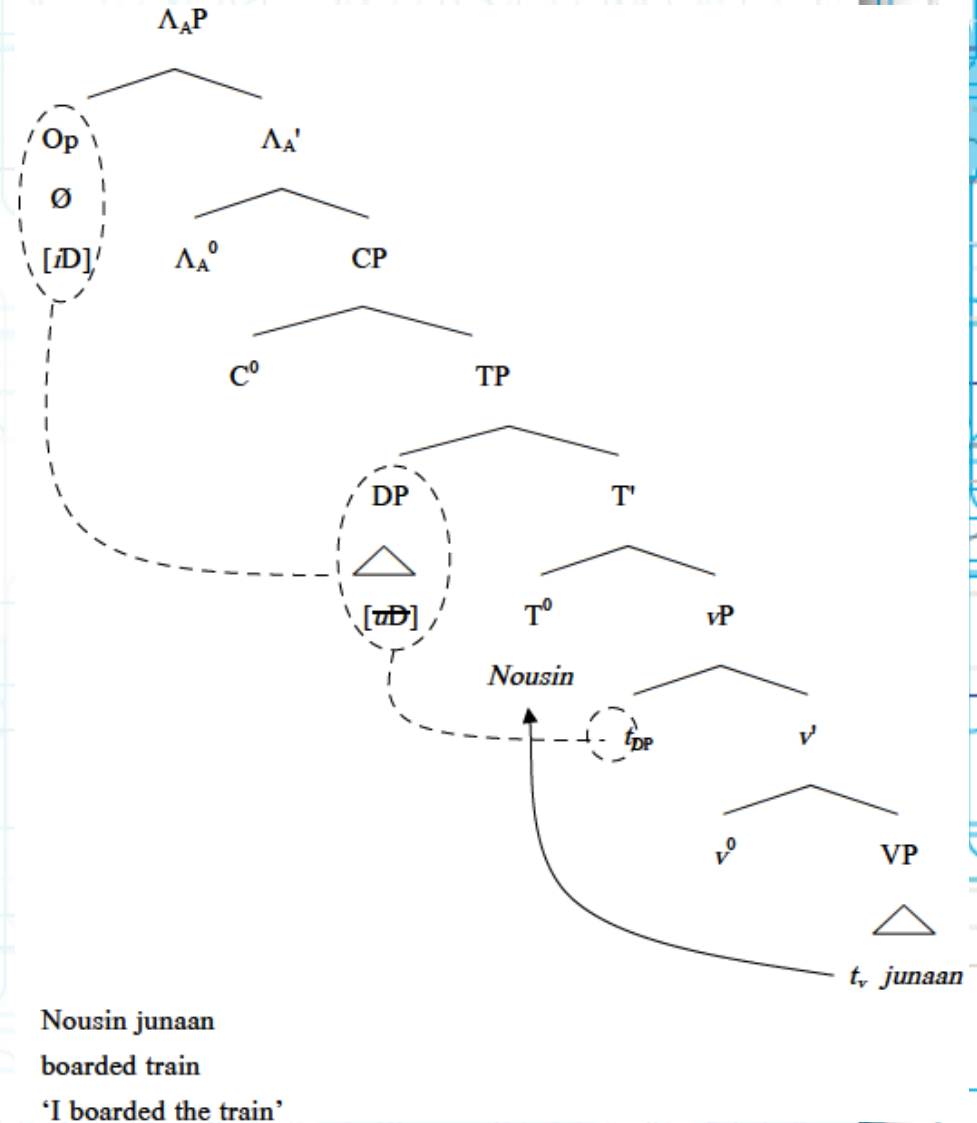
- In partial NALs (Holmberg 2010), pronouns can optionally be omitted in certain person/tense combinations.
- Examples:
 - Finnish:
 - *(Minä/∅) puhun englantia*
'(I) speak English.'
 - *(Hän/*∅) puhuu englantia*
'He speaks English.'
 - Hebrew
 - Russian, Marathi, Brazilian Portuguese

Partial NALs

- In Finnish, for instance, 1st and 2nd person pronouns can be omitted in any finite context, but not 3rd person pronouns.
- In Old North Russian (Kwon 2009) and Shipibo (Camacho & Elías-Ulloa 2010), 3rd person pronouns can be omitted in any finite context, but not 1st or 2nd.
- The early NWGmc languages seem to fit best into this category.

