

# Case competition in headless relatives

Fenna Bergsma

Research Training Group ‘Nominal Modification’  
Goethe-Universität Frankfurt

December 17, 2021

# Introduction

# Introduction

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

# Introduction

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

# Introduction

- (1) Ich lade ein, **wem auch Maria vertraut.**  
I invite<sub>[ACC]</sub> RP.DAT also Maria trust<sub>[DAT]</sub>  
'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.'

# Introduction

- (1) Ich lade ein, **wem auch Maria vertraut.**  
I invite<sub>[ACC]</sub> RP.DAT also Maria trust<sub>[DAT]</sub>  
'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.'

# Introduction

- (1) Ich lade ein, **wem auch Maria vertraut.**  
I invite<sub>[ACC]</sub> RP.DAT also Maria trust<sub>[DAT]</sub>  
'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.'

# Introduction

- (1) Ich lade ein, **wem auch Maria vertraut.**  
I invite<sub>[ACC]</sub> RP.DAT also Maria trust<sub>[DAT]</sub>  
'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.'



# Introduction

- (1) Ich lade ein, **wem auch Maria vertraut.**  
I invite<sub>[ACC]</sub> RP.DAT also Maria trust<sub>[DAT]</sub>  
'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.'

# Introduction

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

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

‘I invite whoever Maria also trusts.’ (Modern German, Vogel 2001: 344)

# Introduction

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

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

‘I invite whoever Maria also trusts.’ (Modern German, Vogel 2001: 344)

two factors determine grammaticality

# Introduction

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

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

‘I invite whoever Maria also trusts.’ (Modern German, Vogel 2001: 344)

two factors determine grammaticality

- 1 the case of the relative pronoun

# Introduction

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

two factors determine grammaticality

1 the case of the relative pronoun

- NOM < ACC < DAT

# Introduction

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

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

‘I invite whoever Maria also trusts.’ (Modern German, Vogel 2001: 344)

two factors determine grammaticality

1 the case of the relative pronoun

- NOM < ACC < DAT
- is stable across languages

# Introduction

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

two factors determine grammaticality

- 1 the case of the relative pronoun
  - NOM < ACC < DAT
  - is stable across languages
- 2 where the winning case comes from

# Introduction

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

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

'I invite whoever Maria also trusts.' (Modern German, Vogel 2001: 344)

two factors determine grammaticality

1 the case of the relative pronoun

- NOM < ACC < DAT
- is stable across languages

2 where the winning case comes from

- INT/EXT



# Introduction

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

two factors determine grammaticality

- 1 the case of the relative pronoun
  - NOM < ACC < DAT
  - is stable across languages
- 2 where the winning case comes from
  - INT/EXT
  - differs across languages

# This presentation

# This presentation

- Illustrate generalizations with data

# This presentation

- Illustrate generalizations with data
  - the stable  $NOM < ACC < DAT$

# This presentation

- Illustrate generalizations with data
  - the stable  $NOM < ACC < DAT$
  - the INT/EXT parameter

# This presentation

- Illustrate generalizations with data
  - the stable  $NOM < ACC < DAT$
  - the INT/EXT parameter
- Derive generalizations from the theory

# This presentation

- Illustrate generalizations with data
  - the stable  $NOM < ACC < DAT$
  - the INT/EXT parameter
- Derive generalizations from the theory
  - the stable  $NOM < ACC < DAT$

# This presentation

- Illustrate generalizations with data
  - the stable  $NOM < ACC < DAT$
  - the INT/EXT parameter
- Derive generalizations from the theory
  - the stable  $NOM < ACC < DAT$
  - the INT/EXT parameter



# This presentation

- Illustrate generalizations with data
  - the stable  $NOM < ACC < DAT$
  - the INT/EXT parameter
- Derive generalizations from the theory
  - the stable  $NOM < ACC < DAT$
  - **the INT/EXT parameter**

## NOM < ACC < DAT in Modern German

# NOM < ACC < DAT in Modern German

NOM < ACC < DAT

(cf. Harbert, 1978; Pittner, 1995; Vogel, 2001; Grosu, 2003a)

# NOM < ACC < DAT in Modern German

NOM < **ACC** < **DAT**

(cf. Harbert, 1978; Pittner, 1995; Vogel, 2001; Grosu, 2003a)

## NOM < ACC < DAT in Modern German

NOM < **ACC** < **DAT**

(cf. Harbert, 1978; Pittner, 1995; Vogel, 2001; Grosu, 2003a)

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

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

'I invite whoever Maria also trusts.' (Modern German, Vogel 2001: 344)

# NOM < ACC < DAT in Modern German

NOM < **ACC** < **DAT**

(cf. Harbert, 1978; Pittner, 1995; Vogel, 2001; Grosu, 2003a)

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

## NOM < ACC < DAT in Modern German

**NOM < ACC < DAT**

(cf. Harbert, 1978; Pittner, 1995; Vogel, 2001; Grosu, 2003a)

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

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

'I invite whoever Maria also trusts.' (Modern German, Vogel 2001: 344)

## NOM < ACC < DAT in Modern German

**NOM < ACC < DAT**

(cf. Harbert, 1978; Pittner, 1995; Vogel, 2001; Grosu, 2003a)

- (2) Ich lade ein, **wem** auch Maria vertraut.  
I invite<sub>[ACC]</sub> RP.**DAT** also Maria trust<sub>[DAT]</sub>  
'I invite whoever Maria also trusts.' (Modern German, Vogel 2001: 344)
- (3) Uns besucht, **wen** Maria mag.  
us visit<sub>[NOM]</sub> RP.**ACC** Maria like<sub>[ACC]</sub>  
'Who visits us, Maria likes.' (Modern German, Vogel 2001: 343)



## NOM < ACC < DAT in Modern German

NOM < ACC < DAT

(cf. Harbert, 1978; Pittner, 1995; Vogel, 2001; Grosu, 2003a)

