Case competition in headless relatives

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Introduction

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

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(2) Ich lade die Person ein, **der Maria vertraut**.
I invite$_{[ACC]}$ the.ACC person RP.DAT Maria.NOM trust$_{[DAT]}$
'I invite the person that Maria trusts.'

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1. which cases are competing
   - NOM < ACC < DAT
   - is stable across languages
2. where the competitors come from
   - INT/EXT
   - differs across languages

- **illustrate the generalizations**
- derive the generalizations

Which cases are competing (Vogel 2001)

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us visit$_{[NOM]}$ RP.ACC Maria like$_{[ACC]}$
'Who visits us, Maria likes.'

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(5) **hòn** **hoi theoì** **philoũsin** apothnḗskei néos
RP.SG.M.ACC the god.PL love.3PL[ACC] die.3SG[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.SG.M.DAT less become.PRES.3SG read.INF[DAT] less love.PRES.3SG[NOM]
'whom less is read, loves less' (Old High German, Tatian 138:13)

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(7) ei galaubjaiþ þamm **-ei** **insandida**
that believe.OPT.PRES.2PL[DAT] REL.SG.M.DAT -COMP send.PRET.3SG[ACC]
jains
DEM.SG.M.NOM
'that you believe in him whom he sent' (Gothic, John 6:29)

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approve INT or EXT as a winner

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

Whether the winner gets approved in Old High German

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(11) **themo** **min uuirdit** **forlazan**, min minnot
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(12) enti aer ant uurta demo **zaimo**
and 3SG.M.NOM reply.PST.3SG$_{[DAT]}$ RP.SG.M.DAT to 3SG.M.DAT
sprah
speak.PST.3SG$_{[NOM]}$
'and he replied to the one who spoke to him'
(Old High German, MONS 7:24, adapted from Pittner 1995: 199)

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

Whether the winner gets approved in Polish

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(13) *Jan lubi **komu -kolkwiek dokucza**.
Jan like.3SG[ACC] REL.DAT.AN.SG ever tease.3SG[DAT]
'Jan likes whoever he teases.'

Whether the winner gets approved in Polish

(13) *Jan lubi **komu -kolkwiek dokucza**.
Jan like.3SG[ACC] REL.DAT.AN.SG ever tease.3SG[DAT]
'Jan likes whoever he teases.'

(14) *Jan ufa komu **-kolkwiek wpuścil do domu**.
Jan trust.3SG[DAT] REL.DAT.AN.SG ever let.3SG[ACC] to home
'Jan trusts whoever he let into the house.'

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Jan like.3SG[ACC] REL.DAT.AN.SG ever tease.3SG[DAT]
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INT \ EXT	[NOM]	[ACC]	[DAT]
[NOM]	NOM	*	*
[ACC]	*	ACC	*
[DAT]	*	*	DAT

Whether the winner gets approved in overview

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

Whether the winner gets approved in overview

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

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

Whether the winner gets approved in overview

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

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

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

Whether the winner gets approved in overview

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

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

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

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

Whether the winner gets approved in overview

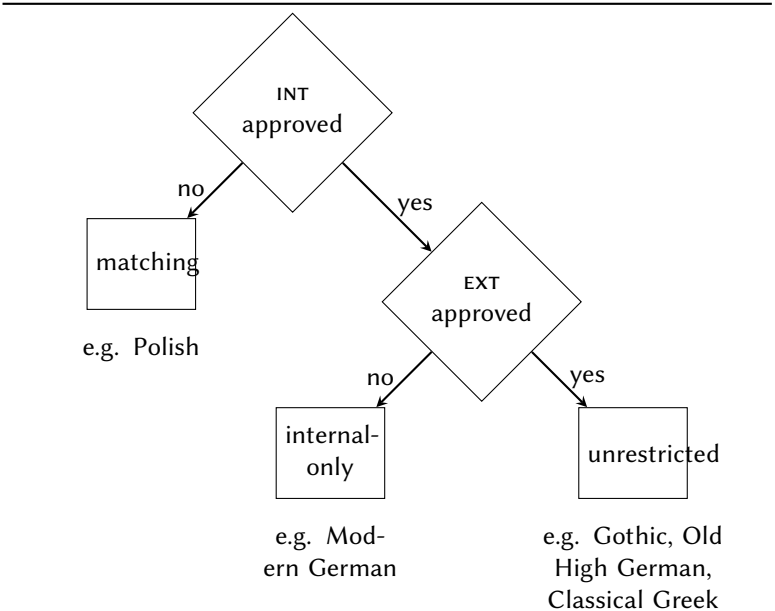
INT \ EXT	[NOM]	[ACC]	[DAT]
[NOM]	NOM	*	*
[ACC]	ACC	ACC	*
[DAT]	DAT	DAT	DAT

