Case competition in headless relatives

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Research Training Group 'Nominal Modification'
Goethe-Universität Frankfurt

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DFG Deutsche Forschungsgemeinschaft

Introduction

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two factors determine grammaticality

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two factors determine grammaticality

1. the case of the relative pronoun
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   - INT/EXT
   - differs across languages

This presentation

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- Illustrate generalizations with data

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  - the stable NOM < ACC < DAT

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  - the stable NOM < ACC < DAT
  - the INT/EXT parameter

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NOM < ACC < DAT in Modern German

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(3) Uns besucht, **wen Maria mag**.
us visit$_{[NOM]}$ RP.ACC Maria like$_{[ACC]}$
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(5) **hòn hoi theoì philoũsin** apothnḗskei néos
RP.ACC the god love$_{[ACC]}$ die$_{[NOM]}$ young
'He, whom the gods love, dies young.'
(Classical Greek, Menander, The Double Deceiver 125)

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(6) **themo min uuirdit forlazan**, min minnot
RP.DAT less become read$_{[DAT]}$ less love$_{[NOM]}$
'whom less is read, loves less' (Old High German, Tatian 138:13)

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(7) ei galaubjaiþ þamm **-ei insandida jains**
that believe$_{[DAT]}$ RP.DAT -COMP send$_{[ACC]}$ he
'that you believe in him whom he sent' (Gothic, John 6:29)

INT/EXT in Modern German

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INT VS. EXT

(cf. Vogel, 2001; Grosu, 2003b; Himmelreich, 2017; Cinque, 2020)

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INT VS. EXT

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(8) Ich lade ein, **wem auch Maria vertraut**.
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INT vs. EXT

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- INT: yes
- EXT: no

INT/EXT overview in Modern German

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INT/EXT overview in Modern German

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

INT/EXT in Old High German

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- INT: yes
- EXT: yes

INT/EXT in Old High German

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(10) **themo min uuirdit forlazan**, min minnot
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INT/EXT in Old High German

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- EXT: yes

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RP.DAT less become read$_{[DAT]}$ less love$_{[NOM]}$
'whom less is read, loves less' (Old High German, Tatian 138:13)

(11) enti aer ant uurta demo **zaimo sprah**
and he reply$_{[DAT]}$ RP.DAT to him speak$_{[NOM]}$
'and he replied to the one who spoke to him'
(Old High German, MONS 7:24, after Pittner 1995: 199)

INT/EXT in Old High German

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[NOM]	NOM	ACC	DAT
[ACC]	ACC	ACC	DAT
[DAT]	DAT	DAT	DAT

INT/EXT in Polish

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- INT: no
- EXT: no

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(12) *Jan lubi **komu -kolkwiek dokucza**.
Jan like[ACC] RP.DAT ever tease[DAT]
'Jan likes whoever he teases.'
(Polish, Citko 2013 after Himmelreich 2017: 17)

INT/EXT in Polish

- INT: no
- EXT: no

(12) *Jan lubi **komu -kolkwiek dokucza**.
Jan like[ACC] RP.DAT ever tease[DAT]
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(Polish, Citko 2013 after Himmelreich 2017: 17)

(13) *Jan ufa komu **-kolkwiek wpuścił do domu**.
Jan trust[DAT] RP.DAT ever let[ACC] to home
'Jan trusts whoever he let into the house.'
(Polish, Citko 2013 after Himmelreich 2017: 17)

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- INT: no
- EXT: no

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(14) Jan lubi **kogo -kolkwiek Maria lubi**.
Jan like[ACC] RP.ACC ever Maria like[ACC]
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INT/EXT in Polish

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[NOM]	NOM	*	*
[ACC]	*	ACC	*
[DAT]	*	*	DAT

INT/EXT overview

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Table 1: Modern German pattern

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

INT/EXT overview

Table 1: Modern German pattern

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

Table 2: Old High German pattern

INT \ EXT	[NOM]	[ACC]	[DAT]
[NOM]	NOM	ACC	DAT
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[NOM]	NOM	*	*
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Table 2: Old High German pattern

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

Table 3: Polish pattern

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

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[NOM]	NOM	*	*
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INT \ EXT	[NOM]	[ACC]	[DAT]
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Table 3: Polish pattern