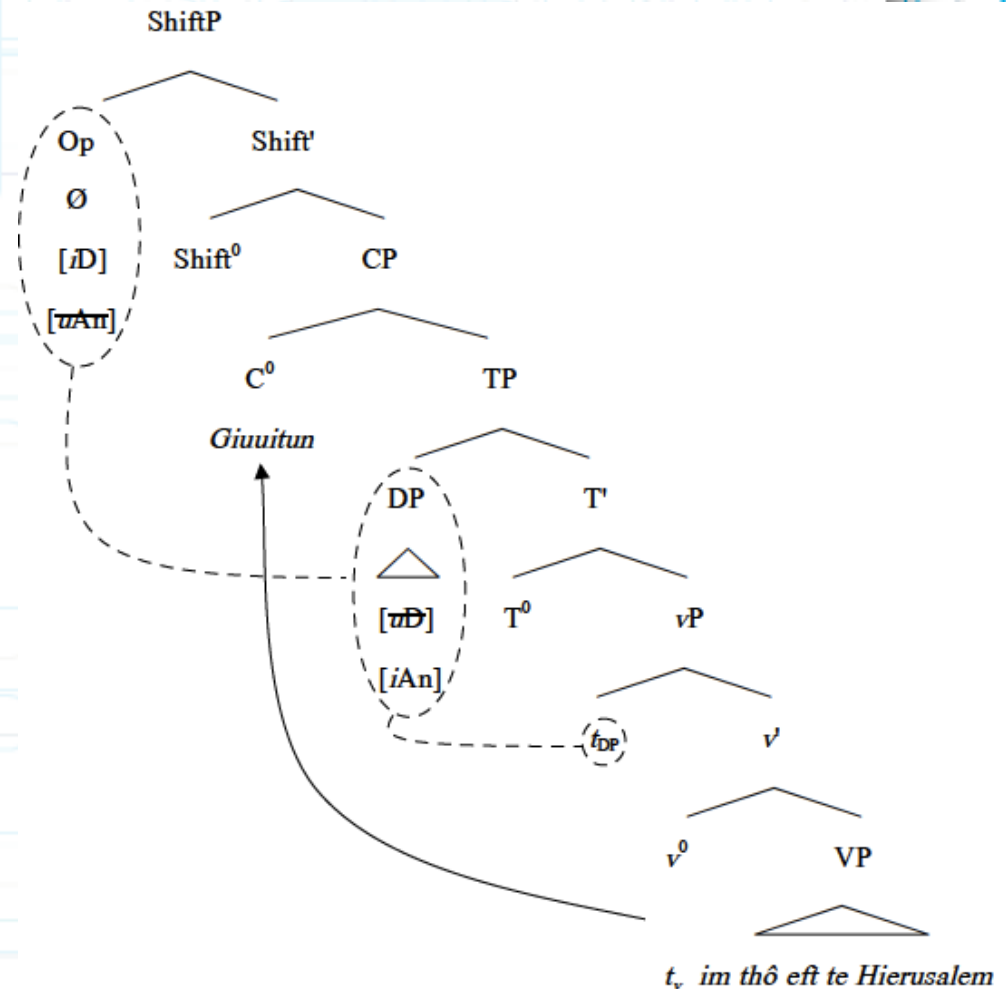
Analysis (broadly following Holmberg 2010)

