Case competition in headless relatives

Fenna Bergsma

March 6, 2020

Contents

Contents						
Li	st of	ables		4		
Li	st of	abbreviations		7		
1	Intı	oduction		9		
Ι	The	constant case complexity		11		
2	A re	occurring pattern		13		
	2.1	Case competition in Gothic headless relatives		13		
	2.2	The accessibility hierarchy		15		
	2.3	Case in morphology		15		
		2.3.1 Morphological containment		15		
		2.3.2 Suppletion patterns		16		
		2.3.3 Syncretism patterns		17		
	2.4	Why the genitive is excluded		18		
3	Cas	e decomposition meets ellipsis		19		
	3.1	Case decomposition		19		
	3.2	Elipsis		19		
	3.3	Phrasal spellout		20		
	3.4	The intuition		20		

CONTENTS	2
CONTENTS	J

II	The direction that differs						
4	The variation			25			
	4.1	The diff	ferent patterns	25			
		4.1.1	Both: Gothic	25			
		4.1.2	Only from external: Old High German	25			
		4.1.3	Only from internal: Modern German	28			
		4.1.4	None: Italian	30			
	4.2	Shape of	of relative pronoun	30			
		4.2.1	D in Old High German	30			
		4.2.2	D + COMP in Gothic	30			
		4.2.3	wн in Modern German	30			
5	Con	necting	morphology and syntax	33			
	5.1	Backgr	ound: relative clause theory	33			
	5.2	Analys	is	33			
		5.2.1	Old High German	33			
		5.2.2	Modern German	34			
		5.2.3	Gothic	34			
III	Deta	ails		35			
6	Tech	nical ir	nplementation	37			
	6.1	Backgr	ound	37			
	6.2	Derivat	cions	38			
7	7 Conclusion						
Pri	Primary texts						
Bil	Bibliography						

List of tables

Chaj	pter 2
2.1	Case attraction in headless relatives in Gothic
2.2	Transparent case containment in Khanty
2.3	Transparent case containment in Kalderaš Romani
2.4	Transparent case containment in West Tocharian
2.5	ABB patterns in suppletion
2.6	ABC patterns in suppletion
2.7	AAB patterns in suppletion
Chaj	pter 3
3.1	DAT VS. ACC
3.2	DAT VS. NOM
3.3	ACC VS. NOM
Chaj	pter 4
4.1	INT vs. EXT in MG and OHG and Gothic
4.2	Case attraction in headless relatives in Gothic
4.3	Case attraction in headless relatives in OHG
4.4	Case attraction in headless relatives in MG
4.5	Relative pronouns in headless relatives in OHG
4.6	Relative pronouns in headless relatives in Gothic

LIST OF TABLES				
4.7	Relative pronouns in headless relatives in MG	31		

List of abbreviations

1 first person

3 third person

ACC accusative

AN animate

DAT dative

EXT external case

ғ feminine

INAN inanimate

INT internal case

м masculine

MG Modern German

n neuter

NOM nominative

OHG Old High German

PL plural

sg singular

Introduction

-general intro-

Languages can use case to mark the grammatical role of a noun phrase in a clause. Consider the two Modern German sentences in (1). In (1a), *der Lehrer* 'the teacher' is marked nominative, and it is the subject. *Den Schüler* 'the student' is marked accusative, and it is an object. In (1b), the roles are reversed: *der Schüler* 'the student' is marked nominative and it is the subject, and *den Lehrer* 'the teacher' is marked accusative and it is the object. Notice also that the subject precedes the predicate *mag* 'likes' and the object follows it.

- (1) a. Der Lehrer mag den Schüler. the.m.nom teacher likes the.m.acc student 'The teacher likes the student.'
 - b. Der Schüler mag den Lehrer. the.m.nom student likes the.m.acc 'The student likes the teacher.'