- (2) Ich lade ein, **wem** auch Maria vertraut.  
I invite<sub>[ACC]</sub> RP.DAT also Maria trust<sub>[DAT]</sub>  
'I invite whoever Maria also trusts.' (Modern German, Vogel 2001: 344)
- (3) Uns besucht, **wen** Maria mag.  
us visit<sub>[NOM]</sub> RP.ACC Maria like<sub>[ACC]</sub>  
'Who visits us, Maria likes.' (Modern German, Vogel 2001: 343)
- (4) \*Uns besucht, wer Maria mag.  
us visit<sub>[NOM]</sub> RP.NOM Maria like<sub>[ACC]</sub>  
'Who visits us, Maria likes.' (Modern German, Vogel 2001: 343)

## NOM < ACC < DAT in Modern German

### NOM < ACC < DAT

(cf. Harbert, 1978; Pittner, 1995; Vogel, 2001; Grosu, 2003a)

- (2) Ich lade ein, **wem** auch Maria vertraut.  
I invite<sub>[ACC]</sub> RP.**DAT** also Maria trust<sub>[DAT]</sub>  
'I invite whoever Maria also trusts.' (Modern German, Vogel 2001: 344)
- (3) Uns besucht, **wen** Maria mag.  
us visit<sub>[NOM]</sub> RP.**ACC** Maria like<sub>[ACC]</sub>  
'Who visits us, Maria likes.' (Modern German, Vogel 2001: 343)

## NOM < ACC < DAT in Modern German

### NOM < ACC < DAT

(cf. Harbert, 1978; Pittner, 1995; Vogel, 2001; Grosu, 2003a)

- (2) Ich lade ein, **wem auch Maria vertraut**.  
I invite<sub>[ACC]</sub> RP.DAT also Maria trust<sub>[DAT]</sub>  
'I invite whoever Maria also trusts.' (Modern German, Vogel 2001: 344)
- (3) Uns besucht, **wen Maria mag**.  
us visit<sub>[NOM]</sub> RP.ACC Maria like<sub>[ACC]</sub>  
'Who visits us, Maria likes.' (Modern German, Vogel 2001: 343)
- (4) Uns besucht, **wem Maria vertraut**.  
us visit<sub>[NOM]</sub> RP.DAT Maria trust<sub>[DAT]</sub>  
'Who visits us, Maria trusts.' (Modern German, Vogel 2001: 343)

## NOM < ACC < DAT in Modern German

**NOM < ACC < DAT**

(cf. Harbert, 1978; Pittner, 1995; Vogel, 2001; Grosu, 2003a)

- (2) Ich lade ein, **wem** auch Maria vertraut.  
I invite<sub>[ACC]</sub> RP.**DAT** also Maria trust<sub>[DAT]</sub>  
'I invite whoever Maria also trusts.' (Modern German, Vogel 2001: 344)
- (3) Uns besucht, **wen** Maria mag.  
us visit<sub>[NOM]</sub> RP.**ACC** Maria like<sub>[ACC]</sub>  
'Who visits us, Maria likes.' (Modern German, Vogel 2001: 343)
- (4) Uns besucht, **wem** Maria vertraut.  
us visit<sub>[NOM]</sub> RP.**DAT** Maria trust<sub>[DAT]</sub>  
'Who visits us, Maria trusts.' (Modern German, Vogel 2001: 343)
- (5) \*Uns besucht, wer Maria vertraut.  
us visit<sub>[NOM]</sub> RP.**NOM** Maria trust<sub>[DAT]</sub>  
'Who visits us, Maria trusts.' (Modern German, Vogel 2001: 343)

## NOM < ACC < DAT in Modern German

### NOM < ACC < DAT

(cf. Harbert, 1978; Pittner, 1995; Vogel, 2001; Grosu, 2003a)

- (2) Ich lade ein, **wem auch Maria vertraut**.  
I invite<sub>[ACC]</sub> RP.**DAT** also Maria trust<sub>[DAT]</sub>  
'I invite whoever Maria also trusts.' (Modern German, Vogel 2001: 344)
- (3) Uns besucht, **wen Maria mag**.  
us visit<sub>[NOM]</sub> RP.**ACC** Maria like<sub>[ACC]</sub>  
'Who visits us, Maria likes.' (Modern German, Vogel 2001: 343)
- (4) Uns besucht, **wem Maria vertraut**.  
us visit<sub>[NOM]</sub> RP.**DAT** Maria trust<sub>[DAT]</sub>  
'Who visits us, Maria trusts.' (Modern German, Vogel 2001: 343)

NOM < ACC < DAT in other languages

## NOM < ACC < DAT in other languages

NOM < ACC < DAT

## NOM < ACC < DAT in other languages

NOM < ACC < DAT

- (5) **hòn hoi theoi philoûsin** apothnēskēi néos  
RP.ACC the god love<sub>[ACC]</sub> die<sub>[NOM]</sub> young  
'He, whom the gods love, dies young.'

(Classical Greek, Menander, The Double Deceiver 125)



## NOM < ACC < DAT in other languages

NOM < ACC < DAT

- (5) **hòn hoi theoi philoūsin** apothnēskei néos  
RP.**ACC** the god love<sub>[ACC]</sub> die<sub>[NOM]</sub> young  
'He, whom the gods love, dies young.'  
(Classical Greek, Menander, The Double Deceiver 125)
- (6) **themo min uuirdit forlazan**, min minnot  
RP.**DAT** less become read<sub>[DAT]</sub> less love<sub>[NOM]</sub>  
'whom less is read, loves less'  
(Old High German, Tatian 138:13)

## NOM < ACC < DAT in other languages

NOM < ACC < DAT

- (5) **hòn hoi theoi philoūsin** apothnēskei néos  
RP.**ACC** the god love<sub>[ACC]</sub> die<sub>[NOM]</sub> young  
'He, whom the gods love, dies young.'  
(Classical Greek, Menander, The Double Deceiver 125)
- (6) **themo min uuirdit forlazan**, min minnot  
RP.**DAT** less become read<sub>[DAT]</sub> less love<sub>[NOM]</sub>  
'whom less is read, loves less'  
(Old High German, Tatian 138:13)
- (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/EXT in Modern German

INT VS. EXT

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

# INT/EXT in Modern German

## INT VS. EXT

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

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

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

'I invite whoever Maria also trusts.' (Modern German, Vogel 2001: 344)

# INT/EXT in Modern German

## INT VS. EXT

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

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

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

‘I invite whoever Maria also trusts.’ (Modern German, Vogel 2001: 344)

