

## Case attraction in headless relatives

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# 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<sub>GEN</sub> also some.GEN sufferings.GEN which.GEN her at home  
 geschach.  
 happened<sub>NOM</sub>  
 ‘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<sub>DAT</sub> who.DAT to him spoke<sub>NOM</sub>  
 ‘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<sub>DAT</sub> who.DAT to him spoke<sub>NOM</sub>  
 'He replied to the one who spoke to him.' proper attraction headless relative
- (6) Ich lade ein, wem Maria vertraut.  
 I invite<sub>ACC</sub> who.DAT also Maria trusts<sub>DAT</sub>  
 '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

Illustrate complexity with Gothic

### 2.2 Background: case hierarchy theory, nano theory

also argue against scott grimm? or add to it

### 2.3 Analysis

No syntax of relative clauses yet, just "when one contains the other, the contained one can be deleted"

### 2.4 Bigger picture

Case is complex



## Chapter 3

# Direction of attraction

### 3.1 The typology

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

Table 3.1: 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	✓	✓

#### 3.1.1 Gothic

(1) EXT:NOM, INT:ACC

- a. þ-an-ei frijos siuks ist  
D-M.SG.ACC-COMP sick is  
'(The one) whom you love is sick'

(2) EXT:NOM, INT:DAT

(3) EXT:NOM, INT:GEN

(4) EXT:ACC, INT:NOM

- a. jah þ-o-ei ist us Laudeikaion jus ussiggwaid  
and D-F.SG.ACC-COMP is from Laodicea you read  
'And read the one (which) is from Laodicea'

(5) EXT:ACC, INT:DAT

(6) EXT:ACC, INT:GEN

(7) EXT:DAT, INT:NOM

- a. þ-aim-ei iupa sind fraþjaip  
D-PL.DAT-COMP above are think on  
'Set your mind on (those) which are above'
- (8) EXT:DAT, INT:ACC  
a. hva nu wileip ei taujau þ-amm-ei qipip þiudan  
what now you-want that I-do D-M.SG.DAT-COMP you-say king  
Judaie?  
of-Jews  
'What do you want that I do to him (whom) you call the [king of] Jews?'
- (9) EXT:DAT, INT:GEN
- (10) EXT:GEN, INT:NOM  
a. not attested
- (11) EXT:GEN, INT:ACC  
a. ni waiht þ-iz-ei gasehvun  
not any D-N.SG.GEN-COMP they-saw  
'not any of that (which) they saw'
- (12) EXT:GEN, INT:DAT

Table 3.2: Case attraction in headless relatives in Gothic

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

### 3.1.2 Old High German

- (13) EXT:ACC, INT:NOM  
a. ih bibringu fona Juda dhen mina berga  
I educate von Juda D-M/N/F.PL.DAT/M.SG.ACC my? mountain  
chisetzit  
order/put  
'  
(Old High German, Isidor 34,3, Behaghel 1923-1932, p. 761)
- (14) EXT:DAT, INT:NOM

- a. Aer antuurta demo zaimo sprah.  
 he replied<sub>[DAT]</sub> D-M.SG.DAT to him spoke<sub>[NOM]</sub>  
 ‘He replied to the one who spoke to him.’ (Old High German, Monsee  
 Fragments 7,24, Behaghel 1923-1932, p. 761)
- b. gebe themo ni eigi  
 give<sub>[DAT]</sub> D-M.SG.DAT not posses<sub>[NOM]</sub>  
 ‘give to whom that does not have’ gebe dem der nicht hat (Old High  
 German, Otfrid I,24,77, Schrod,175)
- (15) EXT:DAT, INT:ACC
- a. istû furira Abrâhame, ouh thên man hiar nû  
 are you superior to<sub>[DAT]</sub> Abraham also D-D.PL one here now  
 zalta?  
 mentioned<sub>[ACC]</sub>  
 ‘are you bigger than Abraham and those people named just now?’ (Old  
 High German, Otfrid III,18,33, Behaghel 1923-1932, p. 761)
- (16) EXT:GEN, INT:NOM
- a. suachit thes nan sentit  
 search.3.SG<sub>GEN?</sub> D-N.SG.GEN 3.SG.M.ACC sent  
 ‘he searched for who sent him/ der sucht die Sachen dessen der ihn  
 sendet’ (Old High German, Otfrid III,16,21, Behaghel 1923-1932, p. 761)
- b. diu habe niemer niht entuot, des der seele schaden si  
 they have not never not do D-GEN.SG.N the soul damage is<sub>[NOM]</sub>  
 ‘ (Middle High German, Warn. 2490, Behaghel 1923-1932, p. 761)
- (17) EXT:GEN, INT:ACC
- a. der bewiset in des er suochte  
 he directed<sub>[GEN]</sub> him D-N.SG.GEN he sought<sub>[ACC]</sub>  
 ‘He directed him to what he sought.’ (Middle High German, Iwein 988,  
 Behaghel 1923-1932, p. 761), trans. Hartmann von Aue-Portal
- b. giwisso ni birut ir thero ih irwellu zi mir  
 bestimmt not belong<sub>[GEN]</sub> 2.PL.NOM D-GEN.PL I choose<sub>[ACC]</sub> to me  
 ‘you surely do not belong to those that I choose for myself //sicherlich  
 gehört ihr nicht zu denen die ich mir erwähle’ (Old High German,  
 Otfrid III,22,20, Schrod,175)
- (18) EXT:GEN, INT:DAT