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

Table 4: unattested pattern

INT \ EXT	[NOM]	[ACC]	[DAT]
[NOM]	NOM	ACC	DAT
[ACC]	*	ACC	DAT
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INT \ EXT	[NOM]	[ACC]	[DAT]
[NOM]	NOM	*	*
[ACC]	ACC	ACC	*
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Table 2: Old High German pattern

INT \ EXT	[NOM]	[ACC]	[DAT]
[NOM]	NOM	ACC	DAT
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INT \ EXT	[NOM]	[ACC]	[DAT]
[NOM]	NOM	*	*
[ACC]	*	ACC	*
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The stable NOM < ACC < DAT

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Table 5: Khanty 3SG pronouns (Nikolaeva 1999: 16 after Smith et al. 2019)

	3SG
NOM	luw
ACC	
DAT	

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- syncretism patterns (cf. Baerman, Brown, and Corbett, 2005)

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a single cause

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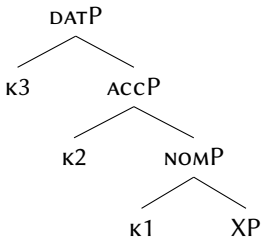
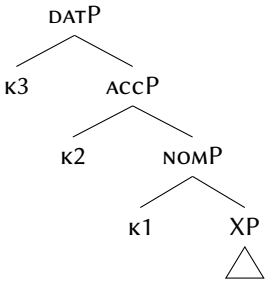


(Caha, 2009, 2019)

The winning case contains the losing case



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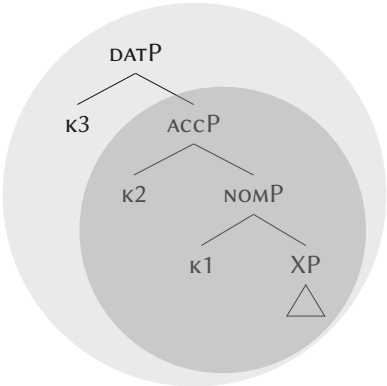

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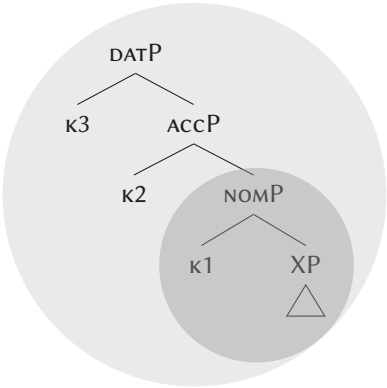

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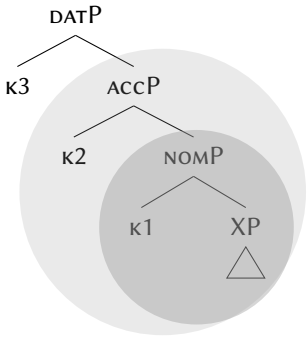

The INT/EXT parameter

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Table 6: Modern German pattern

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

The INT/EXT parameter

Table 6: Modern German pattern

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

Table 7: Polish pattern

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

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[ACC]	ACC	ACC	*
[DAT]	DAT	DAT	DAT

Table 7: Polish pattern

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

Table 8: Old High German pattern

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

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INT \ EXT	[NOM]	[ACC]	[DAT]
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INT \ EXT	[NOM]	[ACC]	[DAT]
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[ACC]	*	ACC	*
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	INT may surface	
Modern German	yes	
Polish	no	

The INT/EXT parameter

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

	INT may surface	Vogel 2001 OT constraints
Modern German	yes	x » y
Polish	no	y » x

The INT/EXT parameter

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

Table 7: Polish pattern

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

	INT may surface	Vogel 2001 OT constraints	Himmelreich 2017 agree
Modern German	yes	x » y	no probe
Polish	no	y » x	probe

My proposal

My proposal

- embedded in Nanosyntax (Starke, 2009)

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- same syntax and same spellout algorithm for each language

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- same syntax and same spellout algorithm for each language
- difference is in the lexicon (Borer-Chomsky Conjecture)

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  light head_{EXT} [relative $\text{pronoun}_{\text{INT}}$ ...]