# INT/EXT in Modern German

## INT VS. EXT

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

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

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

'I invite whoever Maria also trusts.' (Modern German, Vogel 2001: 344)

- (9) \*Ich vertraue, wem **auch Maria mag.**

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

'I trust whoever Maria also likes.' (Modern German, Vogel 2001: 345)

# INT/EXT in Modern German

## INT VS. **EXT**

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

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

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

'I invite whoever Maria also trusts.' (Modern German, Vogel 2001: 344)

- (9) \*Ich vertraue, wem **auch Maria mag.**

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

'I trust whoever Maria also likes.' (Modern German, Vogel 2001: 345)



# INT/EXT in Modern German

## INT VS. EXT

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

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

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

‘I invite whoever Maria also trusts.’ (Modern German, Vogel 2001: 344)

- (9) \*Ich vertraue, wem **auch Maria mag.**

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

‘I trust whoever Maria also likes.’ (Modern German, Vogel 2001: 345)

■ INT: yes

■ EXT: no

## INT/EXT overview in *Modern German*

# INT/EXT overview in Modern German

- INT: yes
- EXT: no

# INT/EXT overview in Modern German

- INT: yes
- EXT: no

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

# INT/EXT in Old High German

# INT/EXT in Old High German

- INT: yes
- EXT: yes

# INT/EXT in Old High German

■ INT: yes

■ EXT: yes

- (10) **themo min uuirdit forlazan**, min minnot  
RP.**DAT** less become read<sub>[DAT]</sub> less love<sub>[NOM]</sub>  
'whom less is read, loves less' (Old High German, Tatian 138:13)

# INT/EXT in Old High German

■ INT: yes

■ EXT: yes

- (10) **themo min uuirdit forlazan**, min minnot  
RP.**DAT** less become read<sub>[DAT]</sub> less love<sub>[NOM]</sub>  
'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)



# INT/EXT in Old High German

■ INT: yes

■ EXT: yes

- (10) **themo min uuirdit forlazan**, min minnot  
RP.**DAT** less become read<sub>[DAT]</sub> less love<sub>[NOM]</sub>  
'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)

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

## INT/EXT in Polish

## INT/EXT in Polish

- INT: no
- EXT: no

## INT/EXT in Polish

■ INT: no

■ EXT: no

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

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

‘Jan likes whoever he teases.’

(Polish, Citko 2013 after Himmelreich 2017: 17)

## INT/EXT in Polish

■ INT: no

■ EXT: no

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

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

‘Jan likes whoever he teases.’

(Polish, Citko 2013 after Himmelreich 2017: 17)

(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.’

(Polish, Citko 2013 after Himmelreich 2017: 17)

## INT/EXT in Polish

■ INT: no

■ EXT: no

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

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

‘Jan likes whoever he teases.’

(Polish, Citko 2013 after Himmelreich 2017: 17)

(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.’

(Polish, Citko 2013 after Himmelreich 2017: 17)

(14) Jan lubi **kogo -kolwiek Maria lubi.**

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

‘Jan likes whoever Maria likes.’

(Polish, Citko 2013 after Himmelreich 2017: 17)

## INT/EXT in Polish

■ INT: no

■ EXT: no

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

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

‘Jan likes whoever he teases.’

(Polish, Citko 2013 after Himmelreich 2017: 17)

(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.’

(Polish, Citko 2013 after Himmelreich 2017: 17)

## INT/EXT in Polish

■ INT: no

■ EXT: no

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

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

‘Jan likes whoever he teases.’

(Polish, Citko 2013 after Himmelreich 2017: 17)

(13) \*Jan ufa **komu -kółwiek 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.’

(Polish, Citko 2013 after Himmelreich 2017: 17)

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



## INT/EXT overview

# INT/EXT overview

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

Table 2: Old High German pattern

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

# INT/EXT overview

Table 1: Modern German pattern

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

Table 2: Old High German pattern

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

Table 3: Polish pattern

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

# INT/EXT overview

Table 1: Modern German pattern

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

Table 2: Old High German pattern

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

Table 3: Polish pattern

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

Table 4: unattested pattern

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

# INT/EXT overview

Table 1: Modern German pattern

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

Table 2: Old High German pattern

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

Table 3: Polish pattern

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

# This presentation

# This presentation

- Illustrate generalizations with data
  - $NOM < ACC < DAT = \text{stable}$
  - the INT/EXT parameter
- Derive generalizations from the theory
  - $NOM < ACC < DAT = \text{stable}$
  - the INT/EXT parameter



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	

# 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	

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

- syncretism patterns (cf. Baerman, Brown, and Corbett, 2005)
- agreement (cf. Moravcsik, 1978)

# 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)
- agreement (cf. Moravcsik, 1978)
- relativization (cf. Keenan and Comrie, 1977)

# 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

a single cause

- syncretism patterns (cf. Baerman, Brown, and Corbett, 2005)
- agreement (cf. Moravcsik, 1978)
- relativization (cf. Keenan and Comrie, 1977)



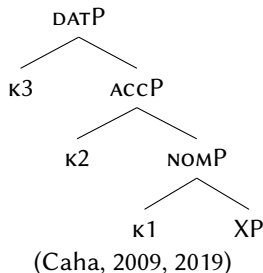
# The stable NOM < ACC < DAT

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

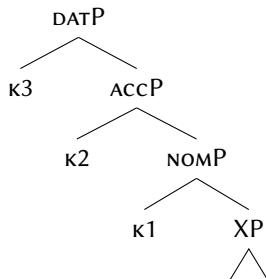
	3SG
NOM	luw
ACC	luw-e:l
DAT	luw-e:l-na

- syncretism patterns (cf. Baerman, Brown, and Corbett, 2005)
- agreement (cf. Moravcsik, 1978)
- relativization (cf. Keenan and Comrie, 1977)

