

# 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, **dem Maria vertraut.**  
1SG.NOM invite.PRES.1SG<sub>[ACC]</sub> the person REL.AN.DAT Maria.NOM  
**vertraut.**  
trust.PRES.3SG<sub>[DAT]</sub>  
'I invite the person that Maria trusts.'

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# Two aspects

## Two aspects

- the winner of the competition

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

## Two aspects

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

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- 1 show the generalizations

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- 1 show the generalizations
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# The winner of the competition — German

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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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'whom less is read, loves less' (Old High German, Tatian 138:13)

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- (8) **ei    galaubjaip                      þamm        -ei    insandida**  
that believe.OPT.PRES.2PL**[DAT]** REL.SG.M.**DAT** -COMP send.PRET.3SG**[ACC]**  
**jains**  
DEM.SG.M.NOM  
'that you believe in him whom he sent' (Gothic, John 6:29)

# Whether the winner gets approved — German



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- (9) Ich lade ein, **wem** **auch Maria** **vertraut**.  
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internal vs. external case

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the internal case gets approved when it wins the case competition, the external case does not

# Whether the winner gets approved – German schema

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



# 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)

## 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<sub>[DAT]</sub> less love.PRES.3SG<sub>[NOM]</sub>  
‘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<sub>[DAT]</sub> RP.SG.M.**DAT** to 3SG.M.DAT  
**sprah**  
speak.PST.3SG<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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INT <sup>EXT</sup>	[NOM]	[ACC]	[DAT]
[NOM]	NOM	ACC	DAT
[ACC]	ACC	ACC	DAT
[DAT]	DAT	DAT	DAT

# Whether the winner gets approved — Polish

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- (14) \*Jan lubi                **komu**                **-kolwiek dokucza.**  
Jan like.3SG<sub>[ACC]</sub> REL.**DAT**.AN.SG ever                tease.3SG<sub>[DAT]</sub>  
'Jan likes whoever he teases.'

## Whether the winner gets approved — Polish

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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.’

## Whether the winner gets approved — Polish

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

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



# 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	DAT
[DAT]	*	*	DAT

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

# Whether the winner gets approved — overview

$\begin{smallmatrix} \text{EXT} \\ \text{INT} \end{smallmatrix}$	[NOM]	[ACC]	[DAT]
[NOM]	NOM	*	*
[ACC]	ACC	ACC	*
[DAT]	DAT	DAT	DAT

$\begin{smallmatrix} \text{EXT} \\ \text{INT} \end{smallmatrix}$	[NOM]	[ACC]	[DAT]
[NOM]	NOM	ACC	DAT
[ACC]	ACC	ACC	DAT
[DAT]	DAT	DAT	DAT

$\begin{smallmatrix} \text{EXT} \\ \text{INT} \end{smallmatrix}$	[NOM]	[ACC]	[DAT]
[NOM]	NOM	ACC	DAT
[ACC]	*	ACC	DAT
[DAT]	*	*	DAT

$\begin{smallmatrix} \text{EXT} \\ \text{INT} \end{smallmatrix}$	[NOM]	[ACC]	[DAT]
[NOM]	NOM	*	*
[ACC]	*	ACC	*
[DAT]	*	*	DAT

# Two generalizations

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

## Introduction — case in headless relative clauses

- (16) gaarma                    þan                    -ei       arma  
pity.PRES.1SG<sub>[ACC]</sub> REL.SG.M.ACC -COMP pity.PRES.1SG<sub>[ACC]</sub>  
'I pity him whom I pity' (Gothic, ROM 9:15)

## Introduction — case competition (Harbert 1978)

- (17) **þan**            **-ei**    **frijos**                      siuks ist  
REL.SG.M.**ACC** -COMP love.PRES.2SG.**[ACC]** sick   be.PRES.3SG**[NOM]**  
'the one whom you love is sick'                      (Gothic, JOHN 11:3)
- (18) jah þo                      **-ei**    **ist**                      **us**    **Laudeikaion** jus  
and REL.SG.N.**ACC** -COMP be.PRES.3SG**[NOM]** from Laodicea            2PL.NOM  
ussiggwaid  
read.**[ACC]**  
'and you read the one which is from Laodicea'                      (Gothic, COL 4:16)

- internal case
- external case

# Two aspects

- Which case wins the case competition?
- Is the winner of the case competition allowed to surface?



