## Case competition in headless relatives

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(1) Ich lade ein, wem auch Maria vertraut.  $1sg.Nom\ invite.Pres.1sg_{[Acc]}\ Rel.An.dat\ also\ Maria.Nom\ trust.Pres.3sg_{[DAT]}$  'I invite whoever Maria also trusts.'

- (1) Ich lade ein, **wem auch Maria vertraut**.

  1SG.NOM invite.PRES.1SG<sub>[ACC]</sub> REL.AN.DAT also Maria.NOM trust.PRES.3SG<sub>[DAT]</sub>

  'I invite whoever Maria also trusts.'
- (2) Ich lade die Person ein, **dem Maria**1sg.nom invite.pres.1sg<sub>[acc]</sub> the person Rel.an.dat Maria.nom
  vertraut.
  trust.pres.3sg<sub>[dat]</sub>
  'I invite the person that Maria trusts.'

- (1) Ich lade ein, **wem auch Maria vertraut**.

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  'I invite whoever Maria also trusts.'
- (2) \*Ich lade ein, wen **auch Maria vertraut**.

  1SG.NOM invite.PRES.1SG[ACC] REL.AN.ACC also Maria.NOM trust.PRES.3SG[DAT]

  'I invite whoever Maria also trusts.'

■ the winner of the competition

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- whether the winner gets approved

- the winner of the competition  $\rightarrow$  is stable across languages
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- show the generalizations

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- $\blacksquare$  whether the winner gets approved  $\rightarrow$  differs across languages
- show the generalizations
- derive the generalizations

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  'I invite whoever Maria also trusts.'
- (4) \*Ich lade ein, wen **auch Maria vertraut**.

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  'Who visits us, Maria likes.'

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  'Who visits us, Maria likes.'
- (5) Uns besucht, **wem Maria vertraut**.

  2PL.ACC visit.PRES.3SG[NOM] REL.AN.DAT Maria.NOM trust.PRES.3SG[DAT]

  'Who visits us, Maria trusts.'
- (6) \*Uns besucht, wer **Maria vertraut**.

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- (3) Ich lade ein, **wem auch Maria vertraut**.

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  'Who visits us, Maria likes.'
- (5) Uns besucht, **wem Maria vertraut**.

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  'Who visits us, Maria trusts.'

#### NOM < ACC < DAT

(6) **hòn hoi theoì philoũsin** apothnę́skei 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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- (8) ei galaubjaiþ þamm -ei insandida that believe.opt.pres.2pl<sub>[DAT]</sub> Rel.sg.m.dat -comp send.pret.3sg<sub>[ACC]</sub> jains

DEM.SG.M.NOM

'that you believe in him whom he sent' (Gothic, John 6:29)

(9) Ich lade ein, **wem auch Maria vertraut**.

1sg.nom invite.pres.1sg<sub>[ACC]</sub> rel.an.dat also Maria.nom trust.pres.3sg<sub>[DAT]</sub>

'I invite whoever Maria also trusts.'

- (9) Ich lade ein, **wem auch Maria vertraut**.

  1SG.NOM invite.PRES.1SG<sub>[ACC]</sub> REL.AN.DAT also Maria.NOM trust.PRES.3SG<sub>[DAT]</sub>

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- (10) \*Ich lade ein, wen **auch Maria vertraut**.

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internal vs. external case

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the internal case (INT) gets approved when it wins the case competition

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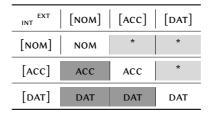
  'I trust whoever Maria also likes.'
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the internal case (INT) gets approved when it wins the case competition, the external case (EXT) does not

# Whether the winner gets approved — German schema



(12) **themo min uuirdit forlazan**, min minnot

RP.SG.M.DAT less become.PRES.3SG read.INF<sub>[DAT]</sub> less love.PRES.3SG<sub>[NOM]</sub>

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- (13) 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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  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)

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

(14) \*Jan lubi **komu -kolkwiek dokucza**.

Jan like.3sG<sub>[ACC]</sub> REL.DAT.AN.SG ever tease.3sG<sub>[DAT]</sub>

'Jan likes whoever he teases.'

- (14) \*Jan lubi komu -kolkwiek dokucza.

  Jan like.3sG<sub>[ACC]</sub> REL.DAT.AN.SG ever tease.3sG<sub>[DAT]</sub>

  'Jan likes whoever he teases.'
- (15) \*Jan ufa komu **-kolkwiek wpuścil do domu.**Jan trust.3sG<sub>[DAT]</sub> REL.DAT.AN.SG ever let.3sG<sub>[ACC]</sub> to home
  'Jan trusts whoever he let into the house.'

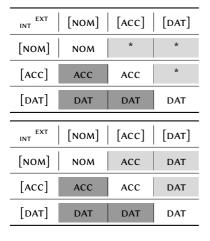
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  'Jan trusts whoever he let into the house.'