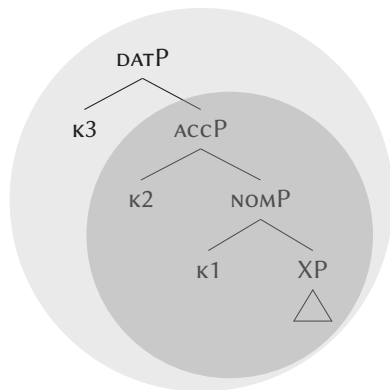
a single cause



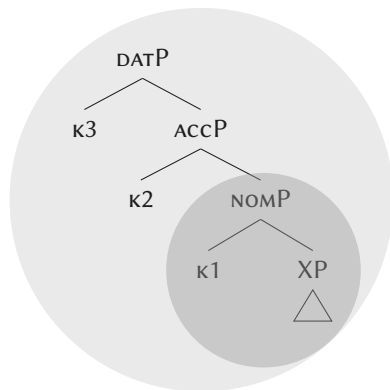
## The winning case contains the losing case



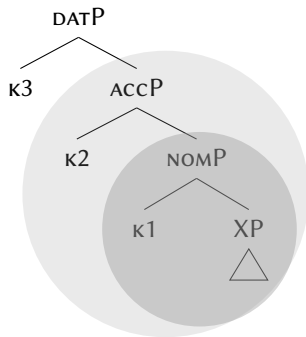
## The winning case contains the losing case



# The winning case contains the losing case



# The winning case contains the losing case



# The INT/EXT parameter

# The INT/EXT parameter

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

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

Table 7: Polish pattern

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



# The INT/EXT parameter

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

Table 8: Old High German pattern

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

# The INT/EXT parameter

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]
[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

INT may surface

Modern German

yes

Polish

no

# 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

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

# My proposal

- embedded in Nanosyntax (Starke, 2009)

# My proposal

- embedded in Nanosyntax (Starke, 2009)
- same syntax and same spellout algorithm for each language



# My proposal

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

# Assumptions

# Assumptions

- headless relatives are derived from light-headed relatives (cf. Citko, 2004; Hanink, 2018), headed by a special type of light head

# Assumptions

- headless relatives are derived from light-headed relatives (cf. Citko, 2004; Hanink, 2018), headed by a special type of light head

(14) Ich umarme den,      den    ich mag.  
I   hug        DEM.ACC RP.ACC I   like  
'I hug him that I like.'

# Assumptions

- headless relatives are derived from light-headed relatives (cf. Citko, 2004; Hanink, 2018), headed by a special type of light head  
light head<sub>EXT</sub> [relative pronoun<sub>INT</sub> ... ]

(14) Ich umarme den,      den      ich mag.  
I   hug      DEM.ACC RP.ACC I   like  
'I hug him that I like.'

# Assumptions

- headless relatives are derived from light-headed relatives (cf. Citko, 2004; Hanink, 2018), headed by a special type of light head  
~~light head~~<sub>EXT</sub> [relative pronoun<sub>INT</sub> ... ]

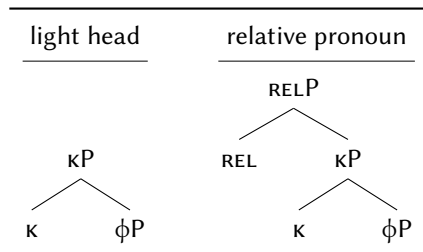
(14) Ich umarme den,      den      ich mag.  
I   hug          DEM.ACC RP.ACC I   like  
'I hug him that I like.'

# Assumptions

- headless relatives are derived from light-headed relatives (cf. Citko, 2004; Hanink, 2018), headed by a special type of light head  
light head<sub>EXT</sub> [relative pronoun<sub>INT</sub> ... ]
- deletion of the light head takes place when the relative pronoun contains the light head as a single constituent

# Assumptions

- headless relatives are derived from light-headed relatives (cf. Citko, 2004; Hanink, 2018), headed by a special type of light head  
light head<sub>EXT</sub> [relative pronoun<sub>INT</sub> ... ]
- 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

# Light head and relative pronoun in Modern German

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

# 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
n	we-m

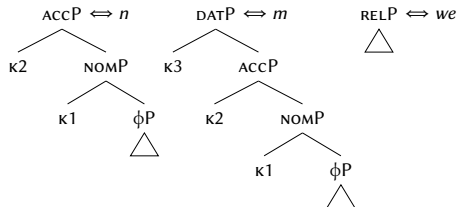
# Light head and relative pronoun in Modern German

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

Table 8: Modern German LH and RP

LH	RP
n	we-m

lexicon



# Light head and relative pronoun in Modern German

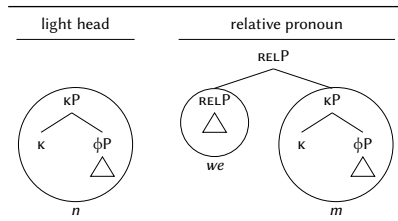
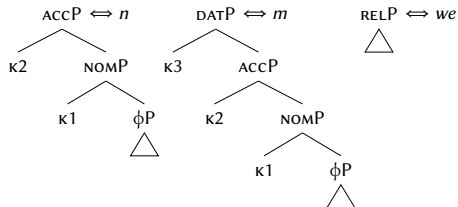
$\text{INT}^{\text{EXT}}$	[NOM]	[ACC]	[DAT]
[NOM]	NOM	*	*
[ACC]	ACC	ACC	*
[DAT]	DAT	DAT	DAT

Table 8: Modern German LH and RP

LH	RP
n	we-m

lexicon

internal syntax



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

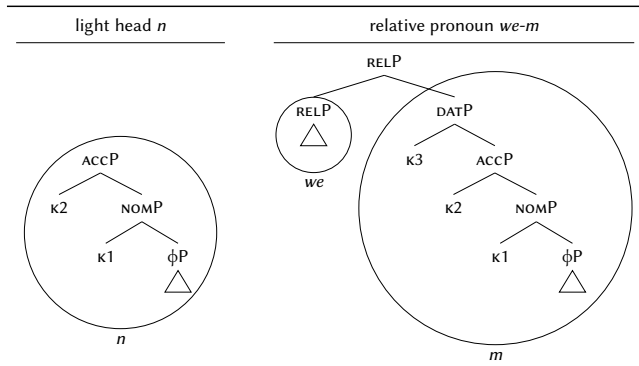
## ACC<sub>EXT</sub> vs. DAT<sub>INT</sub> in Modern German

- (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)



