Case attraction in headless relatives

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Contents

Co	Contents 2						
1	Intr	oduction	5				
	1.1	Explaining the title	5				
		1.1.1 Case attraction	5				
		1.1.2 Headless relatives	6				
	1.2	Three topics	7				
		1.2.1 Case complexity	7				
		1.2.2 Direction of attraction	7				
		1.2.3 Prepositions	7				
2	Case	e complexity	9				
	2.1	The pattern	9				
	2.2	•	1				
	2.3		1				
			1				
			2				
		11	2				
			2				
			2				
		2.3.3 Syncretism	2				
	2.4		2				
		2.4.1 Basics	2				
		2.4.2 Spellout	2				
	2.5	•	13				
	2.6	Bigger picture	13				
3	Dire	ection of attraction	5				
	3.1	The typology	15				
		71 67	15				
			15				
			18				
			21				
	3.2		21				
	3.3		21				

4	CONTENTS

		3.3.1	Old High German	2	1
		3.3.2	Gothic	2	2
		3.3.3	Modern German	2	2
	3.4	Analys	sis	2	2
		3.4.1	Old High German	2	2
		3.4.2	Modern German	2	3
		3.4.3	Gothic	2	3
	3.5	No attr	raction allowed	2	3
	3.6	Bigger	picture	2	3
4	Prep	osition	ns	2	5
	4.1	Headle	ess relatives and prepositions	2	5
	4.2	R-pron	nouns	2	5
	4.3	Bigger	picture	2	5
5	Con	clusion	1	2	7
Bi	bliogi	raphy		2	9

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-

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

-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 $_{\rm GEN}$ 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 replie d_{DAT} who.dat to him spoke $_{NOM}$ 'He replied to the one who spoke to him.' proper attraction headless relative

1.2. THREE TOPICS 7

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

Case complexity

2.1 The pattern

- (1) INT:NOM, EXT:ACC
 - a. Nom not attested
 - b. jah þ-o-ei ist us Laudeikaion jus ussiggwaid and D-f.sg.acc-comp 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. b-aim-ei iupa sind frabjaib
 D-PL.DAT-COMP 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:NOM, EXT:GEN
 - a. Nом not attested
 - b. GEN not attested
- (4) INT:ACC, EXT:NOM
 - a. p-an-ei frijos siuks ist
 D-m.sg.Acc-comp 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
- (5) INT:ACC, EXT:DAT
 - a. Acc not attested
 - b. hva nu wileiþ ei taujau þ-amm-ei qiþiþ þiudan Iudaie? what now want that do_[DAT] D-M.SG.DAT-COMP 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)

- (6) INT:ACC, EXT:GEN, partitive?
 - a. Acc not attested
 - b. ni waiht þ-iz-ei gasehvun not thing $_{[GEN]}$ D-n.sg.gen-comp saw $_{[ACC]}$ 'not any of that which they saw' (Luke 9:36, gloss and translation by Harbert 1978, p. 340)
- (7) INT:DAT, EXT:NOM
 - a. iþ þ-amm-ei leitil fraletada leitil frijod but D-m.sg.dat-comp 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
- (8) INT:DAT, EXT:ACC, is with a preposition
 - a. ushafjands ana þ-amm-ei lag picking up_{[ACC][DAT]} on D-M.SG.DAT-COMP lay 'picking up that on which he lay' (Luke 5:25, gloss and translation by Harbert 1978, p. 343)
 - b. Acc not attested
- (9) INT:DAT, EXT:GEN
 - a. DAT not attested
 - b. GEN not attested
- (10) INT:GEN, EXT:NOM
 - a. GEN not attested
 - b. Nom not attested
- (11) INT:GEN, EXT:ACC, partitive?
 - a. bugei þ-iz-ei þaurbeima buy_[ACC] D-N.SG.GEN-COMP need_[GEN]
 'buy that which we need' (John 13:29, gloss and translation by Harbert 1978, p. 343)
 - b. Acc not attested
- (12) INT:GEN, EXT:DAT
 - a. GEN not attested
 - b. DAT not attested
- (13) NOM < ACC < DAT

reasons to leave out genitive

• Gothic: it is not verbs that select for genitive, but

EXT [GEN] [NOM] [ACC] [DAT] INT ?gen DAT [NOM] NOM ?nom ?nom ?nom ?nom DAT GEN [ACC] ACC ACC ?ACC ?ACC ?ACC ?nom ?gen [DAT] DAT ?DAT DAT DAT ?nom ?ACC ?dat [GEN] GEN ?gen GEN ?gen