### 3.1.3 Modern German

#### 3.1.3.1 Grammatical examples

- (19) EXT:NOM, INT:ACC
- a. Uns besucht wen Maria mag.  
 Us visits<sub>[NOM]</sub> W-M/F.SG.ACC Maria likes<sub>ACC</sub>  
 ‘Who visits us likes Maria likes.’ (vogel2001)

Table 3.3: Case attraction in headless relatives in Old High German

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

- b. \*Uns besucht wer Maria mag.  
 Us visits<sub>[NOM]</sub> W-M/F.SG.NOM Maria likes<sub>ACC</sub>  
 ‘Who visits us likes Maria likes.’ (vogel2001)
- (20) EXT:NOM, INT:DAT
- a. Uns besucht wem Maria vertraut.  
 us visits<sub>[NOM]</sub> W-M/F.SG.DAT Maria trusts<sub>DAT</sub>  
 ‘Who visits us, Maria trusts.’ (vogel2001)
- b. \*Uns besucht wer Maria vertraut.  
 us visits<sub>[NOM]</sub> W-M/F.SG.DAT Maria trusts<sub>DAT</sub>  
 ‘Who visits us, Maria trusts.’ (vogel2001)
- (21) EXT:NOM, INT:GEN
- a. Uns besucht wessen Maria sich erfreuen würde.  
 us visits<sub>[NOM]</sub> W-M/F.SG.GEN Maria self be happy<sub>[GEN]</sub> would  
 ‘Who visits us, Maria would be happy about’ (vogel2001)
- b. \*Uns besucht wer Maria sich erfreuen würde.  
 us visits<sub>[NOM]</sub> W-M/F.SG.NOM Maria self be happy<sub>[GEN]</sub> would  
 ‘Who visits us, Maria would be happy about’ (vogel2001)
- (22) EXT:ACC, INT:DAT
- a. Ich lade ein wem auch Maria vertraut.  
 I invite<sub>[ACC]</sub> W-M/F.SG.DAT also Maria trusts<sub>DAT</sub>.  
 ‘I invite whoever Maria also trusts.’ (vogel2001)
- b. \*Ich lade ein wen auch Maria vertraut.  
 I invite<sub>[ACC]</sub> W-M/F.SG.ACC also Maria trusts<sub>DAT</sub>.  
 ‘I invite whoever Maria also trusts.’ (vogel2001)
- (23) EXT:ACC, INT:GEN
- a. Ich lade ein, wessen sich auch Maria erfreuen würde.  
 I invite<sub>[ACC]</sub> W-M/F.SG.GEN self also Maria be happy<sub>[GEN]</sub> would.  
 ‘I invite whoever also Maria would be happy to meet.’ (vogel2001)

- b. \*Ich lade ein, wen sich auch Maria erfreuen würde.  
 I invite<sub>[ACC]</sub> W-M/F.SG.ACC self also Maria be happy<sub>[GEN]</sub> would.  
 'I invite whoever also Maria would be happy to meet.' (vogel2001)
- (24) EXT:DAT, INT:GEN
- a. ?Bodo entledigt sich, wem immer Gerhard misstraut.  
 Bodo rids<sub>[GEN]</sub> self W-M/F.SG.DAT ever Gerhard mistrusts<sub>DAT</sub>  
 'Bodo gets rid of whoever Gerhard mistrusts.' (vogel2001)
- b. ?Bodo entledigt sich, wessen immer Gerhard misstraut.  
 Bodo rids<sub>[GEN]</sub> self W-M/F.SG.GEN ever Gerhard mistrusts<sub>DAT</sub>  
 'Bodo gets rid of whoever Gerhard mistrusts.' (vogel2001)