- Null pronouns are DPs bearing a [μ D] feature
- This feature must be checked/valued through agreement with a left-peripheral operator
- For Finnish, Hebrew etc., this is a speaker or addressee operator in the left periphery (local logophoric agent or patient, Λ_A or Λ_P , in the sense of Sigurðsson 2004)



Analysis (broadly following Holmberg 2010)

- For eNWGmc, the pronoun agrees with a topic operator in the left periphery
- I assume that it is an Aboutness topic (though cf. Rusten 2010)
- First and second person arguments can be aboutness topics, but are unlikely to be (Sigurðsson 1993)
- Nullness is due to chain reduction



Giuuitun im thø eft te Hierusalem
 went.3PL REFL.DAT then after to Jerusalem
 'Then they went to Jerusalem'

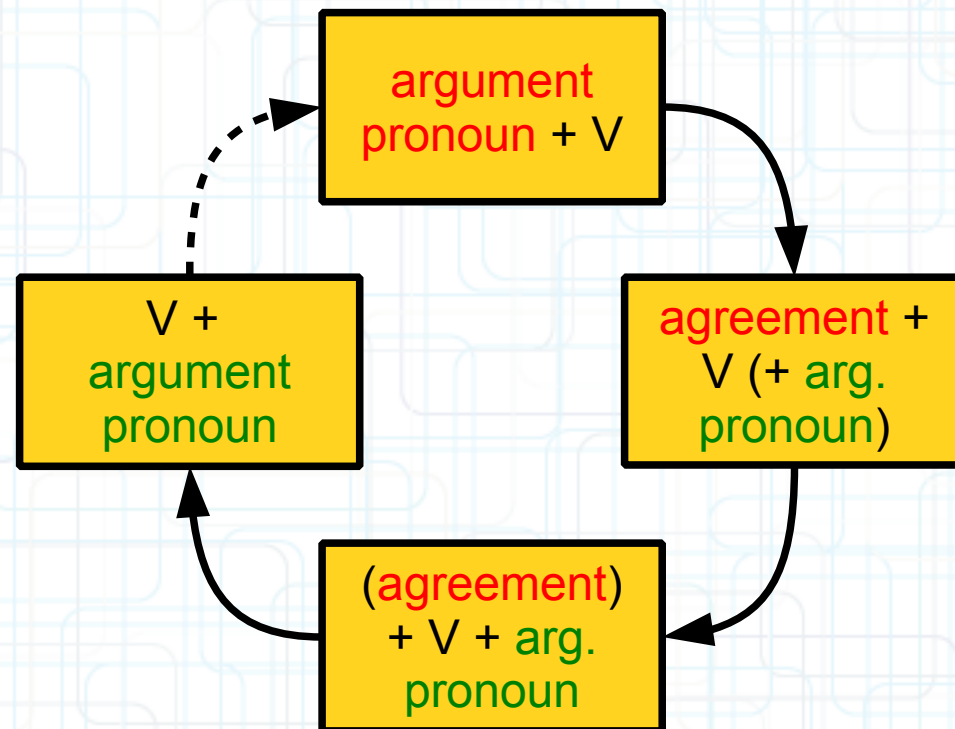
Generic null subjects

- According to Holmberg (2005: 540), partial NALs permit generic inclusive null subjects.
- These are possible in all the eNWGmc languages (though in competition with *man/mon* in West Germanic).
 - OE:
 - Wip þæs magan springe þonne \emptyset þurh muð bitere hræcð
for the maw.GEN sore.DAT when through mouth bitterly retches
'For sores of the mouth when **someone** retches bitterly'
(colaece,Lch_II_[2]:15.1.1.2296)
 - Ol:
 - en \emptyset heyrði til hqDo, þá er þór bar hverinn
but heard.3SG to handle.GEN when that Thor carried kettle.DEF
'**One** could hear the handle rattle when Thor carried the kettle'
(1150.FIRSTGRAMMAR.SCI-LIN,.170)

Partial NALs in the cycle

- Where do partial NALs fit in the null argument cycle?