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Assumptions

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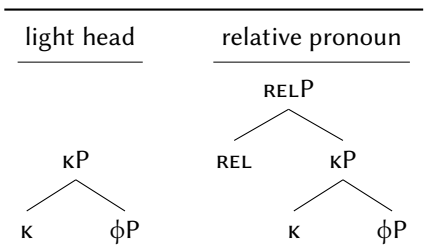
  ~~light head$_{\overline{\text{EXT}}}$~~ [relative pronoun$_{\text{INT}}$ ...]
- deletion of the light head takes place when the relative pronoun contains the light head as a single constituent
- the relative pronoun contains the features of the light head plus an additional one



Light head and relative pronoun in Modern German

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

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Table 8: Modern German LH and RP

LH	RP
n	we-m

Light head and relative pronoun in Modern German

INT \ EXT	[NOM]	[ACC]	[DAT]
[NOM]	NOM	*	*
[ACC]	ACC	ACC	*
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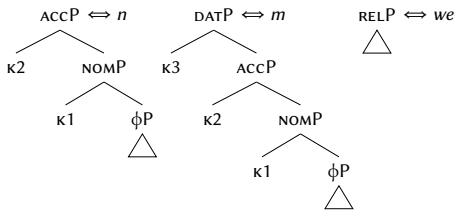
Table 8: Modern German LH and RP

LH	RP
n	we-m

lexicon



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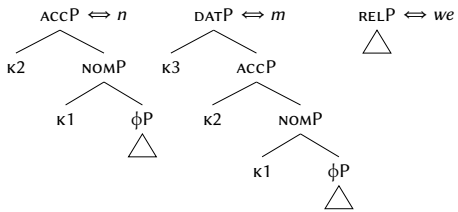
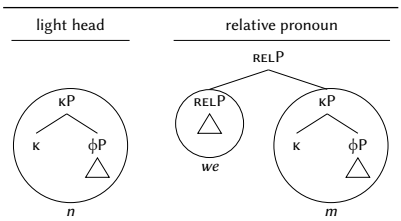


internal syntax



ACC_{EXT} vs. DAT_{INT} in Modern German

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(14) Ich lade ~~n~~ ein, **wem auch Maria vertraut**.
I invite$_{[\text{ACC}]}$ LH.ACC RP.DAT also Maria trust$_{[\text{DAT}]}$
'I invite whoever Maria also trusts.' (Modern German, Vogel 2001: 344)

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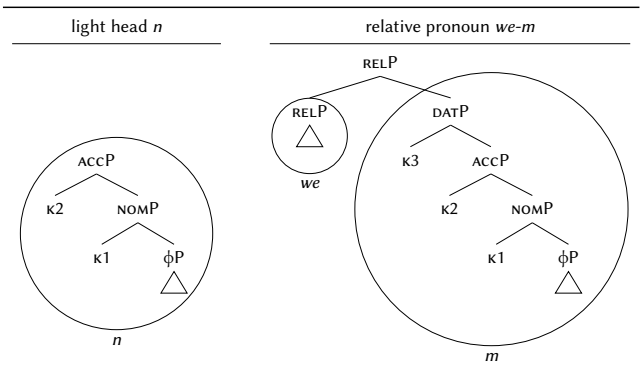

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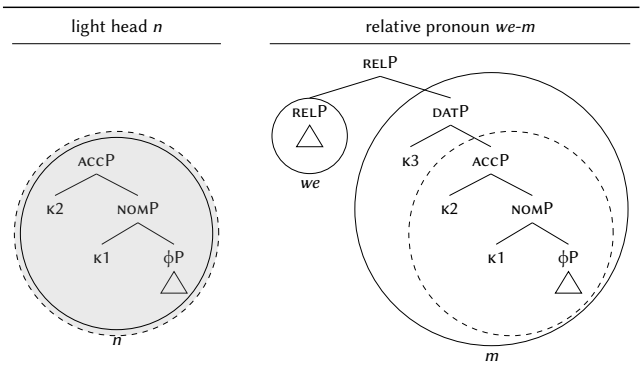

Light head and relative pronoun in Polish

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INT \ EXT	[NOM]	[ACC]	[DAT]
[NOM]	NOM	*	*
[ACC]	*	ACC	*
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Table 9: Polish LH and RP