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

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

Whether the winner gets approved in flowchart

Whether the winner gets approved in flowchart



Two generalizations

1. the winner of the competition
   - is stable across languages
   - NOM < ACC < DAT
2. whether the winner gets approved
   - differs across languages
   - INT/EXT approved

- illustrate the generalizations
- derive the generalizations

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- illustrate the generalizations
- **derive the generalizations**

NOM < ACC < DAT

NOM < ACC < DAT

	3SG
NOM	luw
ACC	
DAT	

NOM < ACC < DAT

	3SG
NOM	luw
ACC	luw-**e:l**
DAT	

NOM < ACC < DAT

	3SG
NOM	luw
ACC	luw-**e:l**
DAT	luw-**e:l**-na

NOM < ACC < DAT

	3SG
NOM	luw
ACC	luw-**e:l**
DAT	luw-**e:l**-na

- syncretism patterns (ref)

NOM < ACC < DAT

	3SG
NOM	luw
ACC	luw-**e:l**
DAT	luw-**e:l**-na

- syncretism patterns (ref)
- agreement (ref)

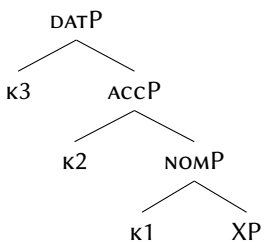
NOM < ACC < DAT

	3SG
NOM	luw
ACC	luw-**e:l**
DAT	luw-**e:l**-na

- syncretism patterns (ref)
- agreement (ref)
- relativization (ref)

NOM < ACC < DAT

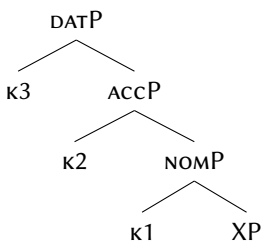
	3SG
NOM	luw
ACC	luw-**e:l**
DAT	luw-**e:l**-na



- syncretism patterns (ref)
- agreement (ref)
- relativization (ref)

NOM < ACC < DAT

	3SG
NOM	luw
ACC	luw-**e:l**
DAT	luw-**e:l**-na



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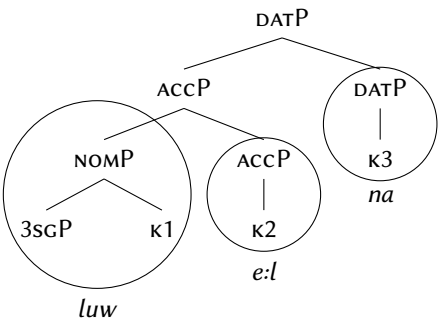
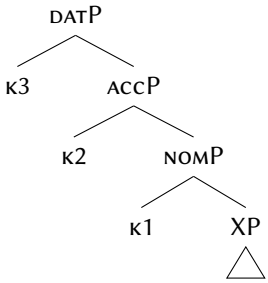


The winning case contains the losing case



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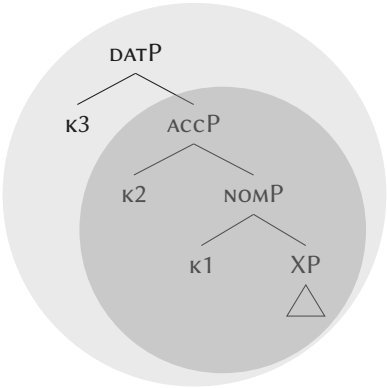