Table 2.1: Case attraction in headless relatives in Gothic

2.2 Another instance of case competition

numerals

2.3 Case containment

2.3.1 Morphological containment

Table 2.2: Transparent case containment in Khanty (Nikolaeva, 1999, p. 16)

	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

Table 2.3: Transparent case containment in Kalderaš Romani (Boretzky, 1994, pp. 31–46)

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

Table 2.4: Transparent case containment in West Tocharian (Gippert, 1987, pp. 23–24)

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

2.3.2 Suppletion

2.3.2.1 ABB

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

Table 2.5: hoi

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

2.3.2.2 ABC

Indo-European: Albanian 3sg.f ajo (a)
të asaj 95 Nakh-Dagestanian: Khinalugh 1sg zi jä as
(ir)

2.3.2.3 AAB

Algic: Yurok 3sg yo2, wo2, yo20·t, wo20·t yo20·t, wo20·t weya2ik

Australian: Wardaman 3sg narnaj narnaj-(j)i gunga Wardaman 3pl narnaj-bulu narnaj-bulu-yi wurrugu

2.3.3 Syncretism

2.4 Nanosyntax

2.4.1 Basics

2.4.2 Spellout

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

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

2.5. ANALYSIS 13

(15) **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.

(16) **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.

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

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

If the spellout procedure in (16) fails, backtracking takes place.

(18) **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.

(19) **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.

2.5 Analysis

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

2.6 Bigger picture

Case is complex

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

3.1.2 Old High German

- (1) INT:NOM, EXT:ACC
 - a. Nom not attested
 - b. ih bibringu fona Juda dhen mina berga
 I educate_[ACC] about Juda D-M.SG.ACC my mountains chisetzit
 through pull_[NOM]

 Leducate the one who wanders through my mountains and the content of the cont
 - '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
 - b. aer antuurta demo zaimo sprah he replied $_{[DAT]}$ D-M.SG.DAT to him spoke $_{[NOM]}$

Table 3.2: Case attraction in headless relatives in Gothic						
EXT	[NOM]	[ACC]	[DAT]	[GEN]		
[NOM]	NOM	?NOM	?NOM	?GEN		
[ACC]	?NOM	ACC	?ACC	GEN ?ACC		
[DAT]	?NOM	?ACC	DAT	?gen ?dat		
[GEN]	?nom	?ACC	?dat ?gen	GEN		
'he replied to the one who spoke to him' German, Monsee Fragments 7:24, Behaghel 1923-1932, p. 761, gloss and translation by Pittner 1995, p. 199) c. gebe themo ni eigi give _[DAT] D-M.SG.DAT not posses _[NOM] 'give to the one who does not have' (Old High German Offrid I 24:77)						
	'give to the one who does not have' (Old High German, Otfrid I 24:77)					

- 'gebe dem der nicht hat' (Schrodt, 175)
- (3) INT:NOM, EXT:GEN
 - NOM not attested a.
 - suachit thes nan sentit $search.3.sg_{[gen?]}$ D-N.sg.gen 3.sg.m.acc $sent_{[nom]}$ 'he searches some of that which sent him' (Old High German, Otfrid III 16:21, Behaghel 1923-1932, p. 761) 'der sucht die Sachen dessen der ihn sendet' (Schrodt, 175)
 - diu habe niemer niht entuot[GEN?], des der seele schaden they have not D-GEN.SG.N the soul damage never not do $si_{[NOM]}$ 'they have never done anything of that which does damage to the soul'

(Middle High German, Warn. 2490, Behaghel 1923-1932, p. 761)

- (4) INT:ACC, EXT:NOM
 - ACC not attested
 - NOM not attested
- (5) INT:ACC, EXT:DAT
 - Acc not attested
 - furira Abrâhame, ouh thên man hiar nû are you superior[DAT] to Abraham also D-DAT.PL one here now zalta? $named_{[\text{\tiny ACC}]}$

3.1. THE TYPOLOGY 17

'are you superior to Abraham to those which they just mentioned?' (Old High German, Otfrid III 18:33, Behaghel 1923-1932, p. 761)