LH	RP
o-go	k-o-mu

Light head and relative pronoun in Polish

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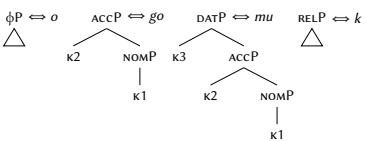

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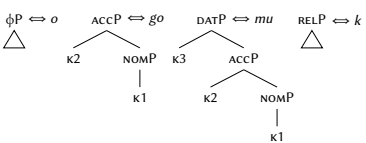

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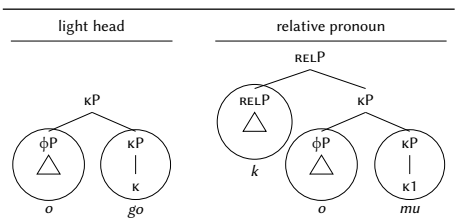

Comparing Polish to Modern German

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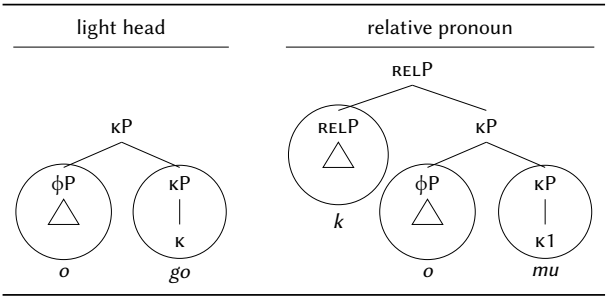

ACC_{EXT} vs. DAT_{INT} in Polish

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(15) *Jan lubi ~~ego~~ **komu -kolkwiek dokucza**.
Jan like$_{[\text{ACC}]}$ LH.ACC RP.DAT ever tease$_{[\text{DAT}]}$
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(Polish, Citko 2013 after Himmelreich 2017: 17)

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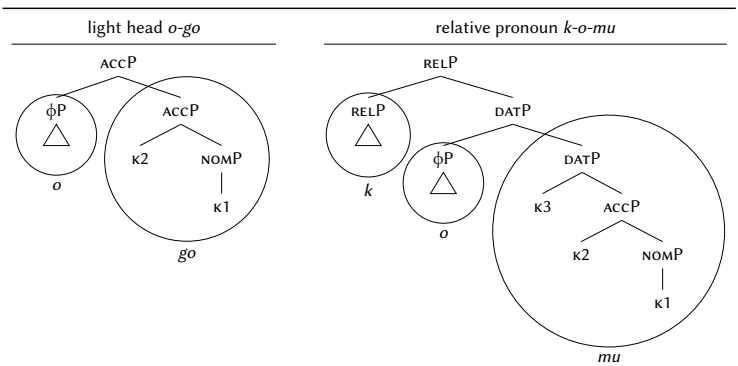

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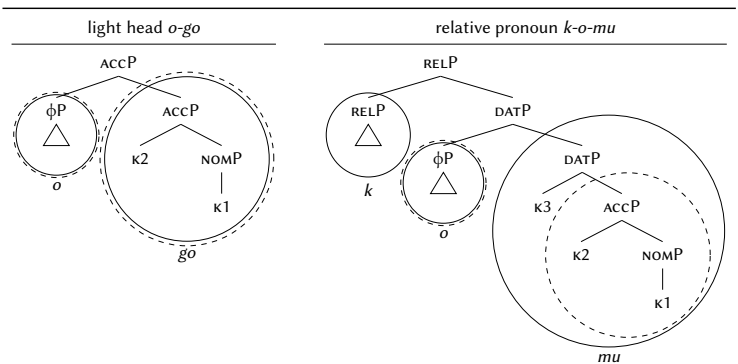

The INT/EXT parameter

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	INT may surface
Modern German	yes
Polish	no

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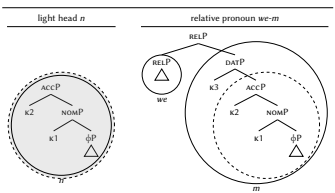

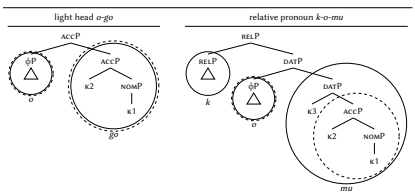

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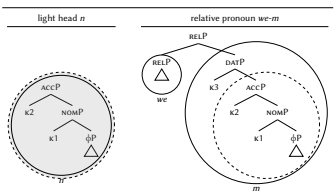