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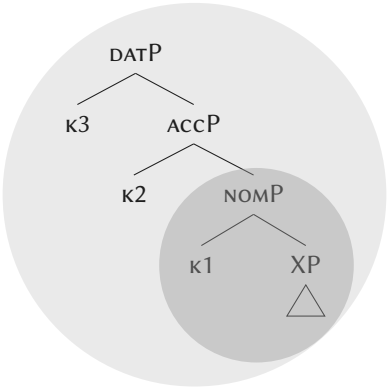

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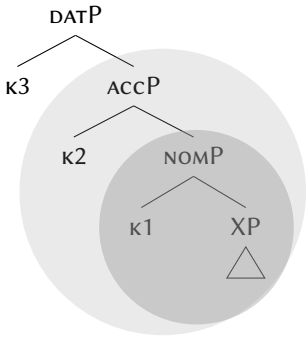

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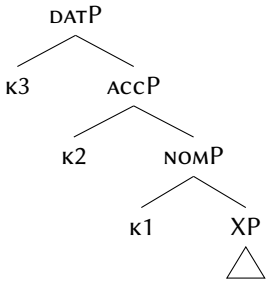

Properties of morphology show reflexes in syntax

INT/EXT approved

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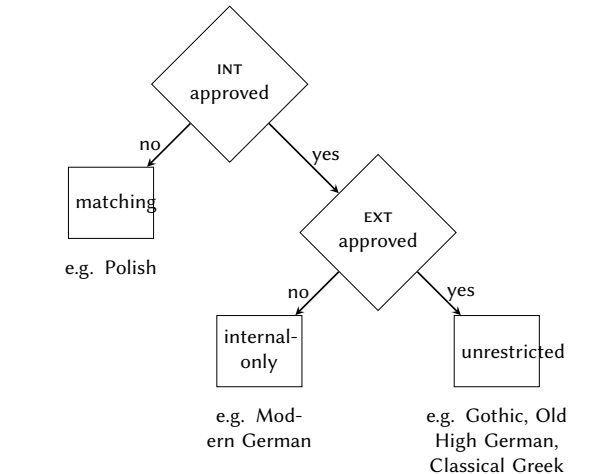
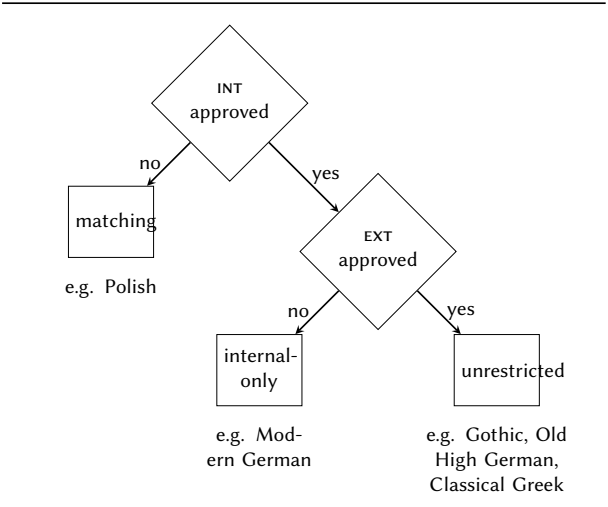


INT/EXT approved



Borer-Chomsky Conjecture: the lexicon is the source of language variation

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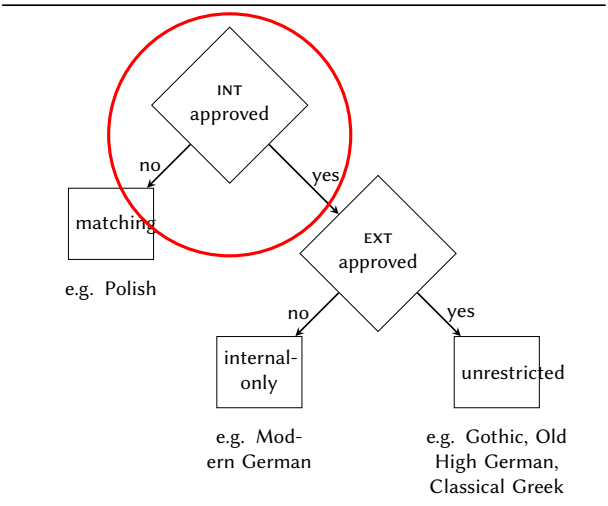

