## Case competition in headless relatives

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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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  'I invite whoever Maria also trusts.' (Modern German, Vogel 2001: 344)
- (2) Ich lade die Person ein, **der Maria vertraut**.

  I invite<sub>[ACC]</sub> the ACC person RP.DAT Maria trust<sub>[DAT]</sub>

  'I invite the person that Maria trusts.'

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two factors determine grammaticality

1 the case of the relative pronoun

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(2) Ich lade ein, wem auch Maria vertraut.

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  I invite<sub>[ACC]</sub> RP.DAT also Maria trust<sub>[DAT]</sub>

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

  I invite<sub>[ACC]</sub> RP.ACC also Maria trust<sub>[DAT]</sub>
  'I invite whoever Maria also trusts.'

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- (3) Uns besucht, wen Maria mag. us visit<sub>[NOM]</sub> RP.ACC Maria like<sub>[ACC]</sub> 'Who visits us, Maria likes.'

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#### NOM < ACC < DAT

(5) **hòn hoi theoì philoũsin** apothnḗskei néos
RP.ACC the god love[ACC] die[NOM] young
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(Classical Greek, Menander, The Double Deceiver 125)

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- (7) ei galaubjaiþ þamm -ei insandida jains that believe<sub>[DAT]</sub> RP.DAT -COMP send<sub>[ACC]</sub> he 'that you believe in him whom he sent' (Gothic, John 6:29)

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INT case is allowed to win the case competition, EXT case is not

# Where the winning case comes from in Modern German

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

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- (11) enti aer ant uurta demo **zaimo sprah**and reply<sub>[DAT]</sub> RP.DAT to him speak<sub>[NOM]</sub>
  '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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EXT INT	NOM]	[ACC]	[DAT]
[NOM]	NOM	ACC	DAT
[ACC]	ACC	ACC	DAT
[DAT]	DAT	DAT	DAT

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

Jan like<sub>[ACC]</sub> RP.DAT ever tease<sub>[DAT]</sub>

'Jan likes whoever he teases.'

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

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- (13) \*Jan ufa komu -kolkwiek wpuścił do domu.

  Jan trust<sub>[DAT]</sub> RP.DAT ever let<sub>[ACC]</sub> to home

  'Jan trusts whoever he let into the house.'

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

Table 1: Modern German pattern

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

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

Table 3: Old High German pattern

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

Table 3: Old High German pattern

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

Table 2: Polish pattern

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

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

Table 2: Polish pattern

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

Table 3: Old High German pattern

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

Table 4: unattested pattern

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

Table 1: Modern German pattern

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

Table 3: Old High German pattern

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

Table 2: Polish pattern

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

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Table 4: Khanty pronoun		
NOM	luw	

ACC

DAT

Table 4: Khanty pronouns

noм luw

ACC luw-e:1

DAT

Table 4: Khanty pronouns

NOM luw

acc luw-e:l

DAT luw-e:l-na

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

 syncretism patterns (Baerman, Brown, and Corbett, 2005; Caha, 2009; Zompì, 2017)

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

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relativization (Keenan and Comrie, 1977; Caha, 2009)

#### NOM < ACC < DAT

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a single trigger

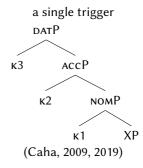
#### NOM < ACC < DAT

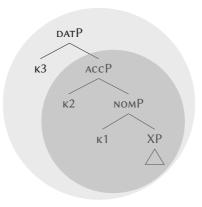
Table 4: Khanty pronouns

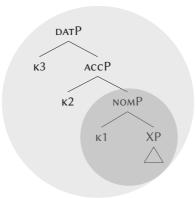
NOM luw
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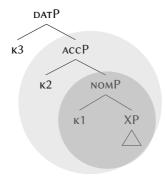
■ relativization (Keenan and Comrie, 1977; Caha, 2009)







NOM < ACC < DAT can be reduced to containment



NOM < ACC < DAT can be reduced to containment

Table 5: Modern German pattern

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

Table 6: Polish pattern

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

Table 7: Old High German pattern

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

Table 5: Modern German pattern

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

Table 6: Polish pattern

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

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

Table 6: Polish pattern

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

parameter =
INT may win case competition
OR
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EXT INT	[NOM]	[ACC]	[DAT]
[NOM]	NOM	*	*
[ACC]	ACC	ACC	*
[DAT]	DAT	DAT	DAT

Table 6: Polish pattern

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

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headless relatives are derived from light-headed relatives, headed by a special type of light head

 headless relatives are derived from light-headed relatives, headed by a special type of light head light head<sub>EXT</sub> [relative pronoun<sub>INT</sub> ... ]

headless relatives are derived from light-headed relatives, headed by a special type of light head
 light head<sub>EXT</sub> [relative pronoun<sub>INT</sub> ... ]