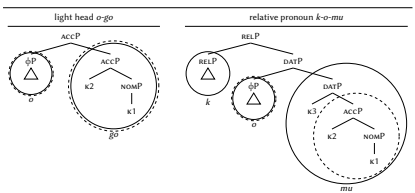

lexical entries → internal syntax → containment → deletion → headless relative

Conclusion

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two factors influence grammaticality

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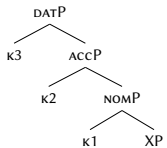

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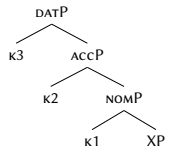

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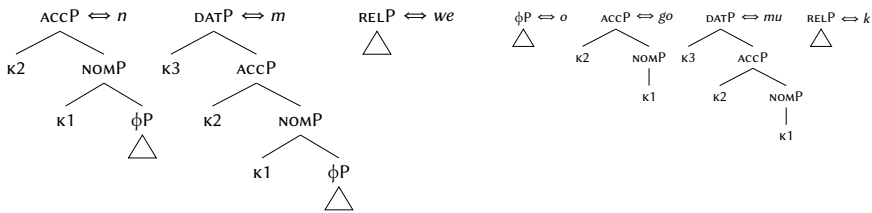

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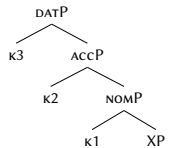

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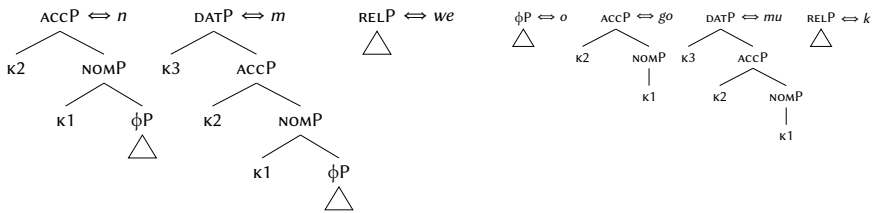

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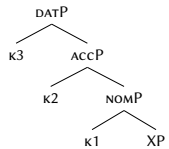

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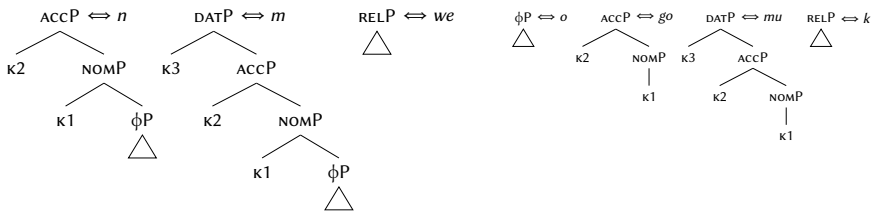

two factors ⟶ one factor:

Conclusion

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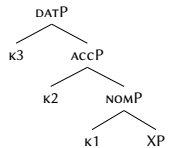

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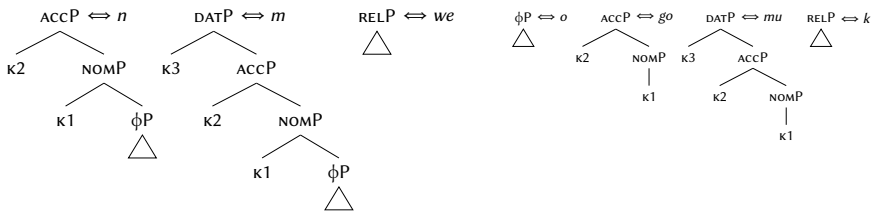