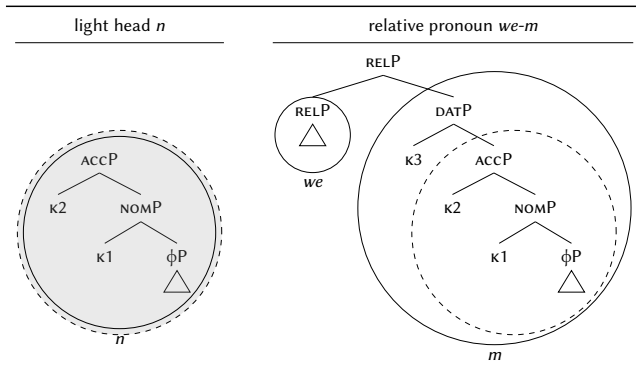
## ACC<sub>EXT</sub> vs. DAT<sub>INT</sub> in Modern German

- (14) Ich lade  $\bar{n}$  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)



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

- (14) Ich lade  $\bar{n}$  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)



# Light head and relative pronoun in Polish

# Light head and relative pronoun in Polish

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

# Light head and relative pronoun in Polish

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

# Light head and relative pronoun in Polish

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

Table 9: Polish LH and RP

LH	RP
o-go	k-o-mu

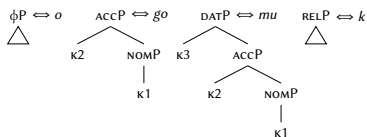
# Light head and relative pronoun in Polish

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

Table 9: Polish LH and RP

LH	RP
o-go	k-o-mu

lexicon



# Light head and relative pronoun in Polish

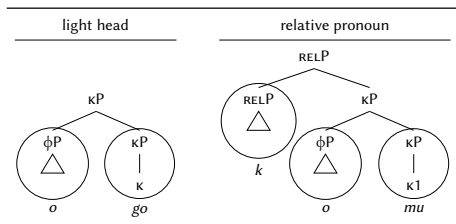
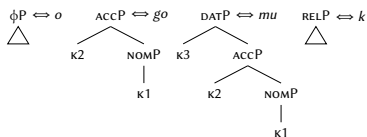
$\text{INT}^{\text{EXT}}$	[NOM]	[ACC]	[DAT]
[NOM]	NOM	*	*
[ACC]	*	ACC	*
[DAT]	*	*	DAT

Table 9: Polish LH and RP

LH	RP
o-go	k-o-mu

internal syntax

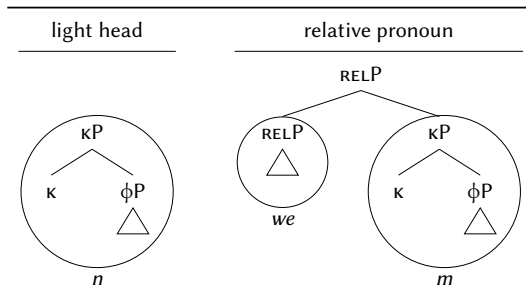
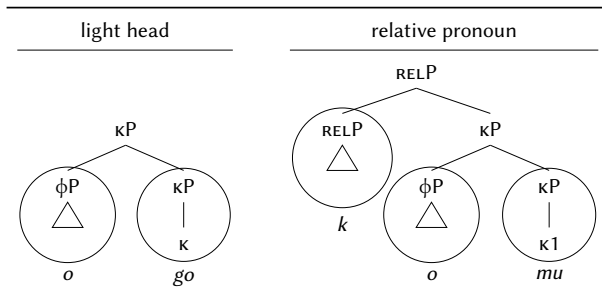
lexicon





# Comparing Polish to Modern German

# Comparing Polish to Modern German



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

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

(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)

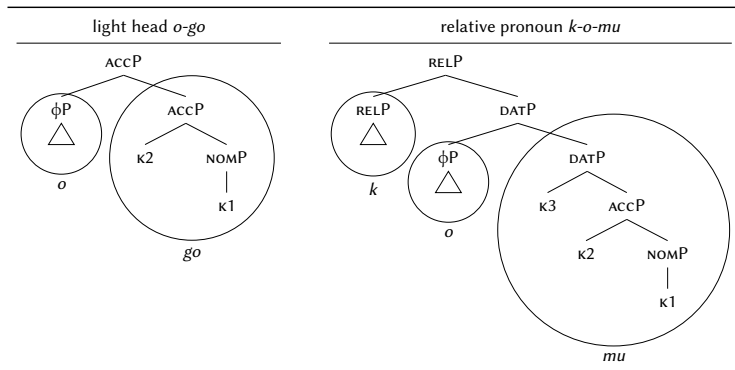
## ACC<sub>EXT</sub> vs. DAT<sub>INT</sub> in Polish

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

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

‘Jan likes whoever he teases.’

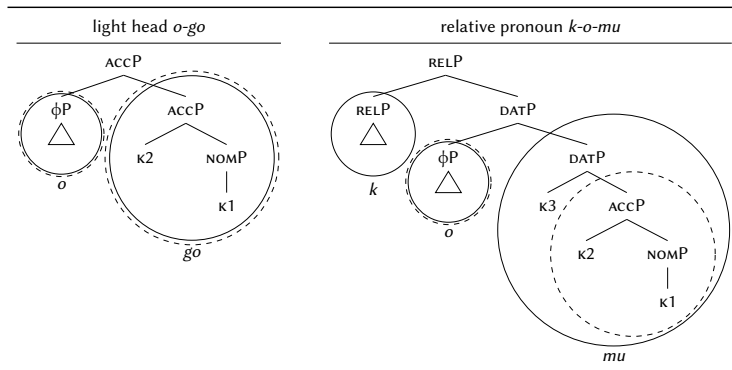
(Polish, Citko 2013 after Himmelreich 2017: 17)



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

- (15) \*Jan lubi  $\emptyset$  **komu** -kolkwiek 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)



# The INT/EXT parameter

# The INT/EXT parameter

	INT may surface
Modern German	yes
Polish	no

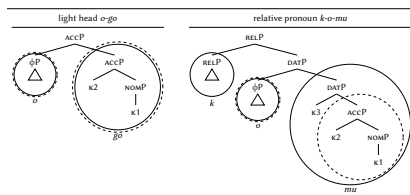
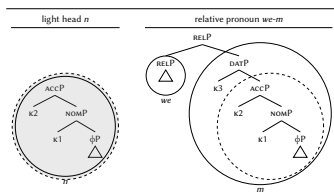