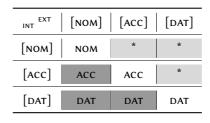
- headless relatives are derived from light-headed relatives, headed by a special type of light head
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- deletion takes place when the relative pronoun contains the light head as a single constituent

- headless relatives are derived from light-headed relatives, headed by a special type of light head
   light head<sub>EXT</sub> [relative pronoun<sub>INT</sub> ... ]
- deletion 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	relativ	relative pronoun	
	REI	LP	
D		- D	
кР	REL	κР	
к фР	I	с фР	

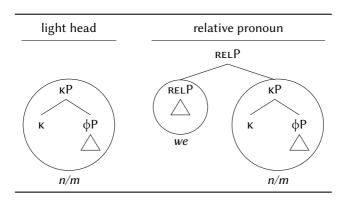
## The pattern in Modern German

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## Light head and relative pronoun in Modern German

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### $\overline{\text{EXT}_{\text{ACC}} \text{ vs. INT}_{\text{ACC}}} \rightarrow wen \text{ in Modern German}$

#### $EXT_{ACC}$ vs. $INT_{ACC} \rightarrow wen$ in Modern German

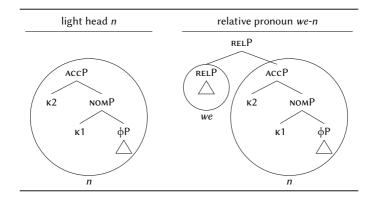
(14) Ich lade n ein, wen auch Maria mag.
I invite[ACC] LH.ACC RP.ACC also Maria like[ACC]
'I invite who Maria also likes.'

(Modern German, adapted from Vogel 2001: 344)

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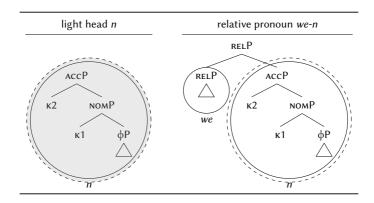
(Modern German, adapted from Vogel 2001: 344)



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### $EXT_{ACC}$ vs. $INT_{DAT} \rightarrow wem$ in Modern German

#### $EXT_{ACC}$ vs. $INT_{DAT} \rightarrow wem$ in Modern German

(15) Ich lade n ein, wem auch Maria vertraut.

I invite[ACC] LH.DAT RP.DAT also Maria trust[DAT]

'I invite whoever Maria also trusts.'

(Modern German, adapted from Vogel 2001: 344)

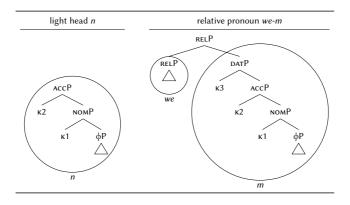
### $\overline{\text{EXT}_{ACC}}$ vs. $\overline{\text{INT}_{DAT}} \rightarrow wem \text{ in Modern German}$

(15) Ich lade n ein, wem auch Maria vertraut.

I invite<sub>[ACC]</sub> LH.DAT RP.DAT also Maria trust<sub>[DAT]</sub>

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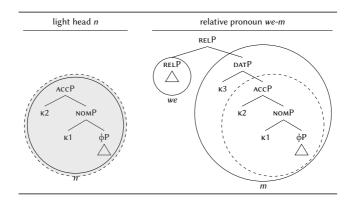
### $\overline{\text{EXT}_{ACC}}$ vs. $\overline{\text{INT}_{DAT}} \rightarrow wem \text{ in Modern German}$

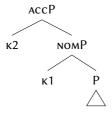
(15) Ich lade n ein, wem auch Maria vertraut.

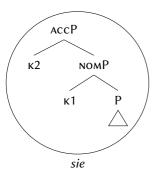
I invite<sub>[Acc]</sub> LH.DAT RP.DAT also Maria trust<sub>[DAT]</sub>

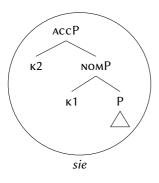
'I invite whoever Maria also trusts.'

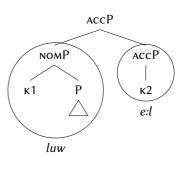
(Modern German, adapted from Vogel 2001: 344)



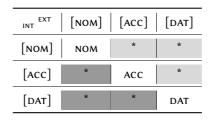






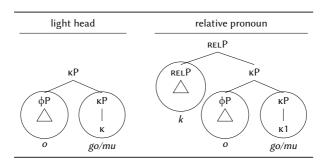


## The pattern in Polish

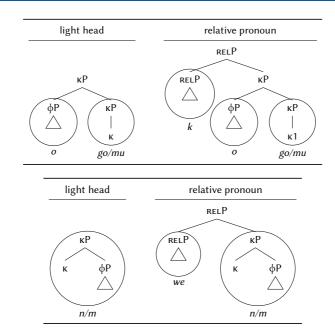


# Light head and relative pronoun in Polish

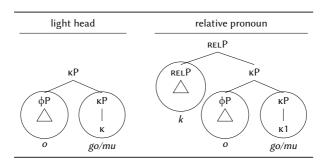
## Light head and relative pronoun in Polish



## Light head and relative pronoun in Polish



## Light head and relative pronoun in Polish



## $\mathsf{EXT}_\mathsf{ACC}$ vs. $\mathsf{INT}_\mathsf{ACC} o kogo$ in Polish

### $EXT_{ACC}$ vs. $INT_{ACC} \rightarrow kogo$ in Polish

(16) Jan lubi ogo kogo -kolkwiek Maria lubi.