Not only full noun phrases, but also other elements can be marked for case, such relative pronouns. Modern German marks relative pronouns, just like full noun phrases, for the grammatical role they have in the clause. Consider the two sentences in (2). In (2a), the relative pronoun *der* 'that.m.nom' introduces a clause that modifies *den Schüler* 'the student'. *Der* 'that.m.nom' is marked masculine and nominative. The relative pronoun is marked masculine, because it agrees in gender with

its antecedent *den Schüler* 'the student'. It is marked nominative, because of its grammatical role: it is the subject in the relative clause. In (2b), the relative pronoun *den* 'that.m.acc' is marked masculine and accusative. Again, the relative pronoun is marked masculine, because it agrees in gender with its antecedent *den Schüler* 'the student'. It is marked accusative, because of its grammatical role: it is the object in the relative clause.

(2) a. Der Lehrer mag den Schüler, der nach draußen the.m.nom teacher likes the.m.ACC student that.m.nom to outside guckt.

looks

'The teacher likes the student that is looking outside.'

b. Der Lehrer mag den Schüler, den er beim the.m.nom teacher likes the.m.acc student that.m.acc he at the

Verstecktspiel sucht.

hide-and-seek game seeks

'The teacher likes the student that he is looking for playing hide-andseek.'

If there is no head, we have a headless relative in these, there is only one place for the case.

-give example of a matching one-

then the cases can differ then, there is a case conflict

there we have case competition in headless relatives this thesis discusses different aspects of this phenomenon

first, what holds for all languages is that there is a single order: highest in the hierarchy wins in the first part, I..

secondly I adress an aspect that differs across languages that is, not all languages are like gothic I connect this crosslinguistic variation to morphology.. so i reduce it to differences in the lexicon

finally, i show how all of this can be derived in derivations

Part I

The constant case complexity

A reoccurring pattern

2.1 Case competition in Gothic headless relatives

- (1) INT:NOM, EXT:ACC
 - a. Nom not attested
 - b. jah [bo -ei ist us Laudeikaion] jus ussiggwaid and what.ACC -COMP is [NOM] from Laodicea you read [ACC] 'and read that which is from Laodicea'

(Gothic, Col 4:16, after Harbert 1978: 357)

- (2) INT:NOM, EXT:DAT
 - a. Nom not attested
 - b. [baim -ei iupa sind] frabjaib what.dat -comp above $are_{[NOM]}$ think $on_{[DAT]}$ 'set your mind on those which are above'

(Gothic, Col 3:2, after Harbert 1978: 339)

- (3) INT:ACC, EXT:NOM
 - a. [ban -ei frijos] siuks ist who.Acc -comp love [acc] sick is [nom] 'the one whom you love is sick'

(Gothic, John 11:3, after Harbert 1978: 342)

b. Noм not attested

- (4) INT:ACC, EXT:DAT
 - a. Acc not attested
 - b. hva nu wileiþ ei taujau [þamm -ei qiþiþ þiudan Iudaie]? what now want that do_[DAT] who.dat -comp say_[ACC] king of Jews 'what now do you wish that I do to him whom you call King of the Jews?' (Gothic, Mark 15:12, after Harbert 1978: 339)
- (5) INT:DAT, EXT:NOM
 - a. iþ [þamm -ei leitil fraletada] leitil frijod but who.dat -comp little is forgiven $_{[DAT]}$ little loves $_{[NOM]}$ 'but the one whom little is forgiven loves little'

(Gothic, Luke 7:47, after Harbert 1978: 342)

- b. Nom not attested
- (6) INT:DAT, EXT:ACC, is with a preposition
 - a. ushafjands [ana þamm -ei lag] picking up_{[ACC][DAT]} on what.DAT -COMP lay 'picking up that on which he lay'

(Gothic, Luke 5:25, after Harbert 1978: 343)

b. Acc not attested

Table 2.1: Case attraction in headless relatives in Gothic

EXT	[NOM]	[ACC]	[DAT]
[NOM]	NOM	ACC ?NOM	DAT ?NOM
[ACC]	?nom	ACC	?ACC
[DAT]	?nom	?ACC	DAT

(7) NOM < ACC < DAT

2.2 The accessibility hierarchy

(8) NOM < ACC < DAT

2.3 Case in morphology

2.3.1 Morphological containment

Nikolaeva 1999: 16

Table 2.2: Transparent case containment in Khanty

	1sg	3sg	1PL
NOM	ma	luw	muŋ
ACC	ma :-ne:m	luw-e:l	muŋ -e:w
DAT	ma:-ne:m-na	luw -e:l-na	muŋ -e:w-na

