

# Case competition in headless relatives

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- (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.'

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'I invite whoever Maria also trusts.'
- (2) Ich lade die Person ein, **der Maria vertraut.**  
1SG.NOM invite.PRES.1SG<sub>[ACC]</sub> the person REL.SG.F.DAT Maria.NOM  
**vertraut.**  
trust.PRES.3SG<sub>[DAT]</sub>  
'I invite the person that Maria trusts.'

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# Two generalizations

# Two generalizations

- 1 the winner of the competition

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- 1 the winner of the competition
- 2 whether the winner gets approved

# Two generalizations

- 1 the winner of the competition → is stable across languages
- 2 whether the winner gets approved → differs across languages

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- 1 the winner of the competition → is stable across languages
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RP.SG.M.**ACC** the god.PL love.3PL<sub>[ACC]</sub> die.3SG<sub>[NOM]</sub> young  
'He, whom the gods love, dies young.'  
(Classical Greek, Menander, The Double Deceiver 125)

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- (8) **ei galaubjaip 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)

# Whether the winner gets approved — German (Vogel 2001)



# Whether the winner gets approved — German (Vogel 2001)

- (9) Ich lade ein, wem 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, the external case (EXT) does not

## Gen 2: whether the winner gets approved (German schema)

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



# Gen 2: whether the winner gets approved (Old High German)

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- (12)    **themo**        **min uuirdit**                    **forlazan**,    min minnot  
RP.SG.M.**DAT** less    become.PRES.3SG read.INF[**DAT**] less love.PRES.3SG[**NOM**]  
'whom less is read, loves less'                    (Old High German, Tatian 138:13)

## Gen 2: whether the winner gets approved (Old High German)

- (12) **themo min uuirdit forlazan, min minnot**  
RP.SG.M.**DAT** less become.PRES.3SG read.INF[**DAT**] less love.PRES.3SG[**NOM**]  
'whom less is read, loves less' (Old High German, Tatian 138:13)
- (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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| INT <sup>EXT</sup> | [NOM] | [ACC] | [DAT] |
|--------------------|-------|-------|-------|
| [NOM]              | NOM   | ACC   | DAT   |
| [ACC]              | ACC   | ACC   | DAT   |
| [DAT]              | DAT   | DAT   | DAT   |

# Gen 2: whether the winner gets approved (Polish)

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- (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.'

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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** **-kolwiek wpuścił 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.’

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



# Gen 2: whether the winner gets approved (overview)

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

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

## Gen 2: whether the winner gets approved (overview)

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

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

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

## Gen 2: whether the winner gets approved (overview)

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

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

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

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

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

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

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

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NOM < ACC < DAT
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INT/EXT approved

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NOM < ACC < DAT
- Whether the winner gets approved → differs across languages  
INT/EXT approved
  - INT approved
  - INT + EXT approved
  - none approved

# Two generalizations

- The winner of the case competition → is stable across languages  
NOM < ACC < DAT
- Whether the winner gets approved → differs across languages  
INT/EXT approved
  - INT approved
  - INT + EXT approved
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1 show the generalizations

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- 
- 1 show the generalizations
  - 2 derive the generalizations

# Generalization 1: $NOM < ACC < DAT$

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|     |     |
|-----|-----|
|     | 3SG |
| NOM | luw |
| ACC |     |
| DAT |     |

# Generalization 1: NOM < ACC < DAT

|     | 3SG             |
|-----|-----------------|
| NOM | luw             |
| ACC | luw- <b>e:l</b> |
| DAT |                 |