# The INT/EXT parameter

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

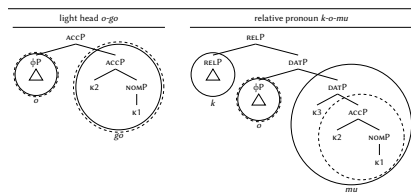
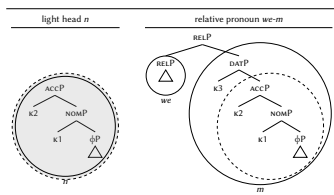
# The INT/EXT parameter

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



# The INT/EXT parameter

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



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

# Conclusion

# Conclusion

two factors influence grammaticality

# Conclusion

two factors influence grammaticality

- the stable  $\text{NOM} < \text{ACC} < \text{DAT}$

# Conclusion

two factors influence grammaticality

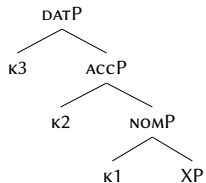
- the stable  $\text{NOM} < \text{ACC} < \text{DAT}$

- the INT/EXT parameter

# Conclusion

two factors influence grammaticality

- the stable  $\text{NOM} < \text{ACC} < \text{DAT}$



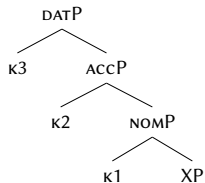
- the INT/EXT parameter



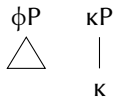
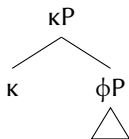
# Conclusion

two factors influence grammaticality

- the stable NOM < ACC < DAT



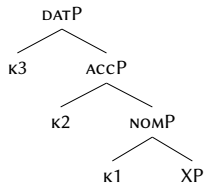
- the INT/EXT parameter



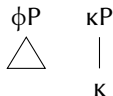
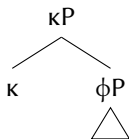
# Conclusion

two factors influence grammaticality

- the stable NOM < ACC < DAT



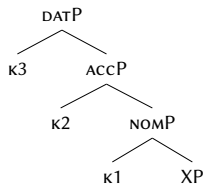
- the INT/EXT parameter



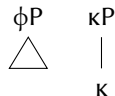
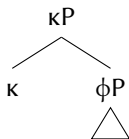
# Conclusion

two factors influence grammaticality

- the stable  $\text{NOM} < \text{ACC} < \text{DAT}$



- the INT/EXT parameter

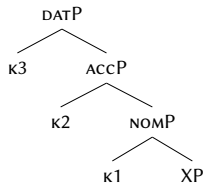


two factors → one factor:

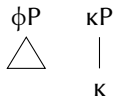
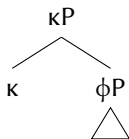
# Conclusion

two factors influence grammaticality

- the stable  $\text{NOM} < \text{ACC} < \text{DAT}$



- the INT/EXT parameter



two factors → one factor: **containment**

# References I

- Baerman, Matthew, Dunstan Brown, and Greville G Corbett (2005). *The syntax-morphology interface: A study of syncretism*. Cambridge: Cambridge University Press.
- Caha, Pavel (2009). “The Nanosyntax of Case”. PhD thesis. Tromsø: University of Tromsø.
- Caha, Pavel (2019). *Case competition in Nanosyntax: A study of numerals in Ossetic and Russian*. Berlin: Language Science Press.
- Cinque, Guglielmo (forthcoming). “Some notes on externalization”. In: *Cartography and Explanatory Adequacy*. Ed. by Ángel J. Gallego and Dennis Ott. Oxford: Oxford University Press.
- Citko, Barbara (2004). “On headed, headless, and light-headed relatives”. In: *Natural Language & Linguistic Theory* 22.1, pp. 95–126. DOI: 10.1023/b:na1a.0000005564.33961.e0.
- Citko, Barbara (2013). *Size matters: Multidominance and DP structure in Polish*. Talk at the 13th Poznan Linguistic Meeting.
- Daskalaki, Evangelia (2011). “Case Mis-Matching as Case Stranding”. In: *University of Pennsylvania Working Papers in Linguistics*. Ed. by Lauren A. Friedman. Vol. 17. Philadelphia: Penn Linguistics Club, pp. 77–86.

## References II

- Grosu, Alexander (2003a). “A Unified Theory of ‘standard’ and ‘transparent’ Free Relatives”. In: *Natural Language and Linguistic Theory* 21.2, pp. 247–331. DOI: 10.1075/1a.55.07gro.
- Grosu, Alexander (2003b). *Three studies in locality and case*. London/New York: Routledge. DOI: 10.4324/9780203427132.
- Hanink, Emily A (2018). “Super light-headed relatives, missing prepositions, and span-conditioned allomorphy in German”. In: *The Journal of Comparative Germanic Linguistics* 21.2, pp. 247–290. DOI: 10.1007/s10828-018-9096-6.
- Harbert, Wayne Eugene (1978). “Gothic syntax: a relational grammar”. PhD thesis. Urbana-Champaign: University of Illinois.
- Hartmann, Dietrich (1978). “Verschmelzungen als Varianten des bestimmten Artikels”. In: *Sprache in Gegenwart und Geschichte. Festschrift für Heinrich Matthias Heinrichs*. Ed. by Dietrich Hartmann, Hansjürgen Linke, and Otto Ludwig. Köln: Böhlau, pp. 68–81.
- Himmelreich, Anke (2017). “Case Matching Effects in Free Relatives and Parasitic Gaps: A Study on the Properties of Agree”. PhD thesis. Leipzig: Universität Leipzig.