Boretzky 1994: 31-46

Table 2.3: Transparent case containment in Kalderaš Romani

	'brother'	'brothers'	ʻgirl'	'girls'
NOM	phral	phral-(á)	rakl-í	rakl-já
ACC	phral- és	phral- én	rakl -já	rakl-já- n
DAT	phral- és-kə	phral- én -gə	rakl -já-kə	rakl-já- n -gə

Gippert 1987: 23-24

	'horses'	'men'
NOM	yakwi	eńkwi
ACC	yakwe- ṃ	eṅkwe- ṃ
DAT	yäkwe- ṃ-ts	eṅkwe- ṃ-ts

Table 2.4: Transparent case containment in West Tocharian

(9) NOM < ACC < DAT

Suppletion patterns 2.3.2

(10)NOM < ACC < DAT

2.3.2.1 ABB

cognates widespread in Indo-European - Icelandic cognates across Slavic - Russian cognates across Slavic - Serbian

Table 2.5: ABB patterns in suppletion

	Icelandic	Russian	Serbian		
	1sg	1PL	3sg.f	3sg.m	3sg.n
NOM	ég	my	ona	oni	on
ACC	m ig	nas	nj u	nji h	nje -ga
DAT	m ér	n am	nj oj	njima	nje -mu

Table 2.6: ABC patterns in suppletion

	Khinalugh
	1sg
NOM	z i
ACC	jä
DAT	as(i r)

2.3.2.2 ABC

2.3.2.3 AAB

Table 2.7: AAB patterns in suppletion

	Yurok	Wardaman		
	3sg	3sg	ЗРГ	
NOM	$\mathbf{yo}_{2}(o \cdot t), \mathbf{wo}_{2}(o \cdot t)$	narnaj	narnaj-bulu	
ACC	yo 20·t, wo 20·t	narnaj -(j)i	narnaj-bulu-yi	
DAT	weya2ik	gunga	wurrugu	

2.3.3 Syncretism patterns

2.3.3.1 ABB

2.3.3.2 ABC

2.3.3.3 AAB

(11) NOM < ACC < DAT

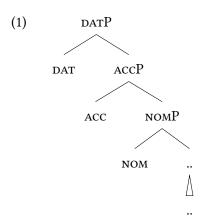
2.4 Why the genitive is excluded

- possessive
- accessibility hierarchy
- not available

Case decomposition meets ellipsis

3.1 Case decomposition

Syntax = morphology



3.2 Elipsis

Elipsis targets phrases

3.3 Phrasal spellout

Single morphemes spell out phrases

3.4 The intuition

Table 3.1: DAT vs. ACC

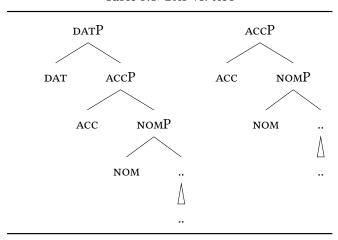


Table 3.2: DAT vs. NOM

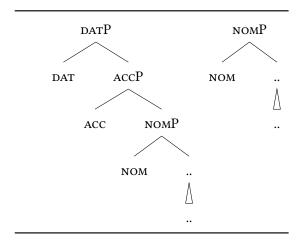
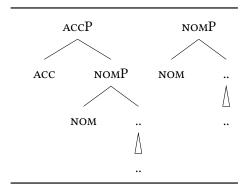


Table 3.3: ACC vs. NOM



Part II The direction that differs

The variation

4.1 The different patterns

In Gothic, the more complex case wins. In OHG, the more complex case wins, only if it is external. In MG, the more complex case wins, only if it is internal.