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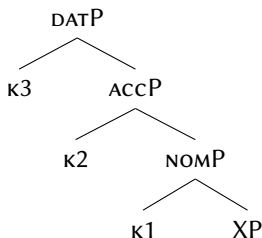
|     | 3SG                |
|-----|--------------------|
| NOM | luw                |
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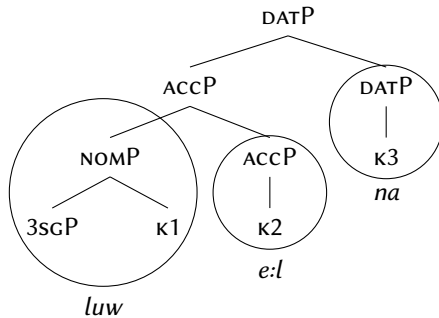
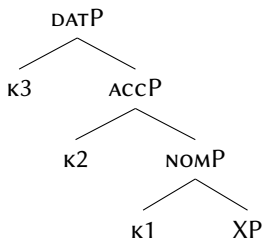
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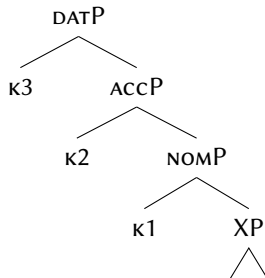
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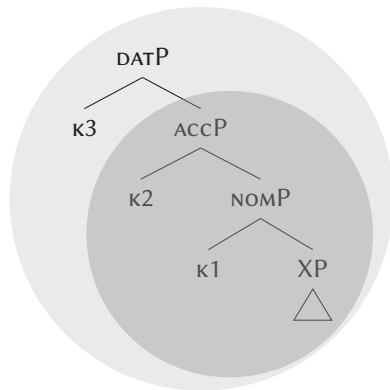
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- agreement (ref)
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# The winning case contains the losing case

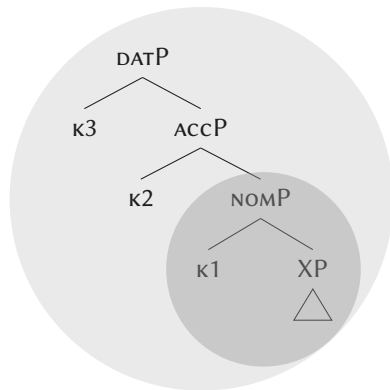


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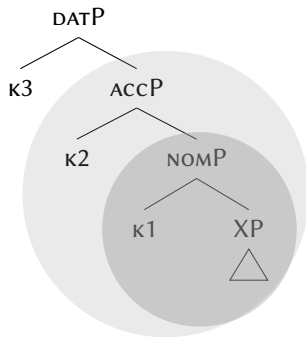




# The winning case contains the losing case



# The winning case contains the losing case

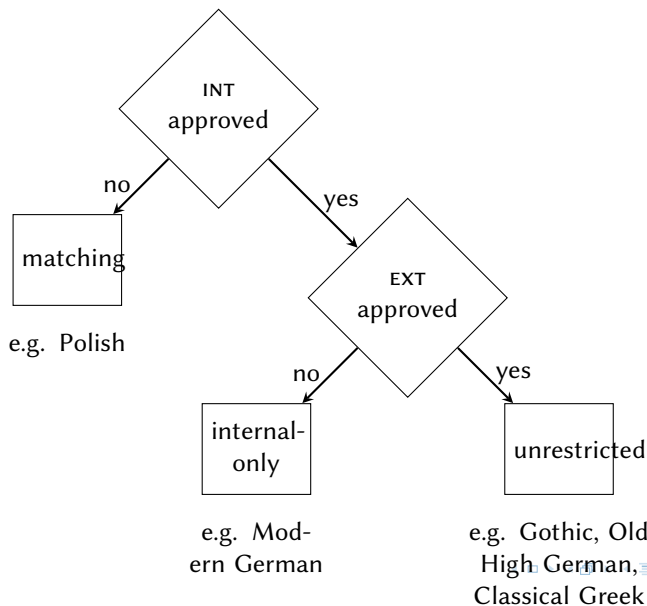


# Morphology and syntax

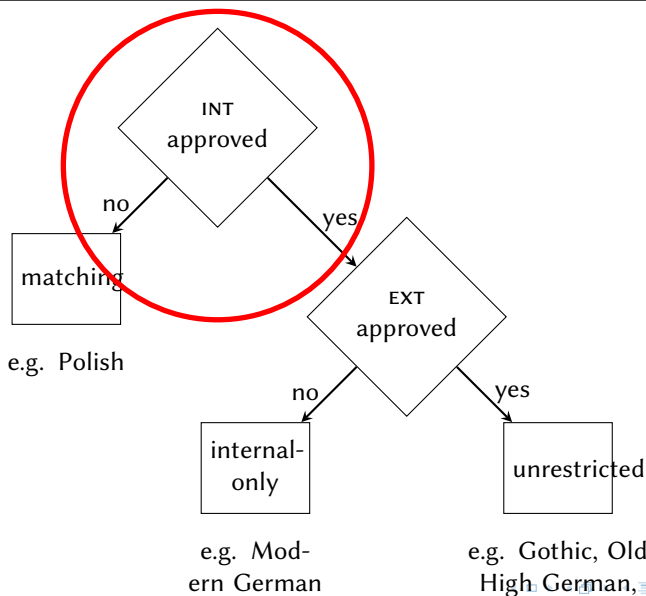
Properties of morphology show reflexes in syntax

