

# Case competition in headless relatives

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Goethe-Universität Frankfurt

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# Introduction

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RP.ACC the god love<sub>[ACC]</sub> die<sub>[NOM]</sub> young  
'He, whom the gods love, dies young.'

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- (7) **ei galaubjaip 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)

## INT/EXT in Modern German

## INT VS. EXT

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## INT/EXT overview in *Modern German*

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

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'whom less is read, loves less' (Old High German, Tatian 138:13)
- (11) enti aer ant uurta demo **zaimo sprah**  
and he 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, after Pittner 1995: 199)



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

‘Jan likes whoever he teases.’

(Polish, Citko 2013 after Himmelreich 2017: 17)

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(13) \*Jan ufa **komu -kolwiek 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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(14) Jan lubi kogo -kolwiek Maria lubi.

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

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



## INT/EXT overview

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Table 1: Modern German pattern

$\text{INT}^{\text{EXT}}$	[NOM]	[ACC]	[DAT]
[NOM]	NOM	*	*
[ACC]	ACC	ACC	*
[DAT]	DAT	DAT	DAT

# INT/EXT overview

Table 1: Modern German pattern

$\text{INT}^{\text{EXT}}$	[NOM]	[ACC]	[DAT]
[NOM]	NOM	*	*
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[DAT]	DAT	DAT	DAT

Table 2: Old High German pattern

$\text{INT}^{\text{EXT}}$	[NOM]	[ACC]	[DAT]
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[DAT]	DAT	DAT	DAT

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INT <sup>EXT</sup>	[NOM]	[ACC]	[DAT]
[NOM]	NOM	*	*
[ACC]	*	ACC	*
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INT <sup>EXT</sup>	[NOM]	[ACC]	[DAT]
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Table 4: unattested pattern

INT <sup>EXT</sup>	[NOM]	[ACC]	[DAT]
[NOM]	NOM	ACC	DAT
[ACC]	*	ACC	DAT
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The stable  $\text{NOM} < \text{ACC} < \text{DAT}$

# The stable NOM < ACC < DAT

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

3SG	
NOM	luw
ACC	
DAT	

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3sg	
NOM	luw
ACC	luw-e:l
DAT	

# The stable NOM < ACC < DAT

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

	3sg
NOM	luw
ACC	luw-e:l
DAT	luw-e:l-na

# The stable NOM < ACC < DAT

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

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

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

# The stable NOM < ACC < DAT

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

	3SG
NOM	luw
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- agreement (cf. Moravcsik, 1978)

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

3SG	
NOM	luw
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a single cause

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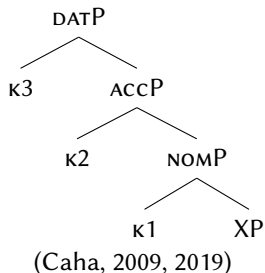
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Table 5: Khanty 3sg pronouns (Nikolaeva 1999: 16 after Smith et al. 2019)

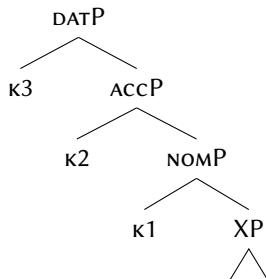
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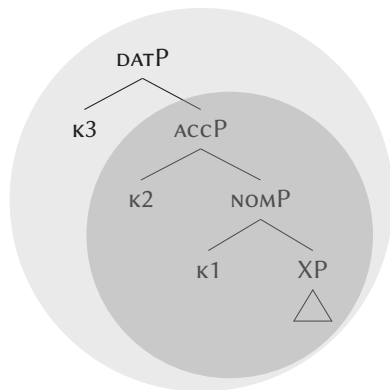
a single cause



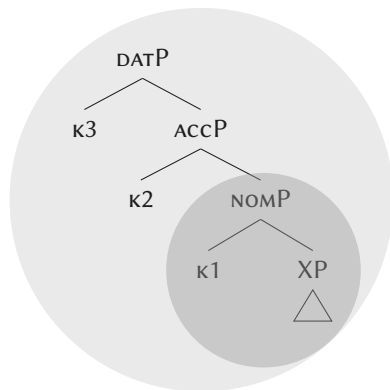
## The winning case contains the losing case