Table 4.1: INT vs. EXT in MG and OHG and Gothic

	INT>EXT	EXT>INT
	inverse attraction	proper attraction
MG	/	*
OHG	*	✓
Gothic	✓	✓

4.1.1 Both: Gothic

4.1.2 Only from external: Old High German

- (1) INT:NOM, EXT:ACC
 - a. NOM not attested

EXT	[NOM]	[ACC]	[DAT]	
[NOM]	NOM	ACC ?NOM	?NOM	
[ACC]	?nom	ACC	?ACC	
[DAT]	?nom	?ACC	DAT	

Table 4.2: Case attraction in headless relatives in Gothic

b. ih bibringu fona Juda [dhen mina berga chisetzit]

I educate_[ACC] about Juda who.ACC my mountains through pull_[NOM]

'I educate the one who wanders through my mountains about Judas'

(OHG, Isid. 34:3, Behaghel 1923-1932: 761)

(2) INT:NOM, EXT:DAT

- a. Nom not attested
- b. aer antuurta [demo zaimo sprah]
 he replied_[DAT] who.dat to him spoke_[NOM]
 'he replied to the one who spoke to him'
 (OHG, Mons. 7:24, Behaghel 1923-1932: 761, after Pittner 1995: 199)

(3) INT:ACC, EXT:NOM

- a. Acc not attested
- b. Nom not attested

(4) INT:ACC, EXT:DAT

a. Acc not attested

- b. istû furira Abrâhame, ouh [thên man hiar nû are you superior_[DAT] to Abraham also who.DAT one here now zalta]?
 named_[ACC]
 'are you superior to Abraham to those which they just mentioned?'
 (OHG, Otfrid III 18:33, Behaghel 1923-1932: 761)
- (5) INT:DAT, EXT:NOM
 - a. DAT not attested
 - b. Nom not attested
- (6) INT:DAT, EXT:ACC
 - a. DAT not attested
 - b. Acc not attested

Don't know:

- (7) OHG
 - a. gaat uz diu halt za dem iz forchaufent
 - " (OHG, Monsee Fragments 20,14, Behaghel 1923-1932, p. 761)
 - b. thisiu fon thiu, iru wan ist, siu alla iru libnara santa (ex eo, quod)

'hæc autem ex eo quod deest illi, totum victum suum quem habuit misit.' (OHG, Tatian 118,1, Behaghel 1923-1932, p. 761)

- c. thaz iru thiu sin guati nirzigi, thes siu bati
 - ' (OHG, Otfrid II,8,24, Behaghel 1923-1932, p. 761)
- d. thia laz ih themo iz lisit thar
 - ' (OHG, Otfrid I,19,25, Behaghel 1923-1932, p. 761)
- e. noh so neduohti in gnuoge des si habetin
 - " (OHG, Notker I,63,29, Behaghel 1923-1932, p. 761)

f. tannoh pito ih tes noh fore ist (id quod)

(OHG, Notker 193,19, Behaghel 1923-1932, p. 761)

So, to sum up:

Table 4.3: Case attraction in headless relatives in OHG

EXT	[NOM]	[ACC]	[DAT]
[NOM]	NOM	ACC ?NOM	PNOM
[ACC]	?nom	ACC	?ACC
[DAT]	?nom	?ACC	DAT

4.1.3 Only from internal: Modern German

- (8) INT:NOM, EXT:ACC
 - a. *Ich lade ein, [wer mir sympathisch ist].

 $I \quad invite_{[ACC]} \ who. nom \ me \ nice \qquad \qquad is_{[NOM]}$

'I invite who I like.' (Vogel 2001: 344)

- b. *Ich lade ein, [wen mir sympathisch ist].
 - $I \quad invite_{[ACC]} \; who. acc \; me \; nice \qquad \quad is_{[NOM]}$

'I invite who I like.' (Vogel 2001: 344)

- (9) INT:NOM, EXT:DAT
 - a. *Ich vertraue, [wer Hitchcock mag].

I trust_[DAT] who.nom Hitchcock likes_[NOM]

'I trust who likes Hitchcock.' (Vogel 2001: 345)

b. *Ich vertraue, [wem Hitchcock mag].

I $trust_{[DAT]}$ who.dat Hitchcock likes_{[NOM]}

'I trust who likes Hitchcock.' (Vogel 2001: 345)

(10) INT:ACC, EXT:NOM

a. Uns besucht [wen Maria mag]. Us $visits_{NOM}$ who.ACC Maria.NOM likes_[ACC] 'Who visits us likes Maria likes.'

isits us likes Maria likes.' (Vogel 2001: 343)

b. *Uns besucht [wer Maria mag].

