

a **bergsma2019**, N and A are part of the nomenclature

Case attraction in headless relatives

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List of abbreviations

1	first person
3	third person
ACC	accusative
AN	animate
DAT	dative
EXT	external case
F	feminine gender
INAN	inanimate
INT	internal case
M	masculine gender
N	neuter gender
NOM	nominative
PL	plural
SG	singular

Chapter 1

Introduction

The topic of this thesis is case attraction in headless relative clauses. First I talk about the role of case in language. Second I discuss regular headed relative clauses and how they handle case. Third I introduce a phenomenon called case attraction in headed relative clause. Finally, I get to headless relative clauses that show case attraction.

1.1 Explaining the title

1.1.1 Case attraction

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-and-
 seek.’

–from here on it still needs working out–

This pattern occurs in German, most other modern languages. In some ancient languages the relative pronoun did not take the case of the grammatical role in its own clause. Instead, it agrees in case with its antecedent. This is called case attraction. The relative pronoun is attracted to its antecedent(?).

- (3) sie gedâht’ ouch maniger leide, der ir dâ héimé
 she thought_{GEN} also some.GEN sufferings.GEN which.GEN her at home
 geschach.
 happened_{NOM}
 ‘She thought about some misfortunes that happened to her at home’ attraction
 headed relative

there is a generalization here: more complex case wins. maybe don’t mention that here yet.

1.1.2 Headless relatives

So far I discussed headed relatives. Headless relatives also exist. The antecedent is missing. We also observe case attraction there. It is less easy to see because the antecedent NP is missing, but we know what's going on because of the case requirements of the predicates. So this actually means is that the relative pronoun takes the case from the main clause (where normally the antecedent was). This is called proper attraction.

- (4) Aer antuurta demo zaimo sprah.
 he replied_{DAT} who.DAT to him spoke_{NOM}
 'He replied to the one who spoke to him.' proper attraction headless relative

1.2 Three topics

Here comes the introduction to a part that discusses three problems. These problems are what I will discuss in my dissertation. What will be here is connecting these problems to the real world. Why do we care about these? What are these problems going to inform us about?

1.2.1 Case complexity

case attraction always follows the hierarchy

1.2.2 Direction of attraction

case attraction can go two ways

- (5) Aer antuurta demo zaimo sprah.
 he replied_{DAT} who.DAT to him spoke_{NOM}
 'He replied to the one who spoke to him.' proper attraction headless relative
- (6) Ich lade ein, wem Maria vertraut.
 I invite_{ACC} who.DAT also Maria trusts_{DAT}
 'I invite whoever Maria also trusts.' invserse attraction headless relative

the morphology of the relative pronouns decides which one is possible

1.2.3 Prepositions

and r-pronouns

Chapter 2

Case complexity

2.1 The pattern

- (1) INT:NOM, EXT:ACC
- a. NOM not attested
 - b. jah poei ist us Laudeikaion jus ussiggwaid
and what.ACC is_[NOM] from Laodicea you read_[ACC]
'and read that which is from Laodicea' (Colossians 4:16, gloss and
translation by Harbert 1978, p. 357)
- (2) INT:NOM, EXT:DAT
- a. NOM not attested
 - b. þaimei iupa sind frapjaiþ
what.DAT above are_[NOM] think on_[DAT]
'set your mind on those which are above'
(Colossians 3:2, gloss and translation by Harbert 1978, p. 339)
- (3) INT:ACC, EXT:NOM
- a. þanei frijos siuks ist
who.ACC love_[ACC] sick is_[NOM]
'the one whom you love is sick'
(John 11:3, gloss and translation by Harbert 1978, p. 342)
 - b. NOM not attested
- (4) INT:ACC, EXT:DAT
- a. ACC not attested

- b. hva nu wileiþ ei taujau þammei qipþ þiudan Iudaie?
 what now want that do_[DAT] who.DAT say_[ACC] king of Jews
 ‘what now do you wish that I do to him whom you call King of the Jews?’
 (Mark 15:12, gloss and translation by Harbert 1978, p. 339)