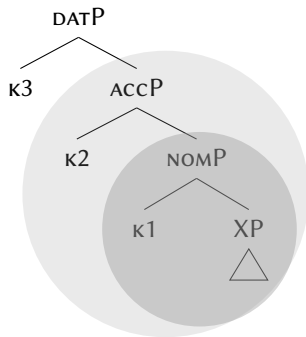
## The winning case contains the losing case



# The winning case contains the losing case



# The winning case contains the losing case



# The INT/EXT parameter

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Table 6: Modern German pattern

$\text{INT}^{\text{EXT}}$	[NOM]	[ACC]	[DAT]
[NOM]	NOM	*	*
[ACC]	ACC	ACC	*
[DAT]	DAT	DAT	DAT

# The INT/EXT parameter

Table 6: Modern German pattern

INT <sup>EXT</sup>	[NOM]	[ACC]	[DAT]
[NOM]	NOM	*	*
[ACC]	ACC	ACC	*
[DAT]	DAT	DAT	DAT

Table 7: Polish pattern

INT <sup>EXT</sup>	[NOM]	[ACC]	[DAT]
[NOM]	NOM	*	*
[ACC]	*	ACC	*
[DAT]	*	*	DAT



# The INT/EXT parameter

Table 6: Modern German pattern

INT <sup>EXT</sup>	[NOM]	[ACC]	[DAT]
[NOM]	NOM	*	*
[ACC]	ACC	ACC	*
[DAT]	DAT	DAT	DAT

Table 7: Polish pattern

INT <sup>EXT</sup>	[NOM]	[ACC]	[DAT]
[NOM]	NOM	*	*
[ACC]	*	ACC	*
[DAT]	*	*	DAT

Table 8: Old High German pattern

INT <sup>EXT</sup>	[NOM]	[ACC]	[DAT]
[NOM]	NOM	ACC	DAT
[ACC]	ACC	ACC	DAT
[DAT]	DAT	DAT	DAT

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Table 6: Modern German pattern

$\text{INT}^{\text{EXT}}$	[NOM]	[ACC]	[DAT]
[NOM]	NOM	*	*
[ACC]	ACC	ACC	*
[DAT]	DAT	DAT	DAT

Table 7: Polish pattern

$\text{INT}^{\text{EXT}}$	[NOM]	[ACC]	[DAT]
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# The INT/EXT parameter

Table 6: Modern German pattern

INT <sup>EXT</sup>	[NOM]	[ACC]	[DAT]
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INT <sup>EXT</sup>	[NOM]	[ACC]	[DAT]
[NOM]	NOM	*	*
[ACC]	*	ACC	*
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INT may surface

Modern German	yes
Polish	no

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

Table 7: Polish pattern

INT <sup>EXT</sup>	[NOM]	[ACC]	[DAT]
[NOM]	NOM	*	*
[ACC]	*	ACC	*
[DAT]	*	*	DAT

INT may surface

Vogel 2001  
OT constraints

Modern German

yes

$x \gg y$

Polish

no

$y \gg x$

# The INT/EXT parameter

Table 6: Modern German pattern

INT <sup>EXT</sup>	[NOM]	[ACC]	[DAT]
[NOM]	NOM	*	*
[ACC]	ACC	ACC	*
[DAT]	DAT	DAT	DAT

Table 7: Polish pattern

INT <sup>EXT</sup>	[NOM]	[ACC]	[DAT]
[NOM]	NOM	*	*
[ACC]	*	ACC	*
[DAT]	*	*	DAT

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

# My proposal

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- embedded in Nanosyntax (Starke, 2009)
- same syntax and same spellout algorithm for each language
- difference is in the lexicon (Borer-Chomsky Conjecture)

# Assumptions

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I   hug      DEM.ACC RP.ACC I   like  
'I hug him that I like.'