- (6) INT:ACC, EXT:GEN
 - a. Acc not attested
 - b. der bewiset in des er suochte
 he directed_[GEN] him D-N.SG.GEN he sought_[ACC]
 'He directed him to what he sought.' (Middle High German, Iwein 988, Behaghel 1923-1932, p. 761), trans. Hartmann von Aue-Portal
 - c. giwisso ni birut ir thero ih irwellu zi mir bestimmt not belong[GEN] 2.Pl.nom D-GEN.Pl I choose[ACC] 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, Schrodt,p.175)
- (7) INT:DAT, EXT:NOM
 - a. DAT not attested
 - b. Nом not attested
- (8) INT:DAT, EXT:ACC
 - a. DAT not attested
 - b. Acc not attested
- (9) INT:DAT, EXT:GEN
 - a. DAT not attested
 - b. GEN not attested
- (10) INT:GEN, EXT:NOM
 - a. GEN not attested
 - b. Nom not attested
- (11) INT:GEN, EXT:ACC
 - a. GEN not attested
 - b. Acc not attested
- (12) INT:GEN, EXT:DAT
 - a. GEN not attested
 - b. DAT not attested

Don't know:

- (13) 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 3.3: Case attraction in headless relatives in Old High German

EXT INT	[NOM]	[ACC]	[DAT]	[GEN]
[NOM]	NOM	?NOM	?NOM	GEN ?NOM
[ACC]	?nom	ACC	?ACC	GEN ?ACC
[DAT]	?nom ?dat	?ACC ?DAT	DAT	?gen ?dat
[GEN]	?nom ?gen	?ACC	?dat ?gen	GEN

3.1.3 Modern German

- (14) INT:NOM, EXT:ACC
 - a. *Ich lade ein, w-er mir sympathisch ist.
 - $I \quad invite_{[ACC]} \; W\text{-m/f.sg.nom} \; me \; \; nice \qquad \quad is_{[NOM]}$

'I invite who I like.' (Vogel, 2001, p. 344)

- b. *Ich lade ein, w-en mir sympathisch ist.
 - I invite_[ACC] W-M/F.SG.ACC me nice $is_{[NOM]}$

'I invite who I like.' (Vogel, 2001, p. 344)

- (15) INT:NOM, EXT:DAT
 - a. *Ich vertraue, w-er Hitchcock mag.
 - $I \quad trust_{[DAT]} \ W\text{-m/f.sg.nom Hitchcock likes}_{[NOM]}$

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

3.1. THE TYPOLOGY 19

(16)

(17)

(18)

(19)

(20)

*Ich vertraue, w-em Hitchcock mag. I trust[DAT] W-M/F.SG.DAT Hitchcock likes[NOM] 'I trust who likes Hitchcock.' (Vogel, 2001, p. 345) INT:NOM, EXT:GEN *Bodo entledigt sich, w-er immer andere Ansichten hat other opinions has[NOM] Bodo rids_[GEN] self W-m/f.sg.nom ever als er. than he 'Bodo gets rid of whoever has different opinions than he.' (Vogel, 2001, p. 345) b. *Bodo entledigt sich, w-essen immer andere Ansichten hat Bodo rids_[GEN] self W-m/f.sg.gen ever other opinions has_[NOM] als er. than he 'Bodo gets rid of whoever has different opinions than he.' (Vogel, 2001, p. 345) INT:ACC, EXT:NOM Uns besucht w-en Maria mag. Us visits[NOM] W-M/F.SG.ACC Maria.NOM likes[ACC] 'Who visits us likes Maria likes.' (Vogel, 2001, p. 343) b. *Uns besucht w-er Maria mag. Us visits[NOM] W-M/F.SG.NOM Maria.NOM likes[ACC] 'Who visits us likes Maria likes.' (Vogel, 2001, p. 343) INT:ACC, EXT:DAT *Ich vertraue w-em auch Maria mag. I trust_[DAT] W-M/F.SG.DAT also Maria likes_[ACC]. 'I trust whoever Maria also likes.' (Vogel, 2001, p. 345) *Ich vertraue w-en auch Maria mag. I trust_[DAT] W-M/F.SG.ACC also Maria likes_[ACC]. 'I trust whoever Maria also likes.' (Vogel, 2001, p. 345) INT:ACC, EXT:GEN *Bodo entledigt sich, w-en immer Henkel nicht mag. Bodo rids[GEN] self W-M/F.SG.ACC ever Henkel not likes[ACC] 'Bodo gets rid of whoever Henkel does not like.' (Vogel, 2001, p. 344) *Bodo entledigt sich, w-essen immer Henkel nicht mag. Bodo rids_[GEN] self W-m/f.sg.gen ever Henkel not likes_[ACC] 'Bodo gets rid of whoever Henkel does not like.' (Vogel, 2001, p. 344) INT:DAT, EXT:NOM Uns besucht w-em Maria vertraut. us visits[NOM] W-M/F.SG.DAT Maria trusts[DAT] 'Who visits us, Maria trusts.' (Vogel, 2001, p. 343) *Uns besucht w-er Maria vertraut. us visits[NOM] W-M/F.SG.DAT Maria trusts[DAT]

'Who visits us, Maria trusts.'