Jan like<sub>[Acc]</sub> LH.ACC RP.ACC ever Maria like<sub>[Acc]</sub>

'Jan likes whoever Maria likes.'

(Polish, adapted from Citko 2013 after Himmelreich 2017: 17)

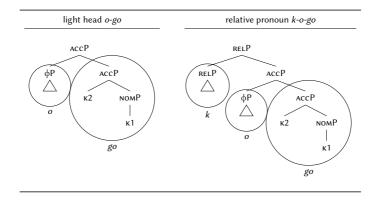
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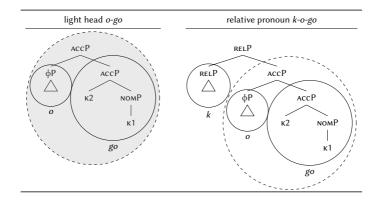
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## $\overline{\text{EXT}_{\text{ACC}}}$ vs. $\overline{\text{INT}_{\text{DAT}}} \rightarrow komu$

#### $\overline{\mathsf{EXT}_{\mathsf{ACC}}}$ vs. $\mathsf{INT}_{\mathsf{DAT}} \xrightarrow{} \mathsf{komu}$

(17) \*Jan lubi ogo komu -kolkwiek dokucza.

Jan like $_{[Acc]}$  LH.ACC RP.DAT ever tease $_{[DAT]}$ 'Jan likes whoever he teases.'

(Polish, adapted from Citko 2013 after Himmelreich 2017: 17)

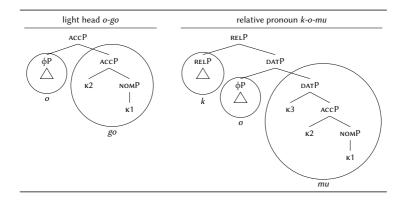
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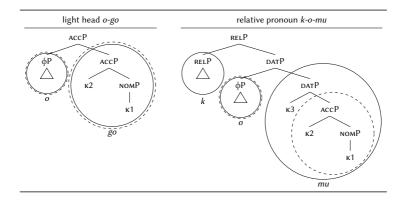
#### $\overline{\mathsf{EXT}_{\mathsf{ACC}}}$ vs. $\mathsf{INT}_{\mathsf{DAT}} \xrightarrow{} \mathit{komu}$

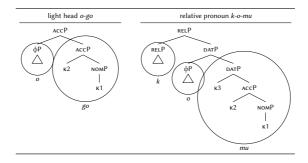
(17) \*Jan lubi ogo komu -kolkwiek dokucza.

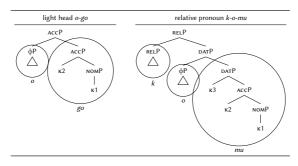
Jan like<sub>[ACC]</sub> LH.ACC RP.DAT ever tease<sub>[DAT]</sub>

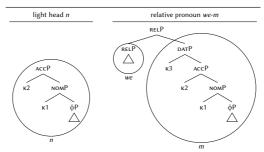
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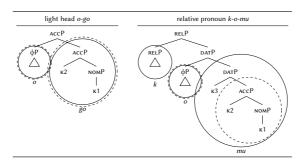
(Polish, adapted from Citko 2013 after Himmelreich 2017: 17)

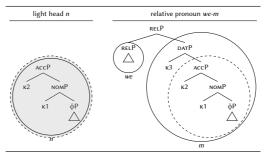


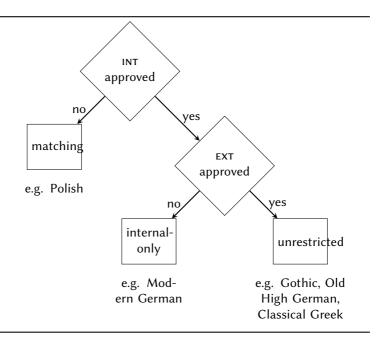


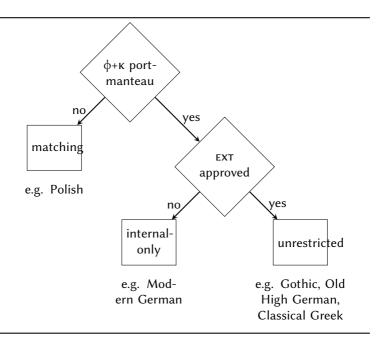












# Again

#### Conclusion

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

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It's all about containment

#### References

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