two factors ⟶ one factor: **containment**

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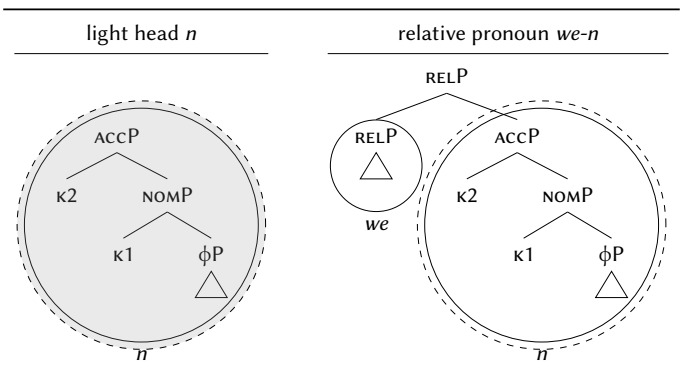
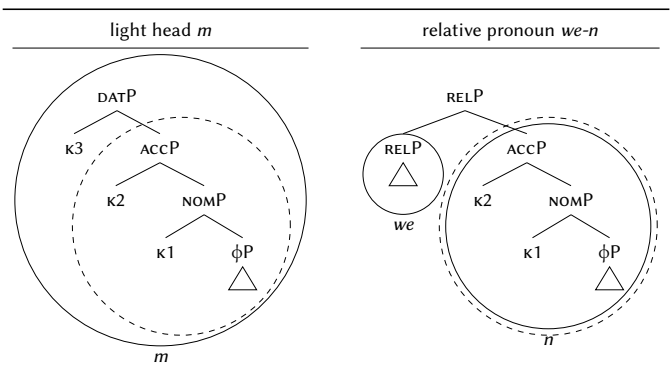
ACC_{EXT} vs. ACC_{INT} in Modern German

(16) Ich lade ~~n~~ ein, **wen** **auch Maria mag**.
I invite$_{[\text{ACC}]}$ LH.ACC RP.ACC also Maria like$_{[\text{ACC}]}$
'I invite who Maria also likes.'
(Modern German, adapted from Vogel 2001: 344)



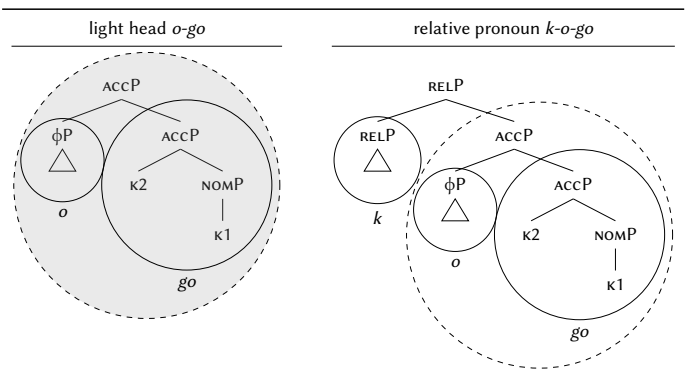
DAT_{EXT} vs. ACC_{INT} in Modern German

(17) *Ich vertraue ~~m~~, **wen auch Maria mag**.
I trust$_{[\text{DAT}]}$ LH.DAT RP.ACC also Maria like$_{[\text{ACC}]}$
'I trust whoever Maria also likes.'
(Modern German, adapted from Vogel 2001: 345)



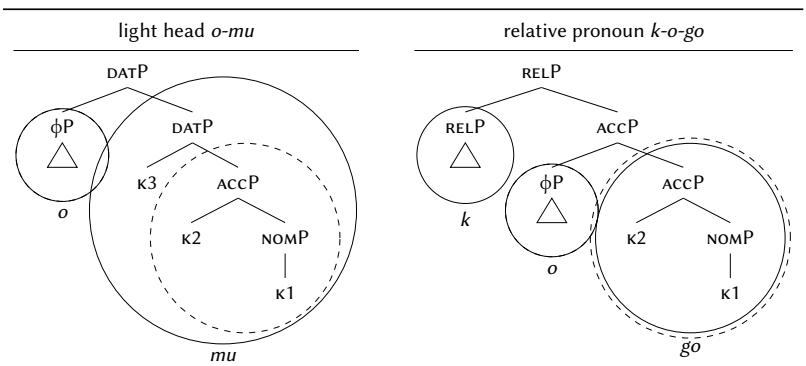
ACC_{EXT} vs. ACC_{INT} in Polish

(18) Jan lubi ~~ego~~ **kogo -kolkwiek Maria lubi**.
Jan like$_{[\text{ACC}]}$ LH.ACC RP.ACC ever Maria like$_{[\text{ACC}]}$
'Jan likes whoever Maria likes.'
(Polish, adapted from Citko 2013 after Himmelreich 2017: 17)