# Which case wins the case competition?

NOM < ACC < DAT

## Gothic — matching data (Harbert 1978)

- (19) ei    sa                    -ei    þis                    matjai,            ni  
COMP REL.SG.M.**NOM** -COMP DEM.SG.M.GEN eat.OPT.3SG<sub>[NOM]</sub> not  
gadaupnai  
die.OPT.3SG<sub>[NOM]</sub>  
'that the one, who eats of this may not die' (JOHN 6:50)
- (20) gaarma    þan                    -ei    arma  
pity.1SG<sub>[ACC]</sub> REL.SG.M.**ACC** -COMP pity.1SG<sub>[ACC]</sub>  
'I pity him, whom I pity' (ROM 9:15)
- (21) nist    mein                    du giban,            alja    þaim                    -ei  
is not 1SG.POSS.NOM to give.INF<sub>[DAT]</sub> except for REL.SG.M.**DAT** -COMP  
manwiþ    was  
prepare.PTCP be.PRET.3SG<sub>[DAT]</sub>  
'it is not mine to give except for to the one, for whom it was prepared'  
(MARK 10:49)

# Gothic — overview matching

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

## Gothic — NOM vs. ACC data (Harbert 1978)

- (22) **pan -ei frijos siuks ist**  
REL.SG.M.ACC -COMP love.PRES.2SG.<sub>[ACC]</sub> sick be.PRES.3SG<sub>[NOM]</sub>  
'the one whom you love is sick' (JOHN 11:3)
- (23) **jah þo -ei ist us Laudeikaion jus**  
and REL.SG.N.ACC -COMP be.PRES.3SG<sub>[NOM]</sub> from Laodicea 2.PL.NOM  
ussiggwaid  
read.<sub>[ACC]</sub>  
'and you read the one which is from Laodicea' (COL 4:16)

# Gothic — overview NOM vs. ACC

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

## Gothic — NOM vs. DAT data (Harbert 1978)

- (24)    ip   **þamm**        -ei    **leiti** **fraletada**                      leiti frijod  
but REL.SG.M.**DAT** -COMP little forgive.PASS.PRES.3SG<sub>[DAT]</sub> little love<sub>[NOM]</sub>  
‘but the one whom little is forgiven loves little’                      (LUKE 7:47)
- (25)    þaim                -ei    **iupa** **sind**                      fraþjaip  
REL.PL.N.**DAT** -COMP above be.PRES.3PL<sub>[NOM]</sub> think about.OPT.PRES.2PL<sub>[DAT]</sub>  
‘think about those which are above’                      (COL 3:2)

# Gothic — overview NOM — DAT

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

## Gothic — ACC vs. DAT data (Harbert 1978)

- (26) ushafjands                      ana   þamm                      -ei   lag  
pick up.PRES.PTCP<sub>[ACC]</sub> ON<sub>[DAT]</sub> REL.SG.N.DAT -COMP lie.PRET.3SG  
'picking up that what he lay on' (LUKE 5:25)
- (27) 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)



# Gothic — overview ACC — DAT

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

# Gothic: overview summary

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

# Which case wins the case competition?

NOM < ACC < DAT

# Is the winner of the case competition allowed to surface?

- Is the internal case allowed to surface?
- Is the external case allowed to surface?

4 possible language types

# The unrestricted type

the internal and the external case are allowed to surface when either of them wins the case competition

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

# The internal-only type

only the internal case is allowed to surface when it wins the case competition

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

# The external-only type

only the external case is allowed to surface when it wins the case competition

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

# The matching type

neither the internal case nor in the external case is allowed to surface when either of them wins the case competition

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



# All types together

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

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

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

# Gothic as the unrestricted type

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

# German as the internal-only type

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

## German — matching data (Vogel 2001)

- (28) Uns besucht, **wer** **Maria** mag.  
2PL.ACC visit.PRES.3SG<sub>[NOM]</sub> REL.AN.<sub>NOM</sub> Maria.ACC like.PRES.3SG<sub>[NOM]</sub>  
'Who visits us likes Maria.'
- (29) Ich lade ein, **wen** **auch** **Maria** mag.  
1SG.NOM invite.PRES.1SG<sub>[ACC]</sub> REL.AN.<sub>ACC</sub> Maria.NOM like.PRES.3SG<sub>[ACC]</sub>  
'I invite who Maria also likes.'
- (30) Ich forede, **wem** **immer ich**  
1SG.NOM forede.PRES.1SG<sub>[DAT]</sub> REL.AN.<sub>DAT</sub> ever 1SG.NOM  
**vertraue.**  
vertraue.PRES.3SG<sub>[DAT]</sub>  
'I follow whoever I trust.'