## References III

- Keenan, Edward L and Bernard Comrie (1977). “Noun phrase accessibility and universal grammar”. In: *Linguistic inquiry* 8.1, pp. 63–99.
- Moravcsik, Edith A. (1978). *Agreement*. Ed. by Charles A. Ferguson Joseph H. Greenberg and Edith A. Moravcsik. Stanford. doi: 10.2307/413494.
- Nikolaeva, Irina (1999). *Ostyak*. München: Lincom Europa.
- Pittner, Karin (1995). “The Case of German Relatives”. In: *The linguistic review* 12.3, pp. 197–231. doi: 10.1515/tlir.1995.12.3.197.
- Schwarz, Florian (2009). “Two types of definites in natural language”. PhD thesis. Amherst: University of Massachusetts.
- Smith, Peter W et al. (2019). “Case and number suppletion in pronouns”. In: *Natural Language & Linguistic Theory* 37.3, pp. 1029–1101. doi: 10.1007/s11049-018-9425-0.
- Spyropoulos, Vassilios (2011). “Case conflict in Greek free relatives”. In: *Morphology and Its Interfaces* 178, pp. 21–56. doi: 10.1075/1a.178.05spy.
- Starke, Michal (2009). “Nanosyntax: A Short Primer to a New Approach to Language”. In: *Nordlyd* 36, pp. 1–6.

## References IV

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.



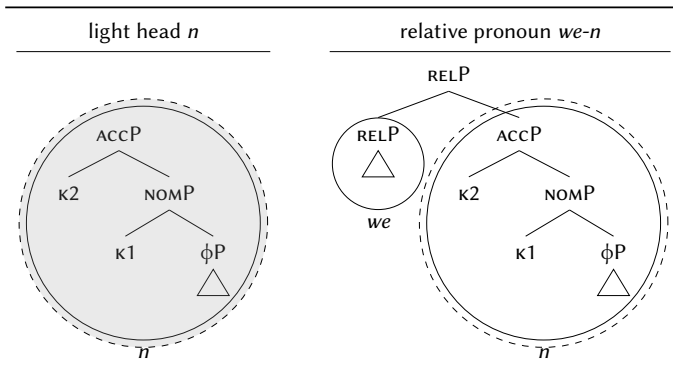
## ACC<sub>EXT</sub> vs. ACC<sub>INT</sub> in Modern German

(16) Ich lade  $\bar{n}$  ein, **wen** auch Maria mag.

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

‘I invite who Maria also likes.’

(Modern German, adapted from Vogel 2001: 344)



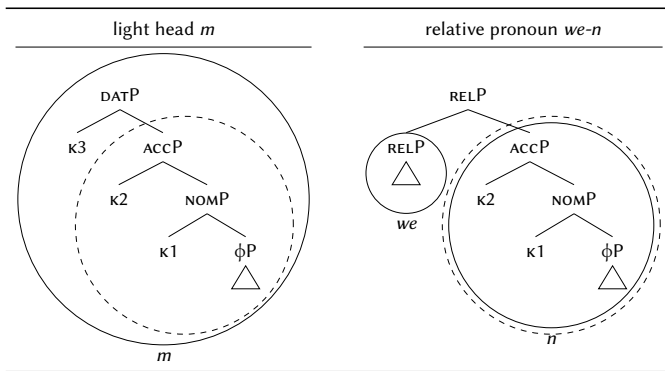
# DAT<sub>EXT</sub> vs. ACC<sub>INT</sub> in Modern German

(17) \*Ich vertraue *m*, **wen** auch Maria mag.

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

'I trust whoever Maria also likes.'

(Modern German, adapted from Vogel 2001: 345)



## Modern German syncretism

(18) Ich erzähle, **was** **immer mir gefällt**.

I tell<sub>[ACC]</sub> RP.NOM ever me pleases<sub>[NOM]</sub>

‘I tell whatever pleases me.’

(Modern German, Vogel 2001: 344)

## Weak and strong definites as head of a relative clause

- (19) \*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 Hartmann 1978: 77)
- (20) 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 Hartmann 1978: 77)

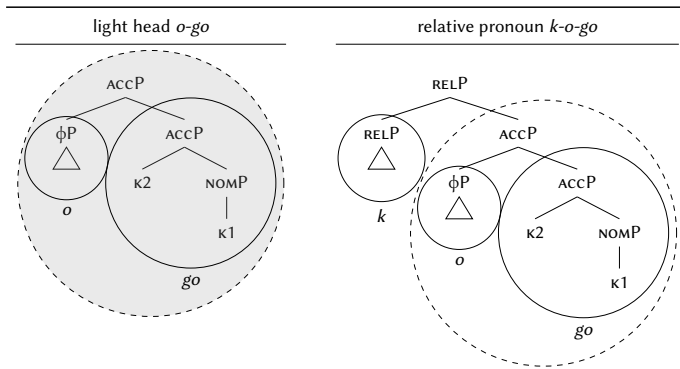
## ACC<sub>EXT</sub> vs. ACC<sub>INT</sub> in Polish

(21) Jan lubi  $\emptyset$ go **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)



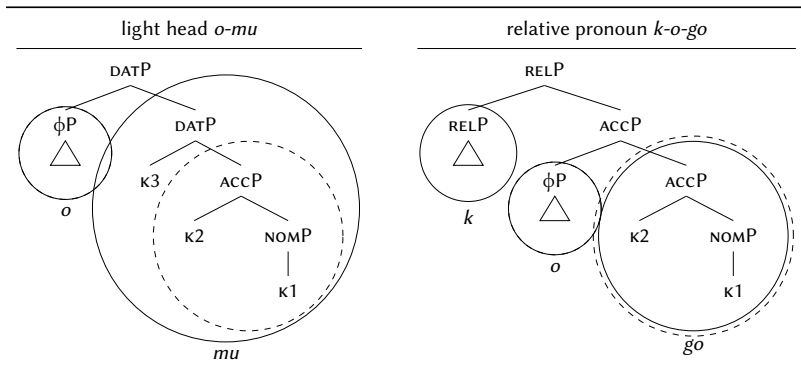
## DAT<sub>EXT</sub> vs. ACC<sub>INT</sub> in Polish

(22) \*Jan ufa  $\emptyset mu$  kogo -kolwiek wpuścił do domu.

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

‘Jan trusts whoever he let into the house.’