Us visits_[NOM] who.NOM Maria.NOM likes_[ACC]

'Who visits us likes Maria likes.'

(Vogel 2001: 343)

(11) INT:ACC, EXT:DAT

a. *Ich vertraue [wem auch Maria mag].

I $trust_{[DAT]}$ who.dat also Maria likes_[ACC].

'I trust whoever Maria also likes.' (Vogel 2001: 345)

b. *Ich vertraue [wen auch Maria mag].

 $I \quad trust_{[DAT]} \ who. acc \ also \ \ Maria \ likes_{[ACC]}.$

'I trust whoever Maria also likes.' (Vogel 2001: 345)

(12) INT:DAT, EXT:NOM

a. Uns besucht [wem Maria vertraut].

us $visits_{[NOM]}$ who.dat Maria $trusts_{[DAT]}$

'Who visits us, Maria trusts.' (Vogel 2001: 343)

b. *Uns besucht [wer Maria vertraut].

us $visits_{[NOM]}$ who.nom Maria $trusts_{[DAT]}$

'Who visits us, Maria trusts.' (Vogel 2001: 343)

(13) INT:DAT, EXT:ACC

a. Ich lade ein [wem auch Maria vertraut].

I invite [ACC] who. DAT also Maria trusts [DAT].

'I invite whoever Maria also trusts.' (Vogel 2001: 344)

b. *Ich lade ein [wen auch Maria vertraut].

I invite_[ACC] who.Acc also Maria trusts_[DAT].

'I invite whoever Maria also trusts.' (Vogel 2001: 344)

EXT [ACC] [DAT] [NOM] INT *ACC *DAT [NOM] NOM *NOM *NOM *NOM *DAT [ACC] ACC *ACC ACC *NOM *ACC [DAT] DAT DAT DAT

Table 4.4: Case attraction in headless relatives in MG

4.1.4 None: Italian

4.2 Shape of relative pronoun

OHG has a d-pronoun. MG has a wh-pronoun. Gothic has a d-pronoun plus a caseless relativizer.

- 4.2.1 р in Old High German
- 4.2.2 D + COMP in Gothic
- 4.2.3 wh in Modern German

Table 4.5: Relative pronouns in headless relatives in OHG

	N.SG	M.SG	F.SG
NOM	d-az,	d-ër	d-iu
ACC	d-az	d-ën	d-ea/-ia/(-ie)
DAT	d-ëmu/-ëmo	d-ëmu/-ëmo	d-ëru/-ëro
	N.PL	M.PL	F.PL
NOM	d-iu/-ei	d-ē/-ea/-ia/-ie	d-eo/-io
ACC	d-iu/-ei	d-ē/-ea/-ia/-ie	d-eo/-io
DAT	d-ēm/-ēn	d-ēm/-ēn	d-ēm/-ēn

Table 4.6: Relative pronouns in headless relatives in Gothic

		N.SG	M.SG	F.SG
NO:	M	þ-at-ei	s-a-ei	s-ō-ei
AC	С	þ-at-ei	þ-an-ei	þ-ō-ei
DA	Т	þ-amm-ei	þ-amm-ei	þ-izái-ei
		N.PL	M.PL	F.PL
NO	M	þ-ō-ei	þ-ái-ei	þ-ōz-ei
NO:		þ-ō-ei þ-ō-ei	þ-ái-ei þ-anz-ei	þ-ōz-ei þ-ōz-ei
	С			•

Table 4.7: Relative pronouns in headless relatives in MG

	INAN	AN
NOM	w-as	w-er
ACC	w-as	w-en
DAT	-	w-em

Connecting morphology and syntax

5.1 Background: relative clause theory

Standard raising, probably Cinque's double-headed structures

5.2 Analysis

5.2.1 Old High German

In OHG, proper attraction in headless relatives can be derived from headed relatives. The relative pronoun is the determiner from the main clause. Under a double-headed Cinque-analysis, it is the internal DP that is deleted.

