Case attraction in headless relatives

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Contents

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 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.   þ-aim-ei   iupa sind   fraþjaiþ
        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:ACC, EXT:NOM

    a.   þ-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

(4) 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)

(5)   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

(6)   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

Table 2.1: Case attraction in headless relatives in Gothic

INT \ EXT	[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

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'	'girl'	'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

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

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

2.3.2.2 ABC

Table 2.5: ABB patterns in suppletion

	Albanian	Khinalugh
	3SG.F	1SG
NOM	ajo	zɨ
ACC	(a)të	jä
DAT	asaj	as(ɨr)

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

(12)

```
            DATP
           /    \
        DAT      ACCP
                /    \
             ACC      NOMP
                     /  \\
                  NOM    ..
```
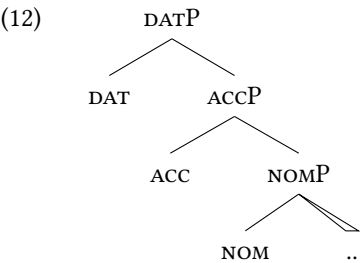
Explain how all phenomena relate to this.

Chapter 3

Ellipsis account

The intuition

(1)   a.

```
          DATP
         /    \
      DAT      ACCP
              /    \
           ACC      NOMP
                   /  \\
                NOM    ..
```

    b.

```
          ACCP
         /    \
      ACC      NOMP
              /  \\
           NOM    ..
```

    c.

```
        NOMP
       /  \\
    NOM    ..
```
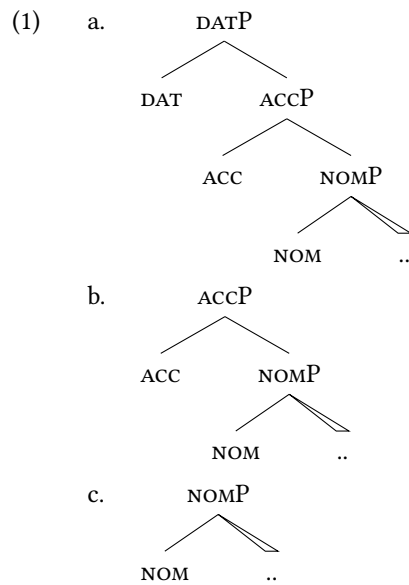
3.1   Elipsis

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: ɪɴᴛ vs. ᴇхᴛ in Modern and Old High German and Gothic

	ɪɴᴛ>ᴇхᴛ inverse attraction	ᴇхᴛ>ɪɴᴛ proper attraction
Modern German	✓	*
Old High German	*	✓
Gothic	✓	✓

4.1.1 Gothic

Table 4.2: Case attraction in headless relatives in Gothic

ᴇхᴛ / ɪɴᴛ	[ɴᴏᴍ]	[ᴀᴄᴄ]	[ᴅᴀᴛ]
[ɴᴏᴍ]	NOM	ACC / ?ɴᴏᴍ	DAT / ?ɴᴏᴍ
[ᴀᴄᴄ]	?ɴᴏᴍ / ACC	ACC	DAT / ?ᴀᴄᴄ
[ᴅᴀᴛ]	?ɴᴏᴍ / DAT	?ᴀᴄᴄ / DAT	DAT

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4.1.2 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]
        '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]
        '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 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, Otfrid I 24:77)
        'gebe dem der nicht hat'   (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 D-DAT.PL 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

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

4.1.3 Modern German

(8)   INT:NOM, EXT:ACC

    a.   *Ich lade ein,   w-er   mir sympathisch ist.
        I   invite[ACC] W-M/F.SG.NOM me nice   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)

(9)   INT:NOM, EXT:DAT

    a.   *Ich vertraue, w-er   Hitchcock mag.
        I   trust[DAT] W-M/F.SG.NOM Hitchcock likes[NOM]
        'I trust who likes Hitchcock.'   (Vogel, 2001, p. 345)

    b.   *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)

(10)   INT:ACC, EXT:NOM

    a.   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)

(11)   INT:ACC, EXT:DAT

    a.   *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)

    b.   *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)

(12)   INT:DAT, EXT:NOM

    a.   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)

    b.   *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)

(13)   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)

4.1.3.1   Summary of the data

Table 4.4: Case attraction in headless relatives in Modern German

INT \ EXT	[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

SG	F	M	N
NOM	d-iu	d-ër	d-aẓ
ACC	d-ea/-ia/(-ie)	d-ën	d-aẓ
DAT	d-ëru/-ëro	d-ëmu/-ëmo	d-ëmu/-ëmo

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

Table 4.6: 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

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

Table 4.7: Modern German relative pronouns in headless relatives

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

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 níet 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)

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

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