Borer-Chomsky Conjecture: the lexicon is the source of language variation

Assumptions

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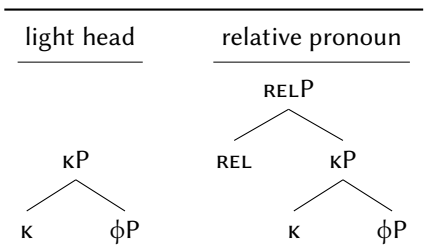
- the relative pronoun contains the features of the light head plus an additional one



The pattern in German

The pattern in German

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

Light head and relative pronoun in German

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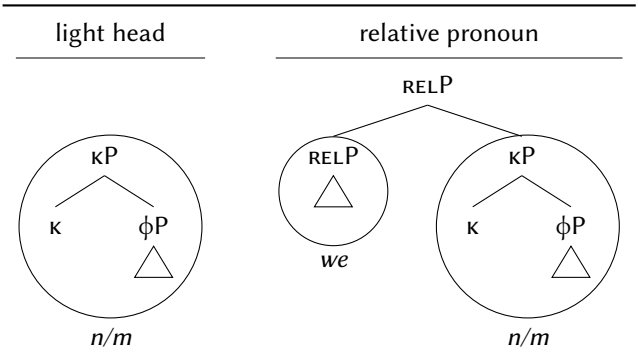

EXT_{ACC} vs. INT_{ACC} $\longrightarrow$ *wen* in German

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(15) Ich lade ~~n~~ ein, **wen** **auch Maria**
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'I invite who Maria also likes.'
(Modern German, adapted from Vogel 2001: 344)

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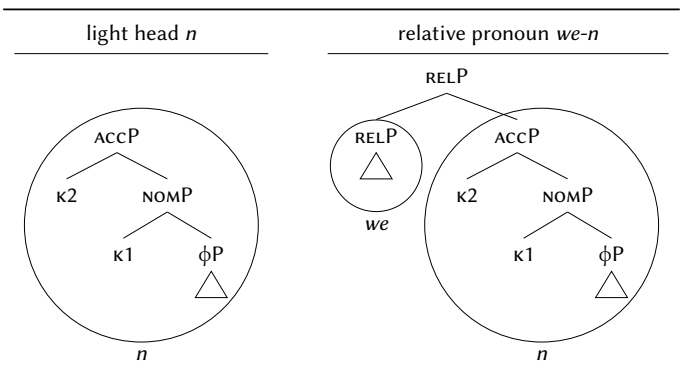

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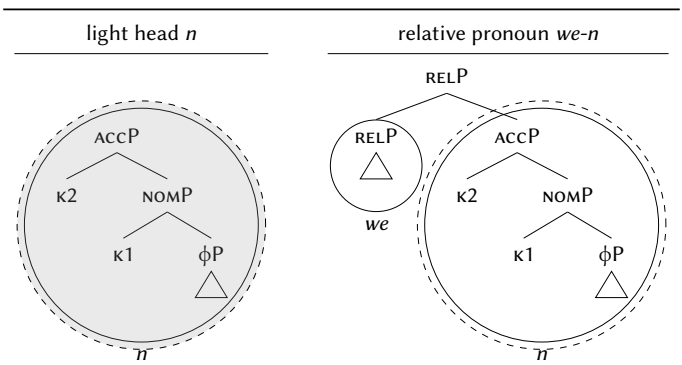

