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 teacher
         '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$_{\text{DAT}}$ who.DAT to him spoke$_{\text{NOM}}$
      'He replied to the one who spoke to him.' proper attraction headless relative

(6)   Ich lade ein, wem   Maria vertraut.
      I   invite$_{\text{ACC}}$ who.DAT also   Maria   trusts$_{\text{DAT}}$
      '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

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) 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:NOM, EXT:GEN

    a.   NOM not attested

    b.   GEN not attested

(4)   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

(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

    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

    a.   ushafjands ana þ-amm-ei lag
        picking   up on$_{[ACC]}$ D-M.SG.DAT-COMP lay$_{[DAT]}$
        '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

    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

Table 3.2: Case attraction in headless relatives in Gothic

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

3.1.2 Old High German

(13)   INT:NOM, EXT:ACC
   a.   NOM not attested
   b.   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)   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)
   c.   gebe   themo   ni eigi
        give[DAT] D−M.SG.DAT not posses[NOM]
        'give to whom that does not have' gebe dem der nicht hat   (Old High
        German, Otfrid I,24,77, Schrodt,175)

(15)   INT:NOM, EXT:GEN
   a.   NOM not attested

    b.   suachit   thes   nan   sentit
         search.3.SG$_{\text{GEN?}}$ 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)

    c.   diu   habe niemer niht   entuot, des   der seele schaden si
         they have not   never not do D-GEN.SG.N the soul damage is$_{\text{[NOM]}}$
         ''   (Middle High German, Warn. 2490, Behaghel 1923-1932, p. 761)

(16)   INT:ACC, EXT:NOM

    a.   ACC not attested
    b.   NOM not attested

(17)   INT:ACC, EXT:DAT

    a.   ACC not attested
    b.   istû   furira   Abrâhame, ouh thên   man hiar nû
         are you superior to$_{\text{[DAT]}}$ Abraham   also D-D.PL one here now
         zalta?
         mentioned$_{\text{[ACC]}}$
         'are you bigger than Abraham and those people named just now?' (Old
         High German, Otfrid III,18,33, Behaghel 1923-1932, p. 761)

(18)   INT:ACC, EXT:GEN

    a.   ACC not attested
    b.   der bewiset   in   des   er suochte
         he directed$_{\text{[GEN]}}$ him D-N.SG.GEN he sought$_{\text{[ACC]}}$
         '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$_{\text{[GEN]}}$ 2.PL.NOM D-GEN.PL I choose$_{\text{[ACC]}}$ 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)

(19)   INT:DAT, EXT:NOM

    a.   DAT not attested
    b.   NOM not attested

(20)   INT:DAT, EXT:ACC

    a.   DAT not attested
    b.   ACC not attested

(21)   INT:DAT, EXT:GEN

    a.   DAT not attested
    b.   GEN not attested

(22)   INT:GEN, EXT:NOM

    a.   GEN not attested
    b.   NOM not attested

(23) INT:GEN, EXT:ACC

    a. GEN not attested

    b. ACC not attested

(24) INT:GEN, EXT:DAT

    a. GEN not attested

    b. DAT not attested

Don't know:

(25) 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:

3.1.3 Modern German

(26) 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)

(27) INT:NOM, EXT:DAT

    a. *Ich vertraue, w-er Hitchcock mag.
       I trust[DAT] W-M/F.SG.NOM Hitchcock likes[NOM]

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

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

    ‘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)

(28)   INT:NOM, EXT:GEN

  a. *Bodo entledigt sich, w-er   immer andere Ansichten hat
    Bodo rids$_{[GEN]}$ self W-M/F.SG.NOM ever   other opinions has$_{[NOM]}$
    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)

(29)   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)

(30)   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)

(31) INT:ACC, EXT:GEN

a. *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)

b. *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)

(32) 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)

(33) 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)

(34) 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)

(35) 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)

(36) 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)

(37)   INT:GEN, EXT:DAT

  a. *Bodo entledigt sich, w-em   immer Gerhard misstraut.
    Bodo rids$_{[GEN]}$ self W-M/F.SG.DAT ever   Gerhard mistrusts$_{[DAT]}$
    '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)

3.1.3.1   Summary of the data

Table 3.4: Case attraction in headless relatives in Modern German

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

Table 3.5: 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
GEN	d-ëra/-ëru/-ëro	d-ës	d-ës

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-ëro	d-ëro	d-ëro

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

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	

3.3.1   Old High German

3.3.2   Gothic

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.

(38)   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)

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.

Harbert, Wayne Eugene (1978). "Gothic syntax: a relational grammar". PhD thesis. Urbana-Champaign: University of Illinois.

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.

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.