DAT_{EXT} vs. ACC_{INT} in Polish

(19) *Jan ufa ~~omu~~ **kogo -kolkwiek wpuścil do domu**.
Jan trust$_{[\text{DAT}]}$ ELH.DAT RP.ACC ever let$_{[\text{ACC}]}$ to home
'Jan trusts whoever he let into the house.'
(Polish, adapted from Citko 2013 after Himmelreich 2017: 17)

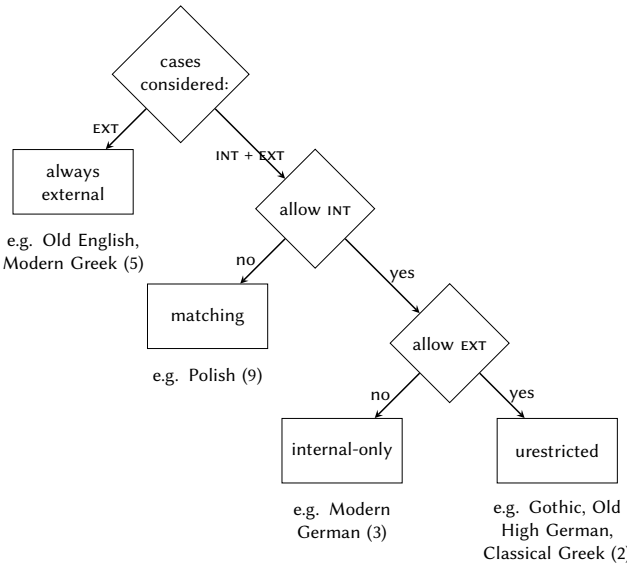


Weak and strong definites as head of a relative clause

(20) *Fritz ist jetzt im Haus, das er sich letztes Jahr gebaut hat.
Fritz is now in the house that the REFL last year built has
'Fritz is now in the house that he built last year.'
(Modern German, Schwarz 2009: 22 after **hartmann1978**: 77)

(21) Fritz ist jetzt in dem Haus, das er sich letztes Jahr gebaut hat.
Fritz is now in the house that the REFL last year built has
'Fritz is now in the house that he built last year.'
(Modern German, Schwarz 2009: 22 after **hartmann1978**: 77)

Three descriptive parameters generate four language types



Logically possible patterns for headless relatives

	[INT]>[EXT]		[EXT]>[INT]		
	INT	EXT	INT	EXT	language
1	☒	*	☒	*	n.a.
2	☒	*	*	☒	e.g. Old High German
3	☒	*	*	*	e.g. Modern German
4	*	☒	☒	*	n.a.
5	*	☒	*	☒	e.g. Old English
6	*	☒	*	*	n.a.
7	*	*	☒	*	n.a.
8	*	*	*	☒	n.a.
9	*	*	*	*	e.g. Polish

Greek examples

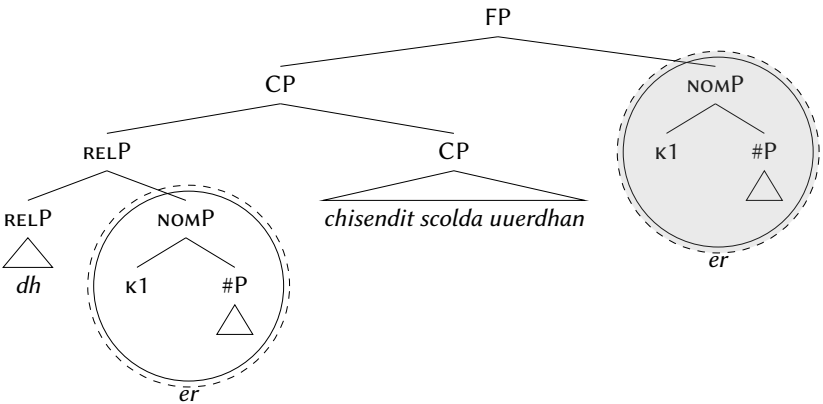
(22) Irθan ópji **káleses**.
come.PST.3PL[NOM] RP.PL.M.NOM invite.PST.2SG[ACC]
'Whoever you invited came.'
(Modern Greek, adapted from Daskalaki 2011: 80)