# German — overview matching

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

## German — NOM vs. ACC data (Vogel 2001)

- (31) Uns besucht,                    **wen**                    **Maria**                    **mag**.  
2PL.ACC visit.PRES.3SG[NOM] REL.AN.ACC Maria.NOM like.PRES.3SG[ACC]  
‘Who visits us, Maria likes.’
- (32) \*Uns besucht,                    **wer**                    **Maria**                    **mag**.  
2PL.ACC visit.PRES.3SG[NOM] REL.AN.NOM Maria.NOM like.PRES.3SG[ACC]  
‘Who visits us, Maria likes.’
- (33) \*Ich lade ein,                    **wen**                    **mir**                    **sympathisch**  
1SG.NOM invite.PRES.1SG[ACC] REL.AN.ACC 1SG.DAT nice  
**ist**.  
be.PRES.3SG[NOM]  
‘I invite who I like.’
- (34) \*Ich lade ein,                    **wer**                    **mir**                    **sympathisch**  
1SG.NOM invite.PRES.1SG[ACC] REL.AN.NOM 1SG.DAT nice  
**ist**.  
be.PRES.3SG[NOM]  
‘I invite who I like.’

# German — overview NOM — ACC

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

## German — NOM vs. DAT data (Vogel 2001)

- (35) Uns besucht, **wem** **Maria** **vertraut**.  
2PL.ACC visit.PRES.3SG<sub>[NOM]</sub> REL.AN.DAT Maria.NOM trust.PRES.3SG<sub>[DAT]</sub>  
'Who visits us, Maria trusts.'
- (36) \*Uns besucht, wer **Maria** **vertraut**.  
2PL.ACC visit.PRES.3SG<sub>[NOM]</sub> REL.AN.NOM Maria.NOM trust.PRES.3SG<sub>[DAT]</sub>  
'Who visits us, Maria trusts.'
- (37) \*Ich vertraue, **wem** **Hitchcock** **mag**.  
1SG.NOM trust.PRES.1SG<sub>[DAT]</sub> REL.AN.DAT Hitchcock.ACC like.PRES.3SG<sub>[NOM]</sub>  
'I trust who likes Hitchcock.'
- (38) \*Ich vertraue, **wer** **Hitchcock** **mag**.  
1SG.NOM trust.PRES.1SG<sub>[DAT]</sub> REL.AN.NOM Hitchcock.ACC like.PRES.3SG<sub>[NOM]</sub>  
'I trust who likes Hitchcock.'



# German — overview NOM — DAT

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

## German — ACC vs. DAT data (Vogel 2001)

- (39) 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.'
- (40) \*Ich lade ein, **wen** **auch** **Maria** **vertraut**.  
1SG.NOM invite.PRES.1SG<sub>[ACC]</sub> REL.AN.**ACC** also Maria.NOM trust.PRES.3SG<sub>[DAT]</sub>  
'I invite whoever Maria also trusts.'
- (41) \*Ich vertraue, **wem** **auch** **Maria** **mag**.  
1SG.NOM trust.PRES.1SG<sub>[DAT]</sub> REL.AN.**DAT** also Maria.NOM like.PRES.3SG<sub>[ACC]</sub>  
'I trust whoever Maria also likes.'
- (42) \*Ich vertraue, **wen** **auch** **Maria** **mag**.  
1SG.NOM trust.PRES.1SG<sub>[DAT]</sub> REL.AN.**ACC** also Maria.NOM like.PRES.3SG<sub>[ACC]</sub>  
'I trust whoever Maria also likes.'

# German — overview ACC — DAT

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

# No external-only type

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

# Polish as the matching type

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

## Polish — matching data (Citko 2013 after Himmelreich 2017)

- (43) Jan lubi **kogo** **-kolkwiek** Maria lubi.  
Jan like.3SG<sub>[ACC]</sub> REL.**ACC**.AN.SG ever Maria like.3SG<sub>[ACC]</sub>  
'Jan likes whoever Maria likes.'
- (44) Jan pomaga **komu** **-kolkwiek** ufa.  
Jan help.3SG<sub>[DAT]</sub> REL.**DAT**.AN.SG ever trust.3SG<sub>[DAT]</sub>  
'Jan helps whomever he trusts.'

# Polish — overview matching

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

## Polish — ACC vs. DAT data (Citko 2013 after Himmelreich 2017)

- (45) \*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.'
- (46) \*Jan lubi **kogo** **-kolkwiek dokucza.**  
Jan like.3SG<sub>[ACC]</sub> REL.**ACC**.AN.SG ever tease.3SG<sub>[DAT]</sub>  
'Jan likes whoever he teases.'
- (47) \*Jan ufa **komu** **-kolkwiek 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.'
- (48) \*Jan ufa **kogo** **-kolkwiek wpuścił do domu.**  
Jan trust.3SG<sub>[DAT]</sub> REL.**ACC**.AN.SG ever let.3SG<sub>[ACC]</sub> to home  
'Jan trusts whoever he let into the house.'