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

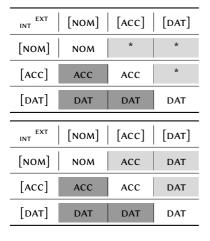
[NOM]	[ACC]	[DAT]
NOM	*	*
ACC	ACC	*
DAT	DAT	DAT
[NOM]	[ACC]	[DAT]
NOM	ACC	DAT
ACC	ACC	DAT
		1
	NOM ACC DAT [NOM] NOM	NOM *  ACC ACC  DAT DAT  [NOM] [ACC]  NOM ACC



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

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

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



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

■ The winner of the case competition  $\rightarrow$  is stable across languages

■ The winner of the case competition  $\rightarrow$  is stable across languages NOM < ACC < DAT

- The winner of the case competition → is stable across languages NOM < ACC < DAT</p>
- $\blacksquare$  Whether the winner gets approved  $\rightarrow$  differs across languages

- The winner of the case competition → is stable across languages NOM < ACC < DAT</p>
- Whether the winner gets approved → differs across languages INT/EXT approved

- The winner of the case competition → is stable across languages NOM < ACC < DAT</p>
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  - INT approved
  - INT + EXT approved
  - none approved

- The winner of the case competition → is stable across languages NOM < ACC < DAT</p>
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  - INT approved
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- show the generalizations

- The winner of the case competition → is stable across languages
  NOM < ACC < DAT</p>
- Whether the winner gets approved  $\rightarrow$  differs across languages INT/EXT approved
  - INT approved
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- show the generalizations
- derive the generalizations

NOM luw
ACC
DAT

NOM luw
ACC luw-e:l

NOM luw
ACC luw-e:l
DAT luw-e:l-na

NOM luw
ACC luw-e:l
DAT luw-e:l-na

syncretism patterns (ref)

	3sg
NOM	luw
ACC	luw- <b>e:l</b>
DAT	luw- <b>e:I</b> -na

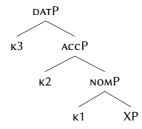
- syncretism patterns (ref)
- agreement (ref)

	3sg
NOM	luw
ACC	luw- <b>e:l</b>
DAT	luw- <b>e:l</b> -na

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

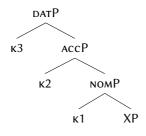
	3sg
NOM	luw
ACC	luw- <b>e:l</b>
DAT	luw- <b>e:I</b> -na

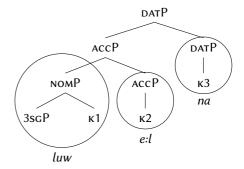
- syncretism patterns (ref)
- agreement (ref)
- relativization (ref)



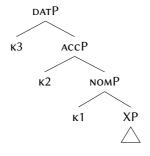
	3sg
NOM	luw
ACC	luw- <b>e:l</b>
DAT	luw- <b>e:l</b> -na

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

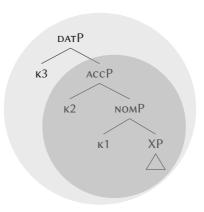




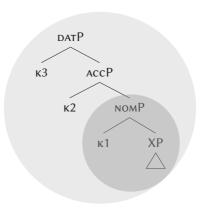
# The winning case contains the losing case



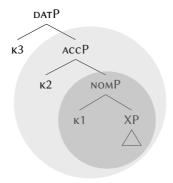
# The winning case contains the losing case



# The winning case contains the losing case

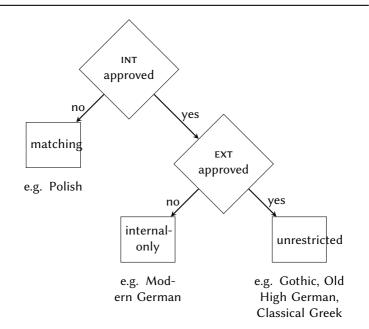


## The winning case contains the losing case

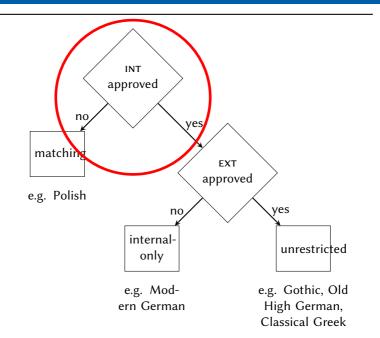


# Generalization 2: INT/EXT approved

#### Generalization 2: INT/EXT approved



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#### **Borer-Chomsky Conjecture**

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

headless relatives are derived from light-headed relatives

• headless relatives are derived from light-headed relatives

light  $head_{EXT}$  [relative pronoun<sub>INT</sub> ... ]

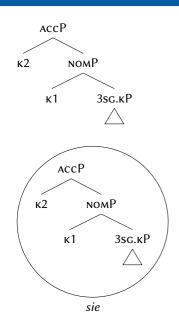
- headless relatives are derived from light-headed relatives
- deletion takes place when the light head is contained in the relative pronoun

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

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

light head		relative pronoun		
		relP		
κР		REL	K	Р
K	φР		K	φР

#### Different lexical entries



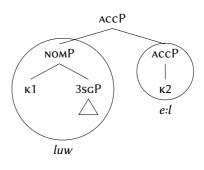


Table 1: Different language types in different situations

language type	situation	surface element	
internal-only	$K_{INT} = K_{EXT}$	$RP_{INT/EXT}$	
	$K_{INT} > K_{EXT}$	RP <sub>INT</sub>	
	$K_{INT} < K_{EXT}$	*	
matching	$K_{INT} = K_{EXT}$	$RP_{INT/EXT}$	
	$K_{INT} > K_{EXT}$	*	
	$K_{INT} < K_{EXT}$	*	

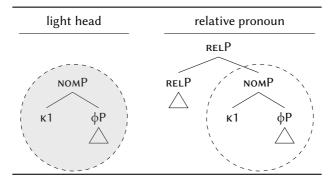


Figure 1: EXT<sub>NOM</sub> vs. INT<sub>NOM</sub> in the internal-only type

#### References

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