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light head<sub>EXT</sub> [relative pronoun<sub>INT</sub> ... ]

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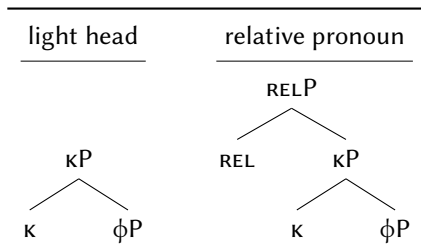
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light head<sub>EXT</sub> [relative pronoun<sub>INT</sub> ... ]
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- the relative pronoun contains the features of the light head plus an additional one





# Light head and relative pronoun in Modern German

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$\text{INT}^{\text{EXT}}$	[NOM]	[ACC]	[DAT]
[NOM]	NOM	*	*
[ACC]	ACC	ACC	*
[DAT]	DAT	DAT	DAT

# Light head and relative pronoun in Modern German

$\text{INT}^{\text{EXT}}$	[NOM]	[ACC]	[DAT]
[NOM]	NOM	*	*
[ACC]	ACC	ACC	*
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$\text{INT}^{\text{EXT}}$	[NOM]	[ACC]	[DAT]
[NOM]	NOM	*	*
[ACC]	ACC	ACC	*
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Table 8: Modern German LH and RP

LH	RP
n	we-m

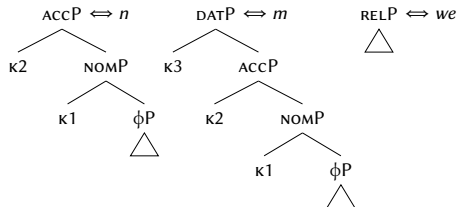
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LH	RP
n	we-m

lexicon



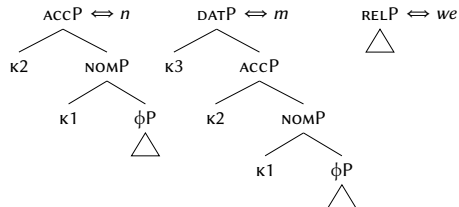
# Light head and relative pronoun in Modern German

$\text{INT}^{\text{EXT}}$	[NOM]	[ACC]	[DAT]
[NOM]	NOM	*	*
[ACC]	ACC	ACC	*
[DAT]	DAT	DAT	DAT

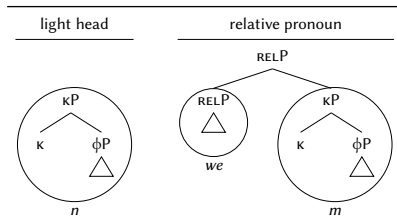
Table 8: Modern German LH and RP

LH	RP
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lexicon



internal syntax



# ACC<sub>EXT</sub> vs. DAT<sub>INT</sub> in Modern German

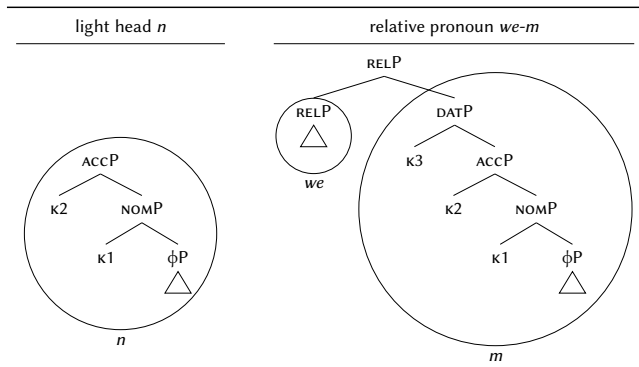
## ACC<sub>EXT</sub> vs. DAT<sub>INT</sub> in Modern German

- (14) Ich lade  $\pi$  ein, **wem auch Maria vertraut.**  
I invite<sub>[ACC]</sub> LH.ACC RP.DAT also Maria trust<sub>[DAT]</sub>  
'I invite whoever Maria also trusts.' (Modern German, Vogel 2001: 344)



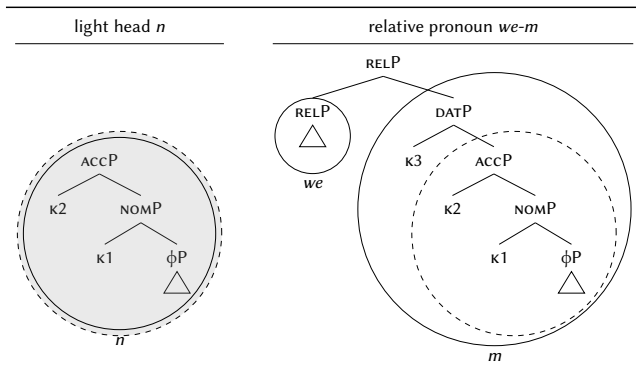
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[NOM]	NOM	*	*
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$\text{INT}^{\text{EXT}}$	[NOM]	[ACC]	[DAT]
[NOM]	NOM	*	*
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$\text{INT}^{\text{EXT}}$	[NOM]	[ACC]	[DAT]
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[ACC]	*	ACC	*
[DAT]	*	*	DAT