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(16) Ich lade ~~n~~ ein, **wem** **auch Maria** **vertraut**.
1SG.NOM invite.PRES.1SG$_{[\text{ACC}]}$ LH.AN.DAT RP.AN.DAT also Maria.NOM
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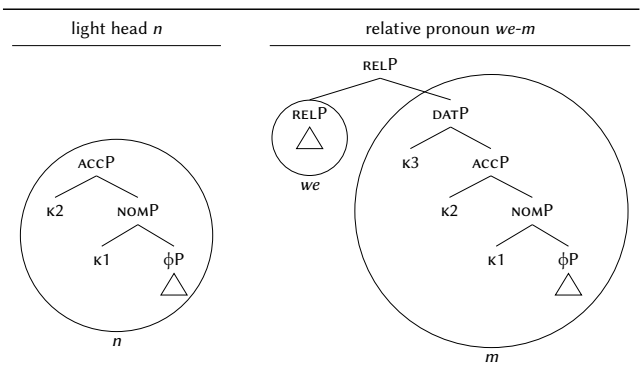

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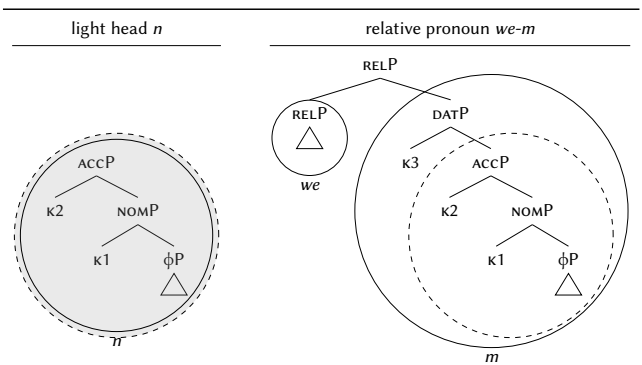

Differences in the lexicon

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Borer-Chomsky Conjecture: the lexicon is the source of language variation

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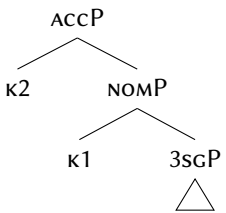

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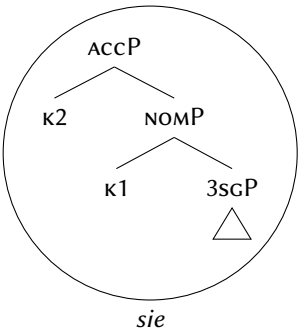

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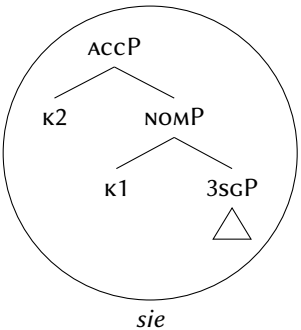

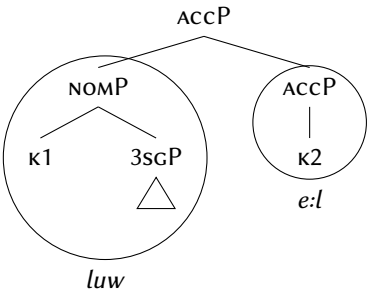

The pattern in Polish

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

Light head and relative pronoun in Polish

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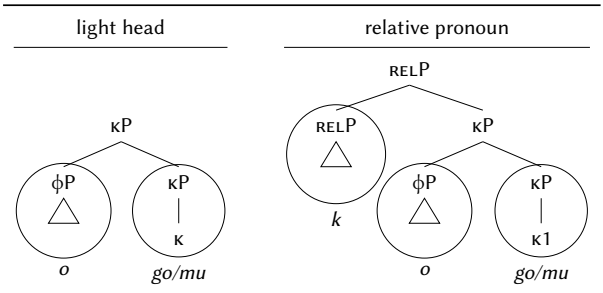

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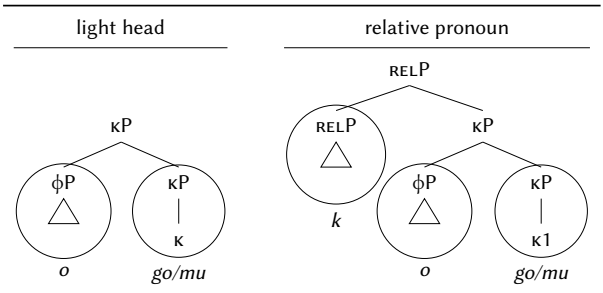