Agreement Cycle



Partial NALs in the cycle

- **Suggestion:** partial NALs develop from “canonical” (Romance-style) NALs.

Partial NAL	Ancestor	Ancestor status
Brazilian Portuguese	Earlier BP	Canonical NAL (e.g. Modesto 2008, Roberts 2011)
Marathi	Sanskrit	Canonical NAL (e.g. Kiparsky 2009)
Russian	Common Slavonic (probably like Old Church Slavonic)	Canonical NAL (e.g. Eckhoff & Meyer 2011)
Finnish	Old Finnish	?
Early NWGmc	Proto-Germanic	Canonical NAL? (Walkden 2012b)

Partial NALs in the cycle

- **Suggestion:** partial NALs develop into non-NALs (or “topic drop” only).

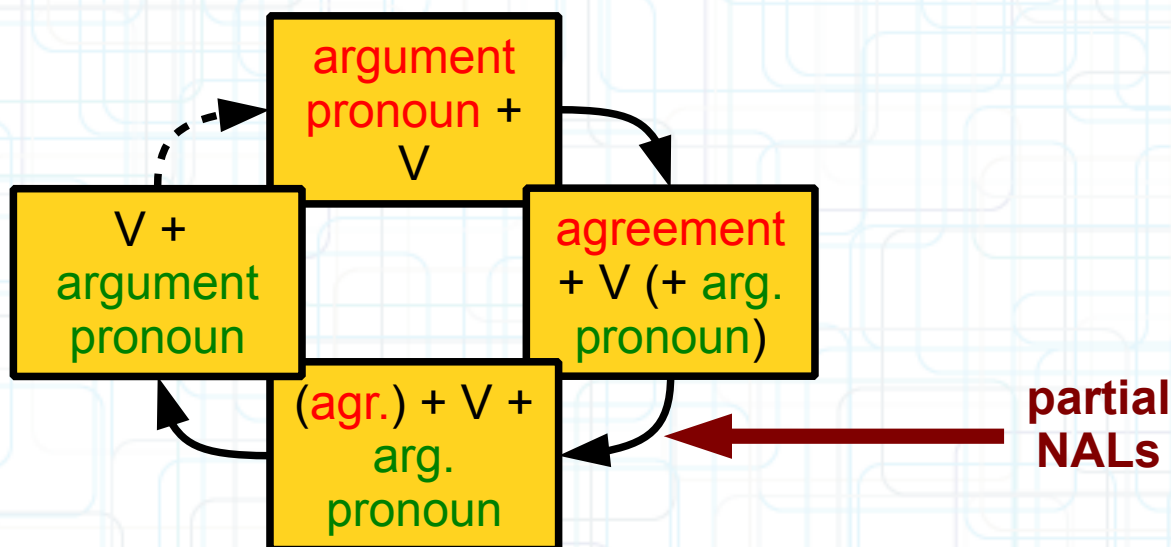
Partial NAL	Descendant	Descendant status
Brazilian Portuguese	?	?
Marathi	?	?
Russian	?	?
Finnish	Colloquial Finnish	Non-NAL (Holmberg 2005, 2010)
Early NWGmc	English, German, Norwegian, etc.	Non-NAL (e.g. Rosenkvist 2009)

The diachrony of partial NALs

- Acquirers of a “canonical” NAL fail to acquire a [uD] feature on T (this may be connected to loss of verbal morphology).
- But null arguments are still present in the PLD.
- Acquirers then posit [uD] feature on null pronoun instead.
 - Speculative: needs testing against acquisition data, etc.
 - Does not account for the person: why only 1st and 2nd person? Why only 3rd?

Summary and conclusions

- The early Northwest Germanic languages all exhibit null arguments to some extent.
- These only occur robustly in the 3rd person, and (except in Old Icelandic) are rarer in subordinate clauses.
- A rich agreement analysis cannot account for the data.
- Partial null argument languages fit in towards the end of the cycle:



Thanks for listening!

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