(Vogel, 2001, p. 343)

(21) INT:DAT, EXT:ACC

- a. Ich lade ein w-em auch Maria vertraut.
 I invite_[ACC] W-M/F.SG.DAT also Maria trusts_[DAT].
 'I invite whoever Maria also trusts.' (Vogel, 2001, p. 344)
- b. *Ich lade ein w-en auch Maria vertraut.

 I invite_[ACC] W-m/F.SG.ACC also Maria trusts_[DAT].

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

(22) INT:DAT, EXT:GEN

- a. *Maria hilft, w-essen andere sich entledigen möchten.
 Maria helps_[DAT] W-M/F.SG.GEN others self rid_[GEN] want
 'Maria helps whoever others want to get rid of.' (Vogel, 2001, p. 344)
- b. *Maria hilft, w-em andere sich entledigen möchten. Maria helps $_{[DAT]}$ W-M/F.SG.DAT others self $rid_{[GEN]}$ want 'Maria helps whoever others want to get rid of.' (Vogel, 2001, p. 344)

(23) INT:GEN, EXT:NOM

- a. Uns besucht w-essen Maria sich erfreuen würde. us visits_[NOM] W-M/F.SG.GEN Maria self be happy_[GEN] would 'Who visits us, Maria would be happy about' (Vogel, 2001, p. 343)
- b. *Uns besucht w-er Maria sich erfreuen würde.
 us visits_[NOM] W-M/F.SG.NOM Maria self be happy_[GEN] would
 'Who visits us, Maria would be happy about' (Vogel, 2001, p. 343)

(24) INT:GEN, EXT:ACC

- a. Ich lade ein, w-essen sich auch Maria erfreuen würde.
 I invite_[ACC] W-M/F.SG.GEN self also Maria be happy_[GEN] would.
 'I invite whoever also Maria would be happy to meet.' (Vogel, 2001, p. 344)
- b. *Ich lade ein, w-en sich auch Maria erfreuen würde. I invite $_{[ACC]}$ W-M/F.SG.ACC self also Maria be happy $_{[GEN]}$ would. 'I invite whoever also Maria would be happy to meet.' (Vogel, 2001, p. 344)

(25) INT:GEN, EXT:DAT

- a. *Bodo entledigt sich, w-em immer Gerhard misstraut. Bodo ${\rm rids}_{\rm [GEN]}$ self W-M/F.SG.DAT ever Gerhard mistrusts $_{\rm [DAT]}$ 'Bodo gets rid of whoever Gerhard mistrusts.' (Vogel, 2001, p. 345)
- b. *Bodo entledigt sich, w-essen immer Gerhard misstraut.
 Bodo rids_[GEN] self W-m/f.sg.gen ever Gerhard mistrusts_[DAT]
 'Bodo gets rid of whoever Gerhard mistrusts.' (Vogel, 2001, p. 345)

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

Table 3.4: Case attraction in headless relatives in Modern German

3.1.3.1 Summary of the data

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-ër	d-az,
ACC	d-ea/-ia/(-ie)	d-ën	d-az
DAT	d-ëru/-ëro	d-ëmu/-ëmo	d-ëmu/-ëmo
GEN	d-ëra/-ëru/-ëro	d-ës	d-ës
PL	F	M	N
PL NOM	f d-eo/-io	M d-ē/-ea/-ia/-ie	N d-iu/-ei
NOM	d-eo/-io	d-ē/-ea/-ia/-ie	d-iu/-ei

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
PL NOM	F þ-ōz-ei	м þ-ái-ei	N þ-ō-ei
NOM	þ-ōz-ei	þ-ái-ei	þ-ō-ei

Table 3.6: Gothic relative pronouns in headless relatives

3.3.2 Gothic

3.3.3 Modern German

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	

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.

(26) ACC instead of NOM

 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 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.

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

?

Conclusion

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.
- 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". 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. 1093/0s0/9780190876746.003.0009.
- 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.