- (1) Acc instead of NOM
 - a. unde ne wolden niet besên den mort den dô was and not wanted not see the murder.ACC that.ACC there had geschên

happened

'and they didn't want to see the murder that had happened.'
(MHG, Nib. 1391,14, Behaghel 1923-1932: 756, after Pittner 1995: 198)

5.2.2 Modern German

In German, inverse attraction in headed relatives can be shown to be very different from inverse attraction in headless relatives. I am not set on an analysis yet. Under a double-headed Cinque-analysis, it is the external DP that is deleted. Grafting is also still an option.

5.2.3 Gothic

In Gothic, ?

Part III

Details

Technical implementation

6.1 Background

(1) **The Superset Principle** Starke (2009):

A lexically stored tree matches a syntactic node iff the lexically stored tree contains the syntactic node.

(2) **The Elsewhere Condition** (Kiparsky 1973, formulated as in Caha 2019): When two entries can spell out a given node, the more specific entry wins. Under the Superset Principle governed insertion, the more specific entry is the one which has fewer unused features.

(3) **Spellout Algorithm:**

Merge F and

- a. Spell out FP.
- b. If (a) fails, attempt movement of the spec of the complement of F, and retry (a).
- c. If (b) fails, move the complement of F, and retry (a).

When a new match is found, it overrides previous spellouts.

(4) **Cyclic Override** (Starke, 2018):

Lexicalisation at a node XP overrides any previous match at a phrase contained in XP.

If the spellout procedure in (3) fails, backtracking takes place.

(5) **Backtracking** (Starke, 2018):

When spellout fails, go back to the previous cycle, and try the next option for that cycle.

If backtracking also does not help, a specifier is constructed.

(6) **Spec Formation** (Starke, 2018):

If Merge F has failed to spell out (even after backtracking), try to spawn a new derivation providing the feature F and merge that with the current derivation, projecting the feature F at the top node.

6.2 Derivations

Conclusion

Primary texts

Col Colossians, New Testament

Isid. Der althochdeutsche Isidor

John John, New Testament

Luke Luke, New Testament

Mark Mark, New Testament

Mons. The Monsee fragments

Nib. Das Nibelungenlied

Otfrid Otfrid's Evangelienbuch

Bibliography

- Behaghel, Otto (1923-1932). *Deutsche Syntax: Eine geschichtliche Darstellung*. Heidelberg: Winter.
- Boretzky, Norbert (1994). *Romani: Grammatik des Kalderaš-Dialektes mit Texten und Glossar.* Wiesbaden: Harrassowitz Verlag.
- Caha, Pavel (2019). Case competition in Nanosyntax. A study of numeral phrases in Ossetic and Russian.
- Gippert, Jost (1987). "Zu Den Sekundären Kasusaffixen Des Tocharischen". In: *Tocharian and Indo-European Studies* 1, pp. 22–39.
- Harbert, Wayne Eugene (1978). "Gothic syntax: a relational grammar". PhD thesis. Urbana-Champaign: University of Illinois.
- Kiparsky, Paul (1973). ""Elsewhere" in Phonology". In: *A Festschrift for Morris Halle*. Ed. by Stephen Anderson and Paul Kiparsky. New York: Holt, Rinehart, & Winston, pp. 93–106.
- Nikolaeva, Irina (1999). Ostyak. München: Lincom Europa.
- Pittner, Karin (1995). "The Case of German Relatives". In: *The linguistic review* 12.3, pp. 197–231. doi: 10.1515/tlir.1995.12.3.197.
- Starke, Michal (2009). "Nanosyntax: A Short Primer to a New Approach to Language". In: *Nordlyd* 36, pp. 1–6.
- (2018). "Complex Left Branches, Spellout, and Prefixes". In: *Exploring Nanosyntax*. Ed. by Lena Baunaz et al. Oxford: Oxford University Press, pp. 239–249. DOI: 10.1093/oso/9780190876746.003.0009.
- Vogel, Ralf (2001). "Case Conflict in German Free Relative Constructions: An Optimality Theoretic Treatment". In: *Competition in Syntax*. Ed. by Gereon Müller

44 BIBLIOGRAPHY

and Wolfgang Sternefeld. Berlin: Mouton de Gruyter, pp. 341–375. doi: $10 \cdot 1515/9783110829068 \cdot 341.$