(23) Me efχarístisan ópji **tus** **íχa** **ðósi** **leftá**.
CL.1SG.ACC thank.PST.3PL[NOM] RP.PL.M.NOM CL.3PL.GEN have.PST.1SG give.PTCP[GEN] money
'Whoever I had given money to, thanked me.'
(Modern Greek, adapted from Daskalaki 2011: 80)

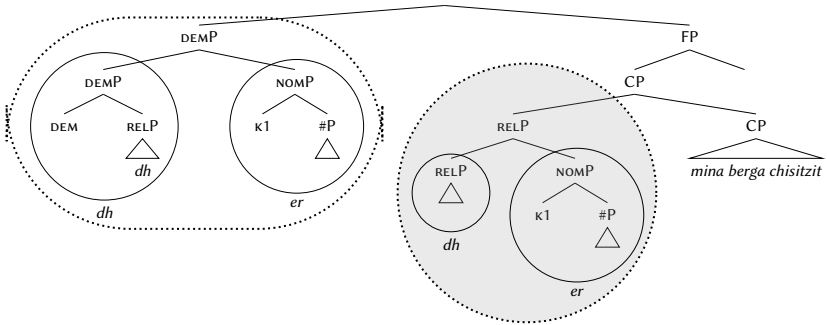
(24) a. ópjos/ ópjon epiléksume θa pári to vravío
RP.SG.M.NOM/ RP.SG.M.ACC choose.1PL[ACC] FUT take.3SG[NOM] the price.ACC
'Whoever we may choose, he will get the price.'

b. ópjos/ ópjon me aɣapá ton aɣapó
RP.SG.M.NOM/ RP.SG.M.ACC CL.1SG.ACC love.3SG[NOM] CL.3SG.M.ACC love.1SG[ACC]

Bigger syntax ELH



Bigger syntax DEM



Modern German syncretism

(25) Ich erzähle, **was immer mir gefällt**.
I tell$_{[ACC]}$ RP.NOM ever me pleases$_{[NOM]}$
'I tell whatever pleases me.' (Modern German, Vogel 2001: 344)

Old High German ELH and RP

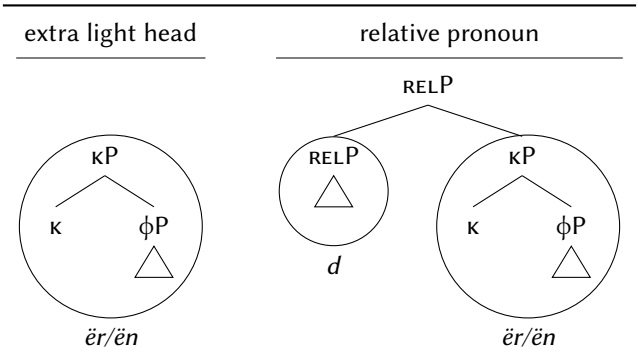


Figure 1: ELH and RP in Old High German

Old High German DEM and RP

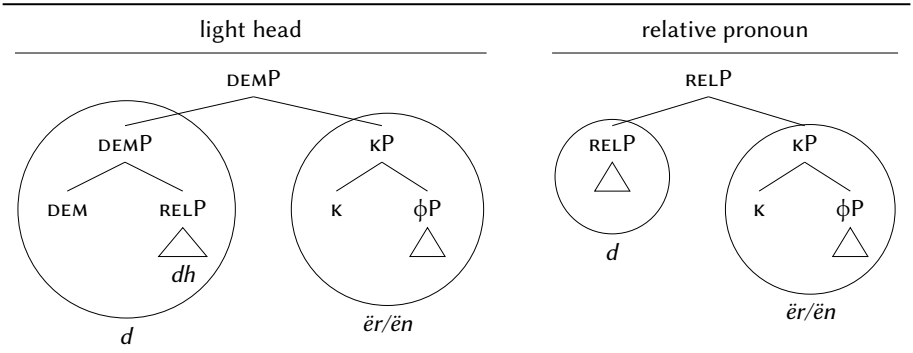


Figure 2: DEM and RP in Old High German