Table 9: Polish LH and RP

LH	RP
o-go	k-o-mu

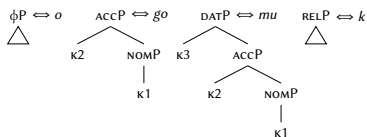
# Light head and relative pronoun in Polish

$\text{INT}^{\text{EXT}}$	[NOM]	[ACC]	[DAT]
[NOM]	NOM	*	*
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lexicon



# Light head and relative pronoun in Polish

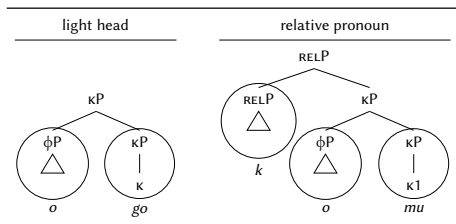
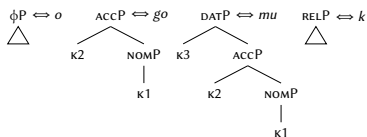
$\text{INT}^{\text{EXT}}$	[NOM]	[ACC]	[DAT]
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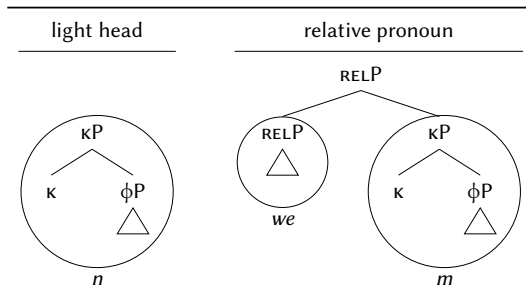
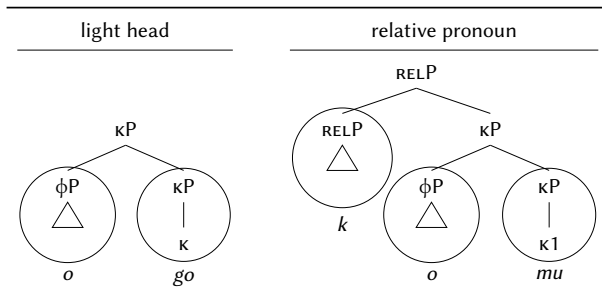
lexicon





# Comparing Polish to Modern German

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## ACC<sub>EXT</sub> vs. DAT<sub>INT</sub> in Polish

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(15) \*Jan lubi       $\emptyset$  **komu -kolwiek dokucza.**

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

‘Jan likes whoever he teases.’

(Polish, Citko 2013 after Himmelreich 2017: 17)

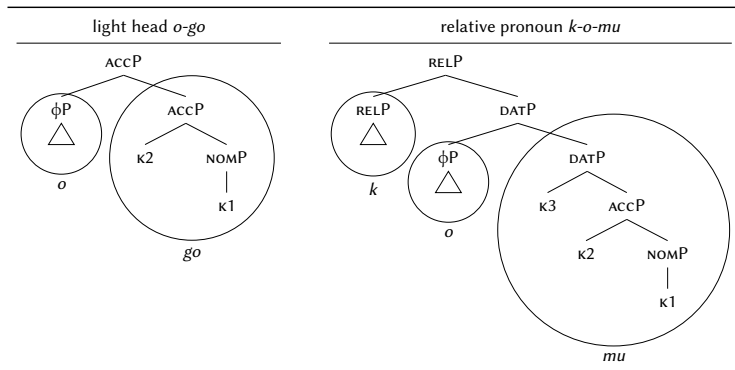
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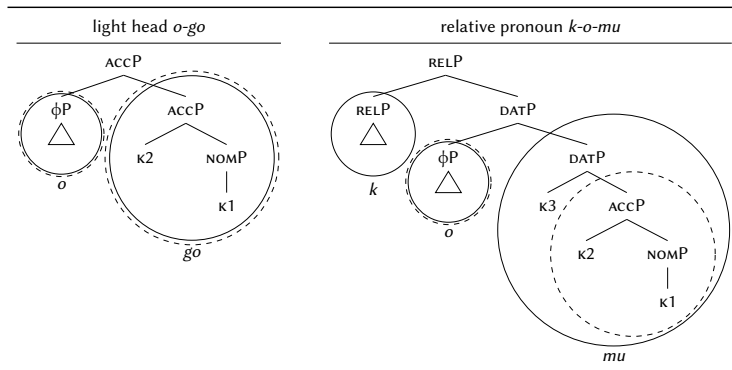
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# The INT/EXT parameter