# Generalization 2: INT/EXT approved

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## Generalization 2: INT/EXT approved



# Borer-Chomsky Conjecture

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

# Assumptions



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- headless relatives are derived from light-headed relatives

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

# Assumptions

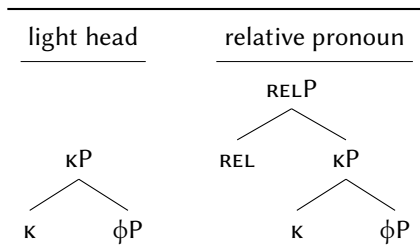
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## The pattern in German

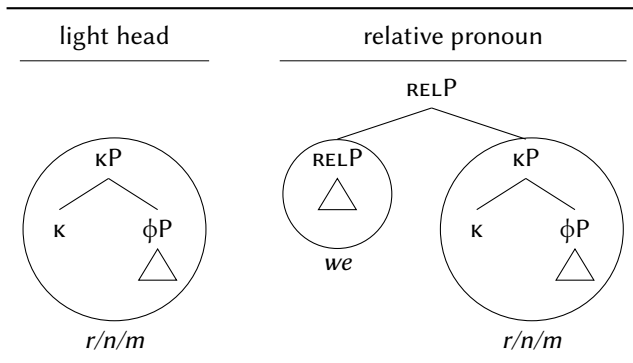
# The pattern in German

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

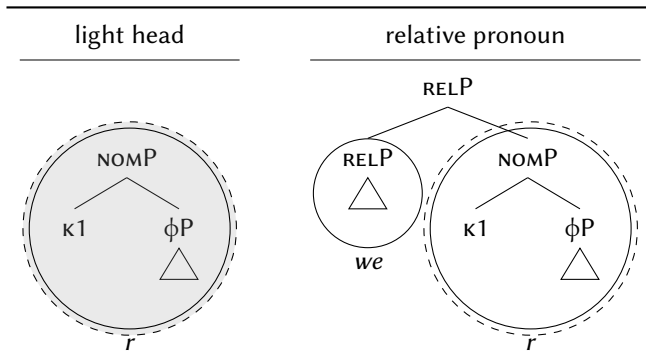
# Light head and relative pronoun in German



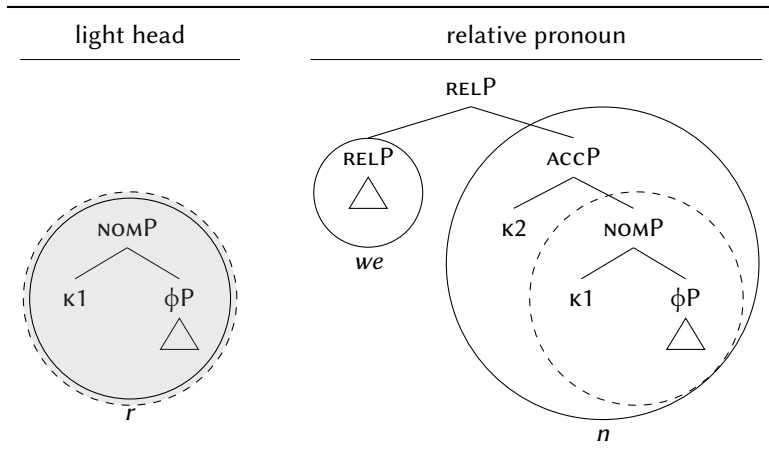
# Light head and relative pronoun in German



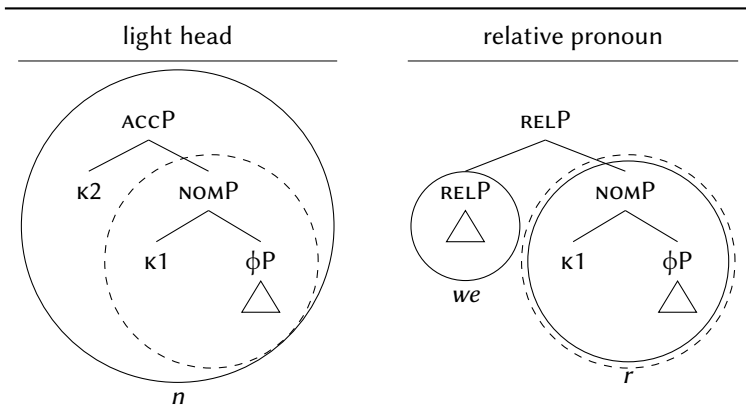
# Light head<sub>NOM</sub> and relative pronoun<sub>NOM</sub> in German