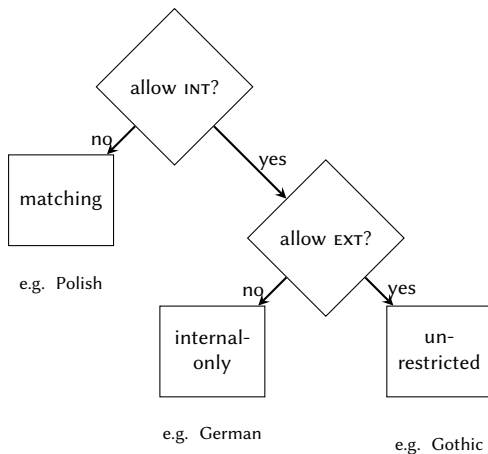
## Polish — overview ACC vs. DAT

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

# The table again

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

# Is the winner of the case competition allowed to surface?



# Two aspects

- Which case wins the case competition?  
NOM < ACC < DAT
- Is the winner of the case competition allowed to surface?  
INT + EXT, INT or none

# No case competition: always internal vs. always external

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

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

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

# No always internal type

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

# Greek as always external type

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

## Greek NOM<sub>INT</sub> vs. ACC<sub>EXT</sub> (Daskalaki 2011)

- (49) Efcharístisa      ópjus      **me**      **voíθisan.**  
thank.PST.3PL<sub>[ACC]</sub> REL.PL.M.<sub>ACC</sub> CL.1SG.ACC help.PST.3PL<sub>[NOM]</sub>  
'I thanked whoever helped me.'



# Three possibilities for Greek

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

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

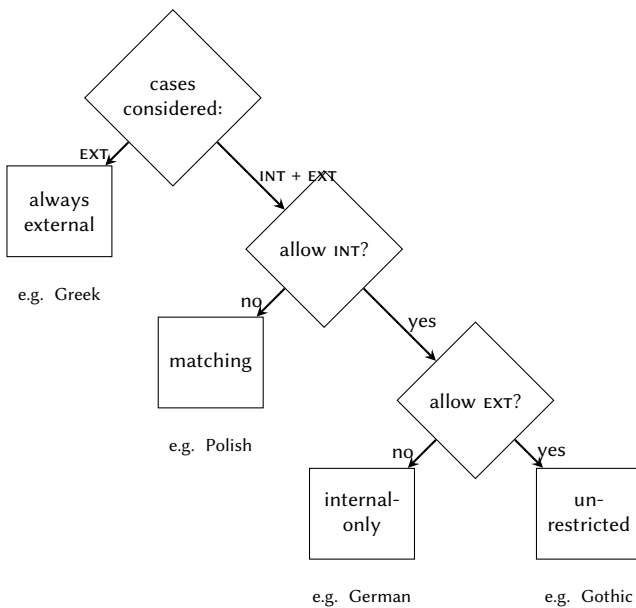
$\text{INT}^{\text{EXT}}$	[NOM]	[ACC]	[GEN]
[NOM]	NOM	ACC	GEN
[ACC]	NOM	ACC	GEN
[GEN]	NOM	ACC	GEN

## Greek NOM<sub>INT</sub> vs. ACC<sub>EXT</sub> (Daskalaki 2011)

- (50) Irθan                      ópji                      **káleses.**  
come.PST.3PL<sub>[NOM]</sub> REL.PL.M.**NOM** invite.PST.2SG<sub>[ACC]</sub>  
'Whoever you invited came.'
- (51) \*Irθan                      **ópjus**                      **káleses.**  
come.PST.3PL<sub>[NOM]</sub> REL.PL.M.**ACC** invite.PST.2SG<sub>[ACC]</sub>  
'Whoever you invited came.'

# Greek: always external

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



# Possible patterns for headless relatives

	[INT]>[EXT]		[EXT]>[INT]		language
	INT	EXT	INT	EXT	
1	✓	*	✓	*	n.a.
2	✓	*	*	✓	e.g. Gothic
3	✓	*	*	*	e.g. German
4	*	✓	✓	*	n.a.
5	*	✓	*	✓	e.g. Greek
6	*	✓	*	*	n.a.
7	*	*	✓	*	n.a.
8	*	*	*	✓	n.a.
9	*	*	*	*	e.g. Polish

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