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	INT may surface
Modern German	yes
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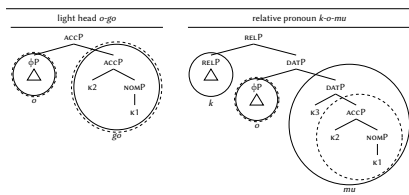
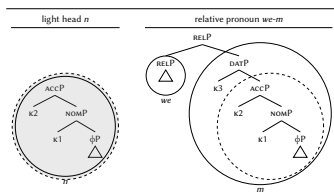


# The INT/EXT parameter

	INT may surface	$\phi + \kappa$
Modern German	yes	portmanteau
Polish	no	separate morphemes

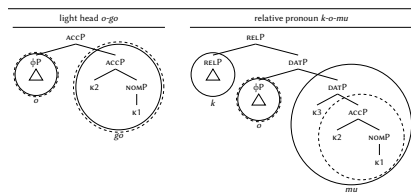
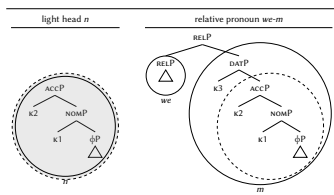
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lexical entries  $\rightarrow$  internal syntax  $\rightarrow$  containment  $\rightarrow$  deletion  $\rightarrow$  headless relative

# Conclusion

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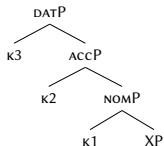
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- the INT/EXT parameter

# Conclusion

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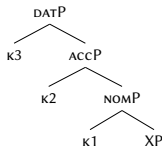
- the INT/EXT parameter



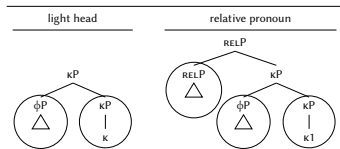
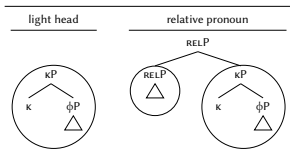
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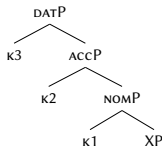
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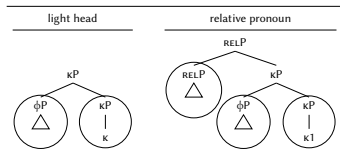
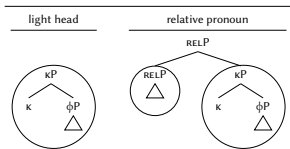
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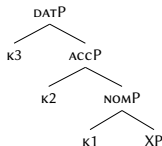
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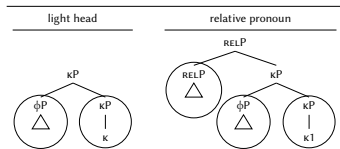
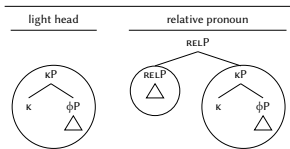
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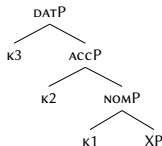


two factors → one factor:

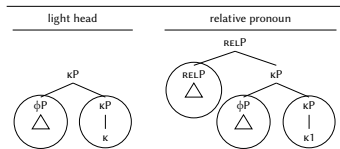
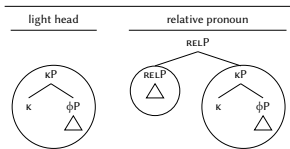
# Conclusion

two factors influence grammaticality

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- the INT/EXT parameter



two factors → one factor: **containment**

extra stuff \* cinque trees \* ohg comparisons