# Light head<sub>NOM</sub> and relative pronoun<sub>ACC</sub> in German



# Light head<sub>ACC</sub> vs. relative pronoun<sub>NOM</sub> in German

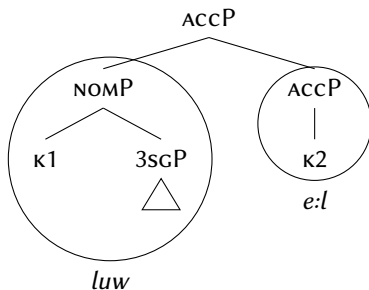
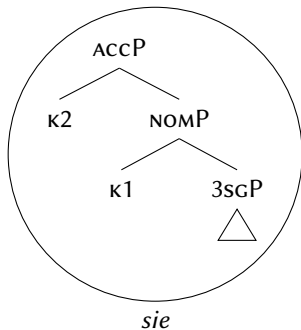


# Differences in the lexicon

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

# Differences in the lexicon

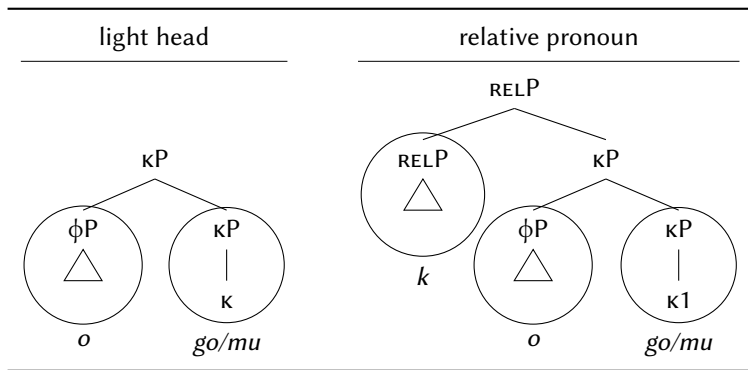
Borer-Chomsky Conjecture: the lexicon is the source of language variation



# The pattern in Polish

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

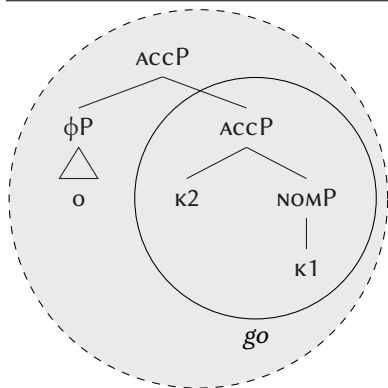
# Light head and relative pronoun in Polish