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



# Old High German ELH and RP

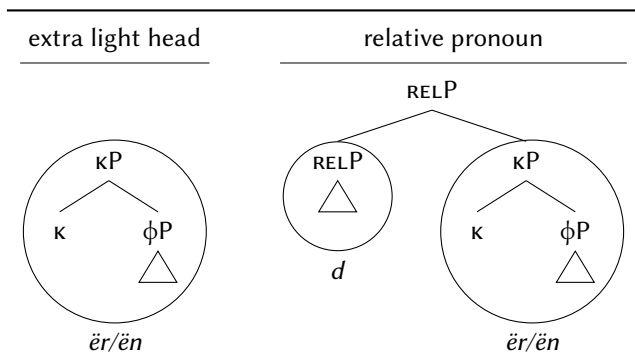


Figure 1: ELH and RP in Old High German

# Old High German DEM and RP

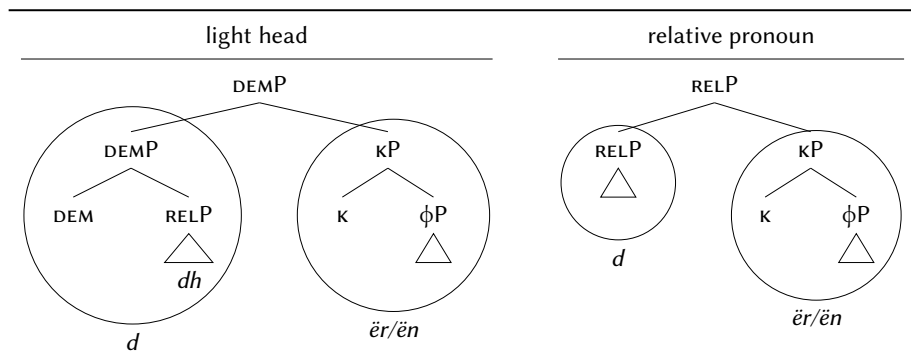


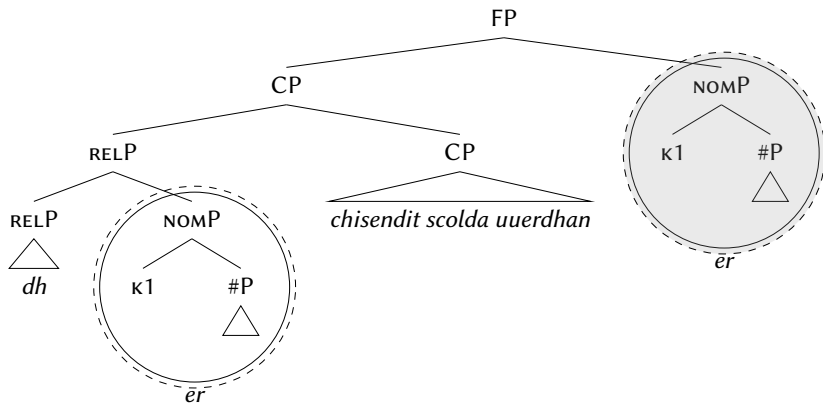
Figure 2: DEM and RP in Old High German



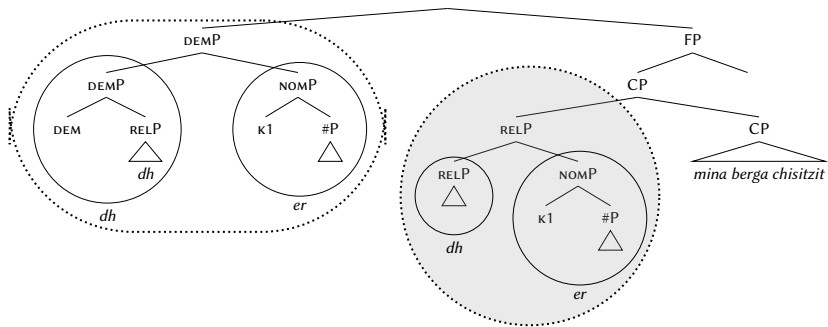
## Modern Greek examples

- (23) Irθan                      ópi                      **káleses.**  
come.PST.3PL<sub>[NOM]</sub> RP.PL.M.NOM invite.PST.2SG<sub>[ACC]</sub>  
'Whoever you invited came.'  
(Modern Greek, adapted from Daskalaki 2011: 80)
- (24) Me                      efχarístisan                      ópi                      **tus**                      **íχα**  
CL.1SG.ACC thank.PST.3PL<sub>[NOM]</sub> RP.PL.M.NOM CL.3PL.GEN have.PST.1SG  
**ðósi**                      **leftá.**  
give.PTCP<sub>[GEN]</sub> money  
'Whoever I had given money to, thanked me.'  
(Modern Greek, adapted from Daskalaki 2011: 80)
- (25) a. ópjos/                      ópjon                      epiléksume                      tha pári                      to  
RP.SG.M.NOM/ RP.SG.M.ACC choose.1PL<sub>[ACC]</sub> FUT take.3SG<sub>[NOM]</sub> the  
vrváo  
price.ACC  
'Whoever we may choose, he will get the price.'
- b. ópjos/                      ópjon                      me                      ayapá                      ton  
RP.SG.M.NOM/ RP.SG.M.ACC CL.1SG.ACC love.3SG<sub>[NOM]</sub> CL.3SG.M.ACC  
ayapó  
love.1SG

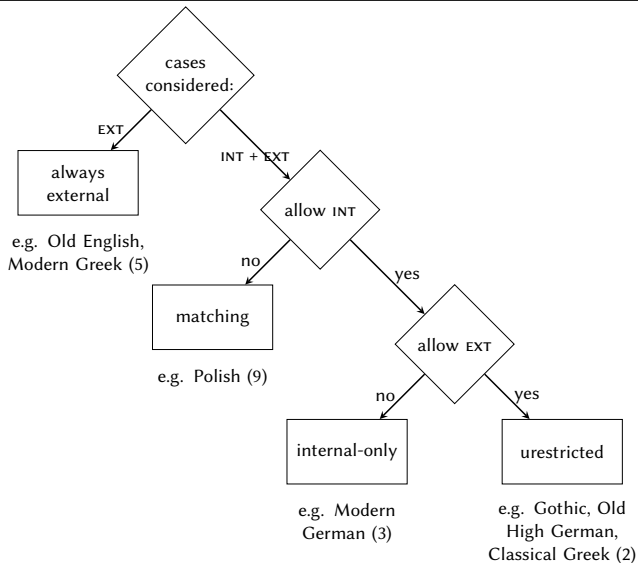
# Bigger syntax ELH



# Bigger syntax DEM



# Three descriptive parameters generate four language types



# Logically possible patterns for headless relatives

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