### 3.1.3.2 Ungrammatical examples

- (25) EXT:ACC, INT:NOM
- a. \*Ich lade ein, wen mir sympathisch ist.  
 I invite<sub>[ACC]</sub> W-M/F.SG.ACC me nice is<sub>NOM</sub>  
 'I invite who I like.' (vogel2001)
- b. \*Ich lade ein, wer mir sympathisch ist.  
 I invite<sub>[ACC]</sub> W-M/F.SG.NOM me nice is<sub>NOM</sub>  
 'I invite who I like.' (vogel2001)
- (26) EXT:DAT, INT:NOM
- a. \*Ich vertraue, wem Hitchcock mag.  
 I trust<sub>[DAT]</sub> W-M/F.SG.DAT Hitchcock likes<sub>NOM</sub>  
 'I trust who likes Hitchcock.' (vogel2001)
- b. \*Ich vertraue, wer Hitchcock mag.  
 I trust<sub>[DAT]</sub> W-M/F.SG.NOM Hitchcock likes<sub>NOM</sub>  
 'I trust who likes Hitchcock.' (vogel2001)
- (27) EXT:DAT, INT:ACC
- a. \*Ich vertraue wem auch Maria mag.  
 I trust<sub>[DAT]</sub> W-M/F.SG.DAT also Maria likes<sub>ACC</sub>.  
 'I trust whoever Maria also likes.' (vogel2001)
- b. \*Ich vertraue wen auch Maria mag.  
 I trust<sub>[DAT]</sub> W-M/F.SG.ACC also Maria likes<sub>ACC</sub>.  
 'I trust whoever Maria also likes.' (vogel2001)
- (28) EXT:GEN, INT:NOM
- a. \*Bodo entledigt sich, wessen immer andere Ansichten hat  
 Bodo rids<sub>[GEN]</sub> self W-M/F.SG.GEN ever other opinions has<sub>[NOM]</sub>  
 als er.  
 than he  
 'Bodo gets rid of whoever has different opinions than he.' (vogel2001)
- b. \*Bodo entledigt sich, wer immer andere Ansichten hat  
 Bodo rids<sub>[GEN]</sub> self W-M/F.SG.NOM ever other opinions has<sub>[NOM]</sub>  
 als er.  
 than he

‘Bodo gets rid of whoever has different opinions than he.’ (vogel2001)

- (29) EXT:GEN, INT:ACC
- a. \*Bodo entledigt sich, wessen immer Henkel nicht mag.  
 Bodo rids<sub>[GEN]</sub> self W-M/F.SG.GEN ever Henkel not likes<sub>ACC</sub>  
 ‘Bodo gets rid of whoever Henkel does not like.’ (vogel2001)
- b. \*Bodo entledigt sich, wen immer Henkel nicht mag.  
 Bodo rids<sub>[GEN]</sub> self W-M/F.SG.ACC ever Henkel not likes<sub>ACC</sub>  
 ‘Bodo gets rid of whoever Henkel does not like.’ (vogel2001)
- (30) EXT:GEN, INT:DAT
- a. \*Maria hilft, wem andere sich entledigen möchten.  
 Maria helps<sub>[DAT]</sub> W-M/F.SG.DAT others self rid<sub>[GEN]</sub> want  
 ‘Maria helps whoever others want to get rid of.’ (vogel2001)
- b. \*Maria hilft, wessen andere sich entledigen möchten.  
 Maria helps<sub>[DAT]</sub> W-M/F.SG.GEN others self rid<sub>[GEN]</sub> want  
 ‘Maria helps whoever others want to get rid of.’ (vogel2001)

### 3.1.3.3 Summary of the data

Table 3.4: Case attraction in headless relatives in Modern German

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

## 3.2 Background: relative clause theory

Standard raising, probably Cinque’s double-headed structures

## 3.3 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.



### 3.3.1 Old High German

Table 3.5: Old High German relative pronouns in headless relatives

SG	F	M	N
NOM	d-iu	d-ēr	d-az
ACC	d-ea/-ia/(-ie)	d-ēn	d-az
DAT	d-ēru/-ēro	d-ēmu/-ēmo	d-ēmu/-ēmo
GEN	d-ēra/-ēru/-ēro	d-ēs	d-ēs
PL	F	M	N
NOM	d-eo/-io	d-ē/-ea/-ia/-ie	d-iu/-ei
ACC	d-eo/-io	d-ē/-ea/-ia/-ie	d-iu/-ei
DAT	d-ēm/-ēn	d-ēm/-ēn	d-ēm/-ēn
GEN	d-ēro	d-ēro	d-ēro

### 3.3.2 Gothic

Table 3.6: Gothic relative pronouns in headless relatives

SG	F	M	N
NOM	s-ō-ei	s-a-ei	þ-at-ei
ACC	þ-ō-ei	þ-an-ei	þ-at-ei
DAT	þ-izái-ei	þ-amm-ei	þ-amm-ei
GEN	þ-izōz-ei	þ-iz-ei	þ-iz-ei
PL	F	M	N
NOM	þ-ōz-ei	þ-ái-ei	þ-ō-ei
ACC	þ-ōz-ei	þ-anz-ei	þ-ō-ei
DAT	þ-áim-ei	þ-áim-ei	þ-áim-ei
GEN	þ-izō-ei	þ-izē-ei	þ-izē-ei

### 3.3.3 Modern German

## 3.4 Analysis

### 3.4.1 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.

Table 3.7: Modern German relative pronouns in headless relatives

SG	F/M	N
NOM	w-er	w-as
ACC	w-en	w-as
DAT	w-em	
GEN	w-essen	

(31) ACC instead of NOM

- a. unde ne wolden nîet 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 1995, p. 198)

### 3.4.2 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.

### 3.4.3 Gothic

In Gothic, ?

## 3.5 No attraction allowed

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

## 3.6 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 4

# Prepositions

### 4.1 Headless relatives and prepositions

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

### 4.2 R-pronouns

Paper on *waarmee*

### 4.3 Bigger picture

?



## **Chapter 5**

## **Conclusion**



# Bibliography

- Behaghel, Otto (1923-1932). *Deutsche Syntax: Eine geschichtliche Darstellung*. Heidelberg: Winter.
- 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.