(5) INT:DAT, EXT:NOM

- a. iþ þammei leitiþ fraletada leitiþ frijod
 but who.DAT little is forgiven_[DAT] little loves_[NOM]
 ‘but the one whom little is forgiven loves little’
 (Luke 7:47, gloss and translation by Harbert 1978, p. 342)

- b. NOM not attested

(6) INT:DAT, EXT:ACC, is with a preposition

- a. ushafjands ana þammei lag
 picking up_{[ACC][DAT]} on what.DAT lay
 ‘picking up that on which he lay’
 (Luke 5:25, gloss and translation by Harbert 1978, p. 343)

- b. ACC not attested

Table 2.1: Case attraction in headless relatives in Gothic

EXT INT	[NOM]	[ACC]	[DAT]
[NOM]	NOM	ACC ?NOM	DAT ?NOM
[ACC]	?NOM ACC	ACC	DAT ?ACC
[DAT]	?NOM DAT	?ACC DAT	DAT

(7) NOM < ACC < DAT

2.2 Accessibility hierarchy

(8) NOM < ACC < DAT

2.3 Morphology

2.3.1 Morphological containment

(Nikolaeva, 1999, p. 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, pp. 31–46)

Table 2.3: Transparent case containment in Kalderaš Romani

	‘brother’	‘brothers’	‘girl’	‘girls’
NOM	phral	phral-(á)	rakl-i	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, pp. 23–24)

Table 2.4: Transparent case containment in West Tocharian

	‘horses’	‘men’
NOM	yakwi	eñkwi
ACC	yakwe- ṃ	eñkwe- ṃ
DAT	yäkwe- ṃ-ts	eñkwe- ṃ-ts

(9) NOM < ACC < DAT

2.3.2 Suppletion

(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	mig	nas	nju	njih	nje-ga
DAT	mér	nam	njoj	njima	nje-mu

2.3.2.2 ABC

Table 2.6: ABC patterns in suppletion

	Khinalugh
	1SG
NOM	zi
ACC	jä
DAT	as(ir)

Table 2.7: AAB patterns in suppletion

	Yurok	Wardaman	
	3SG	3SG	3PL
NOM	yoʔ(o·t), woʔ(o·t)	narnaj	narnaj-bulu
ACC	yoʔo·t, woʔo·t	narnaj-(j)i	narnaj-bulu-yi
DAT	weyaʔik	gunga	wurrugu

2.3.2.3 AAB

2.3.3 Syncretism

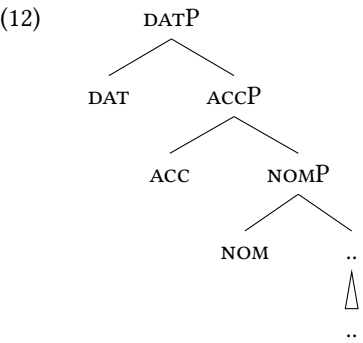
2.3.3.1 ABB

2.3.3.2 ABC

2.3.3.3 AAB

(11) NOM < ACC < DAT

2.4 Case complexity in syntax

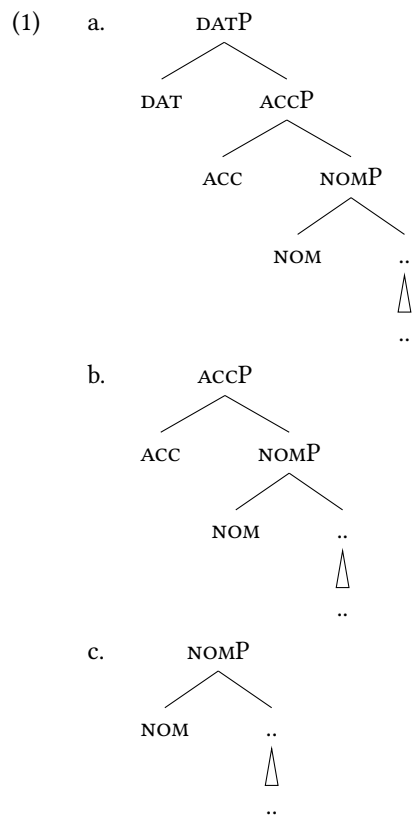


Explain how all phenomena relate to this.