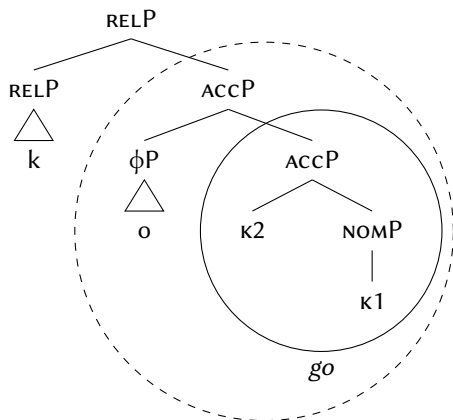


# Light head<sub>ACC</sub> vs. relative pronoun<sub>ACC</sub> in Polish

light head

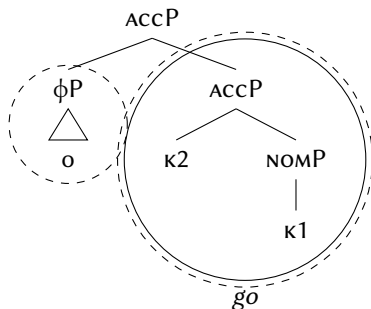


relative pronoun

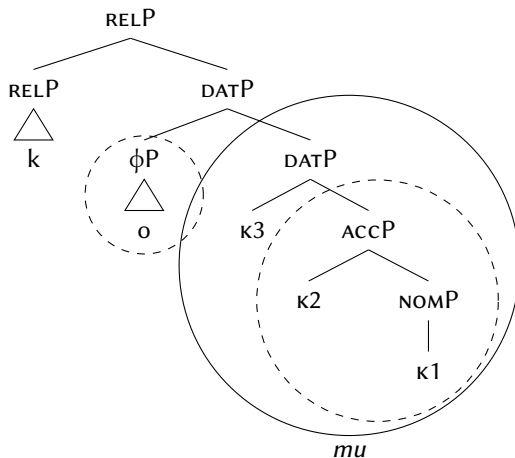


# Light head<sub>ACC</sub> vs. relative pronoun<sub>DAT</sub> in Polish

light head

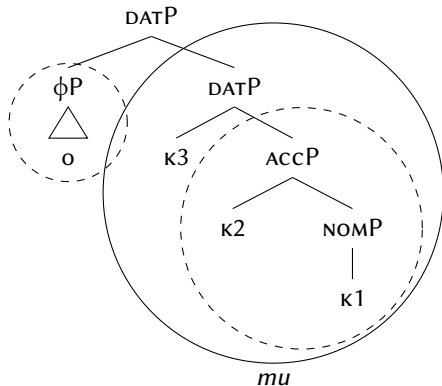


relative pronoun

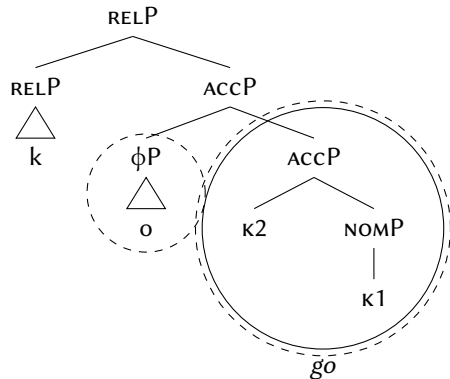


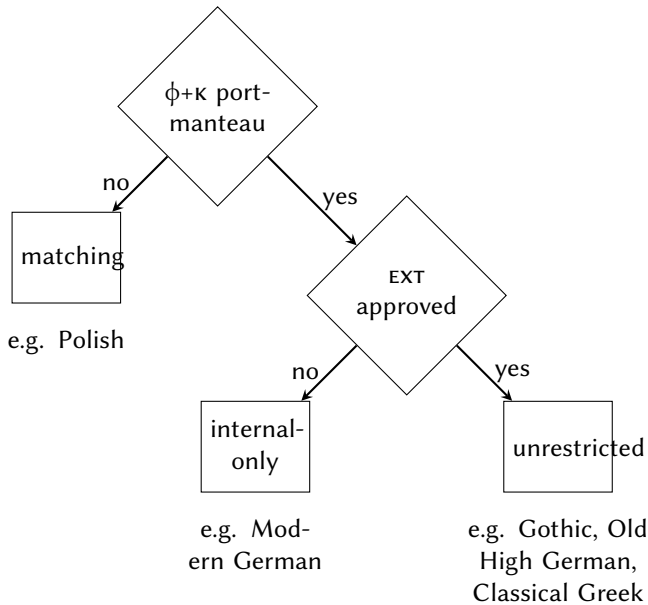
# Light head<sub>DAT</sub> vs. relative pronoun<sub>ACC</sub> in Polish

light head



relative pronoun





# Again

Properties of morphology show reflexes in syntax

# Conclusion

# References

- Citko, Barbara (2013). “Size matters: Multidominance and DP structure in Polish”. In: *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.
- Harbert, Wayne Eugene (1978). “Gothic syntax: a relational grammar”. PhD thesis. Urbana-Champaign.
- Himmelreich, Anke (2017). “Case Matching Effects in Free Relatives and Parasitic Gaps: A Study on the Properties of Agree”. PhD thesis. Universität Leipzig.
- Vogel, Ralf (2001). “Case Conflict in German Free Relative Constructions: An Optimality Theoretic Treatment”. In: *Competition in Syntax*. Ed. by Gereon Müller and Wolfgang Sternefeld. Berlin: Mouton de Gruyter, pp. 341–375. doi: 10.1515/9783110829068.341.