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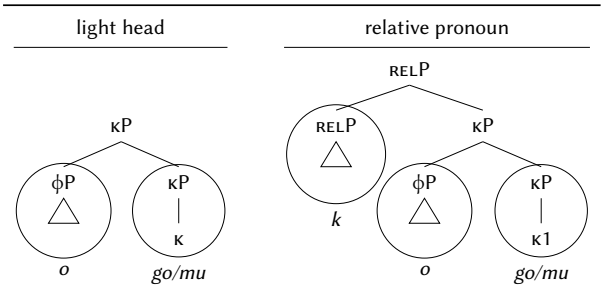

EXT_{ACC} vs. INT_{ACC} $\longrightarrow$ *kogo* in Polish

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(17) Jan lubi ~~ego~~ **kogo** **-kolkwiek Maria lubi**.
Jan like.3SG$_{[\text{ACC}]}$ LH.ACC.AN.SG RP.ACC.AN ever Maria like.3SG$_{[\text{ACC}]}$
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(Polish, adapted from Citko 2013 after Himmelreich 2017: 17)

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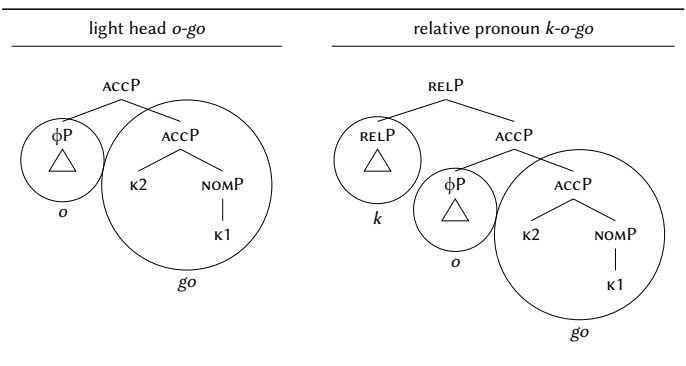

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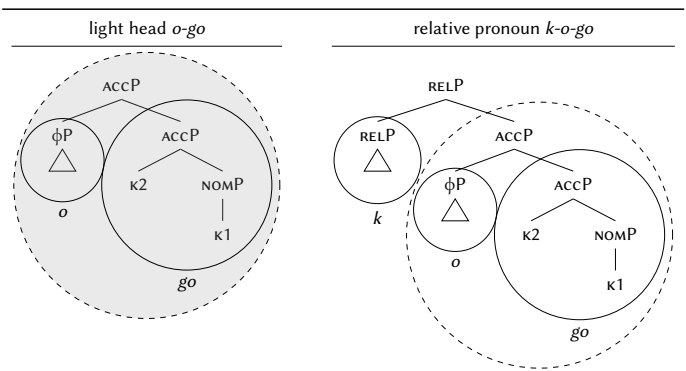

$\mathsf{EXT}_{\mathsf{ACC}}$ vs. $\mathsf{INT}_{\mathsf{DAT}} \not\rightarrow$ *komu*

EXT_{ACC} vs. INT_{DAT} $\not\rightarrow$ *komu*

(18) *Jan lubi ~~ego~~ **komu -kolkwiek dokucza**.
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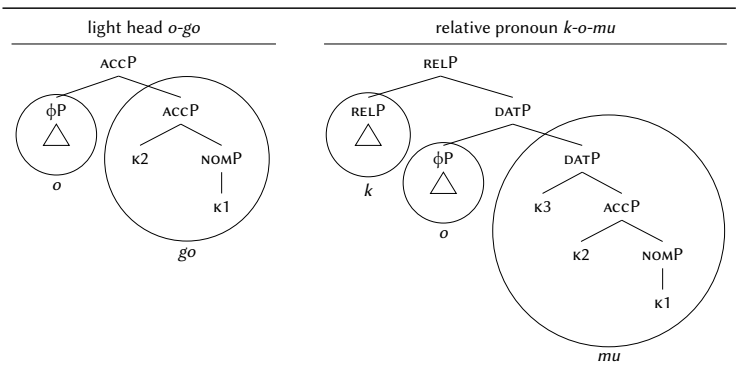