Chapter 3

Ellipsis account

The intuition



3.1 Elipsis

Elipsis targets phrases

3.2 Phrasal spellout

Single morphemes spell out phrases

3.3 Concretely: Nanosyntax

3.3.1 Basics

3.3.2 Spellout

- (2) **The Superset Principle** Starke (2009):

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

- (3) **The Elsewhere Condition** (Kiparsky 1973, formulated as in Caha 2020):

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.

- (4) **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.

- (5) **Cyclic Override** (Starke, 2018):

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

If the spellout procedure in (4) fails, backtracking takes place.

- (6) **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.

(7) **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.

Chapter 4

Direction of attraction

4.1 The typology

Old High German only has proper attraction. Modern German only has inverse attraction. Gothic has both proper and inverse attraction.

Table 4.1: INT vs. EXT in Modern and Old High German and Gothic

	INT>EXT inverse attraction	EXT>INT proper attraction
Modern German	✓	*
Old High German	*	✓
Gothic	✓	✓

4.1.1 Gothic

4.1.2 Old High German

(1) INT:NOM, EXT:ACC

a. NOM not attested

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'
(Old High German, Isidor 34:3, Behaghel 1923-1932, p. 761)

(2) INT:NOM, EXT:DAT

a. NOM not attested

Table 4.2: Case attraction in headless relatives in Gothic

EXT INT	[NOM]	[ACC]	[DAT]
[NOM]	NOM	?NOM ACC	?NOM DAT
[ACC]	?NOM ACC	ACC	?ACC DAT
[DAT]	?NOM DAT	?ACC DAT	DAT

- b. aer antuurta demo zaimo sprah
 he replied_[DAT] who.DAT to him spoke_[NOM]
 ‘he replied to the one who spoke to him’

(Old High German, Monsee Fragments 7:24, Behaghel 1923-1932, p. 761, gloss and translation by Pi)

- c. gebe themo ni eigi
 give_[DAT] who.DAT not posses_[NOM]
 ‘give to the one who does not have’ (Old High German, Otfrid I 24:77)
 ‘gebe dem der nicht hat’ (translation by Schrodt, 175)

(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?’
 (Old High German, Otfrid III 18:33, Behaghel 1923-1932, p. 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) Old High German

- a. gaat uz diu halt za dem iz forchaufent

“

(Old High German, 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.’

(Old High German, Tatian 118,1, Behaghel 1923-1932, p. 761)

- c. thaz iru thiu sin guati nirzigi, thes siu bati

“

(Old High German, Otfrid II,8,24, Behaghel 1923-1932, p. 761)

- d. thia laz ih themo iz lisit thar

“

(Old High German, Otfrid I,19,25, Behaghel 1923-1932, p. 761)

- e. noh so neduohti in gnuoge des si habetin

“

(Old High German, Notker I,63,29, Behaghel 1923-1932, p. 761)

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

“

(Old High German, Notker 193,19, Behaghel 1923-1932, p. 761)

So, to sum up:

Table 4.3: Case attraction in headless relatives in Old High German

EXT INT	[NOM]	[ACC]	[DAT]
[NOM]	NOM	?NOM ACC	?NOM DAT
[ACC]	?NOM ?ACC	ACC	?ACC DAT
[DAT]	?NOM ?DAT	?ACC ?DAT	DAT

4.1.3 Modern German

(8) INT:NOM, EXT:ACC

- a. *Ich lade ein, wer mir sympathisch ist.
 I invite_[ACC] who.NOM me nice is_[NOM]
 'I invite who I like.' (Vogel, 2001, p. 344)
- b. *Ich lade ein, wen mir sympathisch ist.
 I invite_[ACC] who.ACC me nice is_[NOM]
 'I invite who I like.' (Vogel, 2001, p. 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, p. 345)
- b. *Ich vertraue, wem Hitchcock mag.
 I trust_[DAT] who.DAT Hitchcock likes_[NOM]
 'I trust who likes Hitchcock.' (Vogel, 2001, p. 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.' (Vogel, 2001, p. 343)
- b. *Uns besucht wer Maria mag.
 Us visits_[NOM] who.NOM Maria.NOM likes_[ACC]
 'Who visits us likes Maria likes.' (Vogel, 2001, p. 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, p. 345)
- b. *Ich vertraue wen auch Maria mag.
 I trust_[DAT] who.ACC also Maria likes_[ACC].
 'I trust whoever Maria also likes.' (Vogel, 2001, p. 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, p. 343)
- b. *Uns besucht wer Maria vertraut.
 us visits_[NOM] who.NOM Maria trusts_[DAT]
 'Who visits us, Maria trusts.' (Vogel, 2001, p. 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, p. 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, p. 344)

Table 4.4: Case attraction in headless relatives in Old High German

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

4.2 Background: relative clause theory

Standard raising, probably Cinque’s double-headed structures

4.3 Shape of relative pronoun

Old High German has a d-pronoun. Modern German has a wh-pronoun. Gothic has a d-pronoun plus a caseless relativizer.

Table 4.5: Old High German relative pronouns in headless relatives

	N.SG	M.SG	F.SG
NOM	d-az	d-ēr	d-iu
ACC	d-az	d-ēn	d-ea/-ia/(-ie)
DAT	d-ēmu/-ēmo	d-ēmu/-ēmo	d-ēru/-ēro
	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: Gothic relative pronouns in headless relatives

	N.SG	M.SG	F.SG
NOM	þ-at-ei	s-a-ei	s-ō-ei
ACC	þ-at-ei	þ-an-ei	þ-ō-ei
DAT	þ-amm-ei	þ-amm-ei	þ-izái-ei
	N.PL	M.PL	F.PL
NOM	þ-ō-ei	þ-ái-ei	þ-ōz-ei
ACC	þ-ō-ei	þ-anz-ei	þ-ōz-ei
DAT	þ-áim-ei	þ-áim-ei	þ-áim-ei

Table 4.7: Modern German relative pronouns in headless relatives

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

4.3.1 Old High German

4.3.2 Gothic

4.3.3 Modern German

4.4 Analysis

4.4.1 Old High German

In Old High German, 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.

(14) 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.’

(Middle High German, Nibelungenlied 1391,14, Behaghel 1923-1932, p. 756, glosses and translation by Pittner 1998)

4.4.2 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.

4.4.3 Gothic

In Gothic, ?

4.5 No attraction allowed

Italian has none. Italian uses its free relative pronoun also in light-headed relative pronouns.

4.6 Bigger picture

Relative pronoun is a descriptive term. What we analyze as relative pronouns are sometimes wh-elements, sometimes determiners.

Case attraction is also a descriptive term. The constructions are underlyingly very different.

Chapter 5

Prepositions

5.1 Headless relatives and prepositions

What happens if we analyze prepositions as expressions of case? (And what happens if we do not?)

5.2 R-pronouns

Paper on *waarmee*

5.3 Bigger picture

?

Chapter 6

Conclusion

Primary texts

- A The area of the needle point
- a The number of angels per unit area **bergsma2019**
- N The number of angels per needle point

Bibliography

- Behaghel, Otto (1923-1932). *Deutsche Syntax: Eine geschichtliche Darstellung*. Heidelberg: Winter.
- Boretzky, Norbert (1994). *Romani: Grammatik des Kalderaš-Dialektes mit Texten und Glossar*. Harrassowitz Verlag.
- Caha, Pavel (2020). “Nanosyntax: some key features”. In: *The Cambridge handbook of Distributed Morphology*. Ed. by Artemis Alexiadou et al. Oxford: Oxford University Press.
- Gipbert, 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”. In: *München*.
- 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 and Wolfgang Sternefeld. Berlin: Mouton de Gruyter, pp. 341–375. doi: 10.1515/9783110829068.341.