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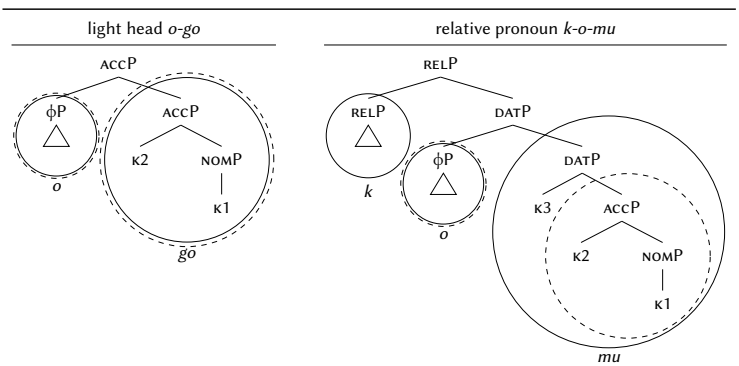

The difference between German and Polish

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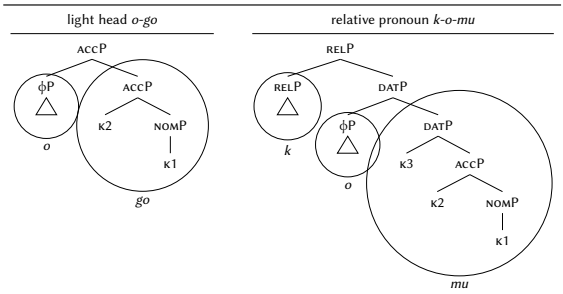

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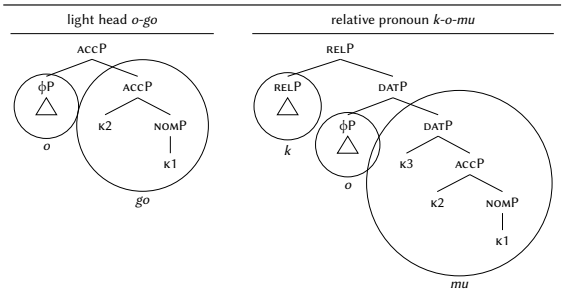

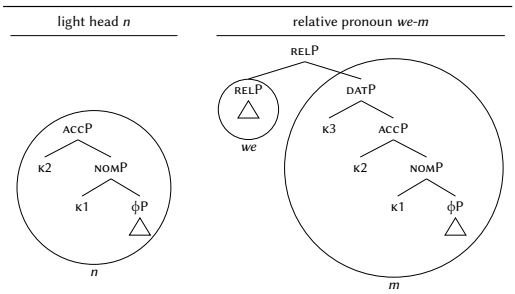

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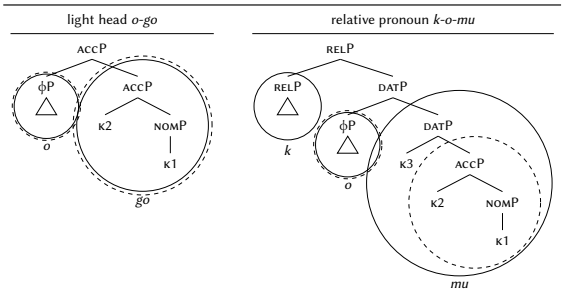

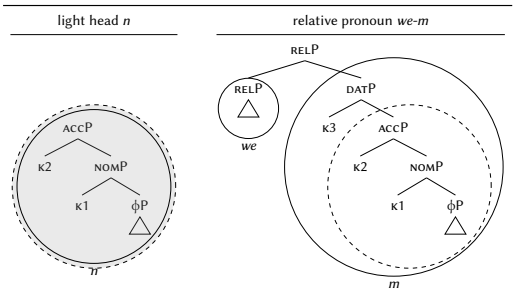

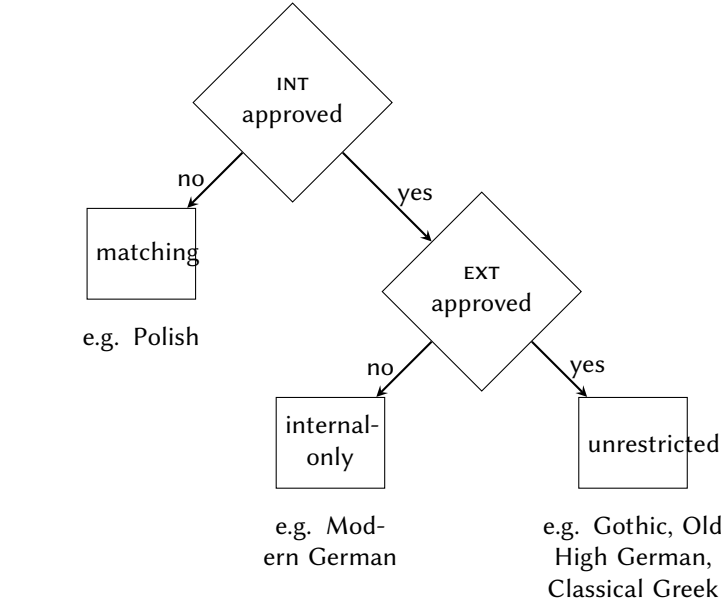
INT
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no
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matching
e.g. Polish
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yes
internal-
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unrestricted
e.g. Mod-
ern German
e.g. Gothic, Old
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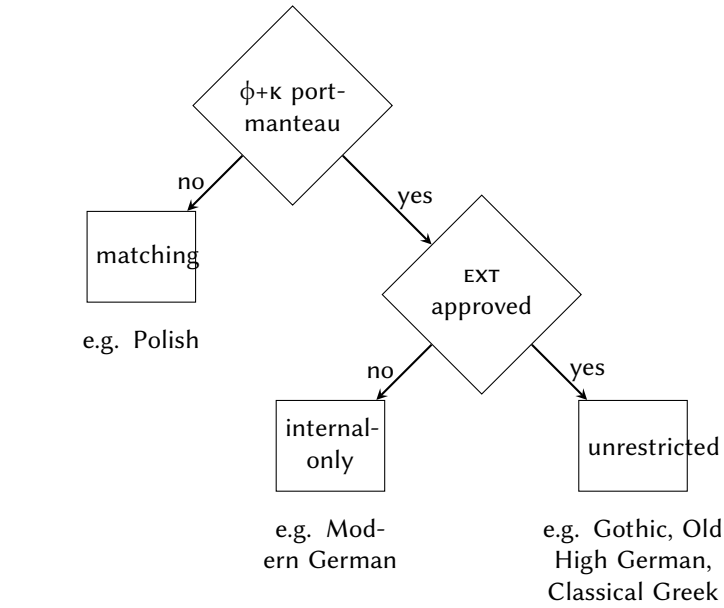
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Again

Conclusion

1. the winner of the competition
   - is stable across languages
   - NOM < ACC < DAT
2. whether the winner gets approved
   - differs across languages
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It's all about containment

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It's all about containment

Properties of morphology show reflexes in syntax

References

Citko, Barbara (2013). “Size matters: Multidominance and DP structure in Polish”. In: *Talk at the th Poznan Linguistic Meeting*.

Daskalaki, Evangelia (2011). “Case Mis-Matching as Kase Stranding”. In: *University of Pennsylvania Working Papers in Linguistics.* Ed. by Lauren A. Friedman. Vol. 17. Philadelphia: Penn Linguistics Club, pp. 77–86.

Harbert, Wayne Eugene (1978). “Gothic syntax: a relational grammar”. PhD thesis. Urbana-Champaign.

Himmelreich, Anke (2017). “Case Matching Effects in Free Relatives and Parasitic Gaps: A Study on the Properties of Agree”. PhD thesis. Universität Leipzig.

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.