A typology of case competition in headless relatives

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Introduction — case

(1) Der Lehrer mag den Schüler. the.Nom teacher likes the.Acc pupil 'The teacher likes the pupil.'

Introduction — case

- (1) Der Lehrer mag den Schüler. the.NOM teacher likes the.ACC pupil 'The teacher likes the pupil.'
- (2) Der Schüler mag den Lehrer. the.NOM pupil likes the.ACC teacher 'The pupil likes the teacher.'

Introduction — case in relative clauses

(3) Der Lehrer mag den Schüler, der nach draußen guckt. the.Nom teacher likes the.Acc pupil REL.SG.M.Nom to outside looks 'The teacher likes the pupil that is looking outside.'

Introduction — case in relative clauses

- (3) Der Lehrer mag den Schüler, der nach draußen guckt. the.Nom teacher likes the.Acc pupil REL.SG.M.Nom to outside looks 'The teacher likes the pupil that is looking outside.'
- (4) Der Lehrer mag den Schüler, den er beim the.Nom teacher likes the.ACC pupil REL.SG.M.ACC he at the Versteckspiel sucht. hide-and-seek game searches 'The teacher likes the pupil that he is searching for playing hide-and-seek.'

Introduction — case in headless relative clauses

(5) gaarma **þan -ei arma**pity.pres.1sg_[Acc] rel.sg.m.acc -comp pity.pres.1sg_[Acc]
'I pity him whom I pity' (Gothic, rom 9:15)

Introduction — case competition (Harbert 1978)

```
(6) 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)
```

Introduction — case competition (Harbert 1978)

- (6) **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)
- (7) 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)

Introduction — case competition (Harbert 1978)

- (6) **ban -ei frijos** siuks ist

 REL.SG.M.ACC -COMP love.PRES.2SG.[ACC] sick be.PRES.3SG[NOM]

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- (7) 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

Two aspects

■ Which case wins the case competition?

Two aspects

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

Which case wins the case competition?

Which case wins the case competition?

NOM < ACC < DAT

Gothic — matching data (Harbert 1978)

(8) ei **sa -ei þis matjai**, ni gadauþnai comp rel.sg.m.nom -comp dem.sg.m.gen eat.opt.3sg_[NOM] not die.opt.3sg_[NOM] 'that the one, who eats of this may not die' (JOHN 6:50)

Gothic — matching data (Harbert 1978)

- (8) ei **sa** -ei þis matjai, ni gadauþnai comp rel.sg.m.nom -comp dem.sg.m.gen eat.opt.3sg_[NOM] not die.opt.3sg_[NOM] 'that the one, who eats of this may not die' (JOHN 6:50)
- (9) gaarma **þan -ei arma**pity.1sG_[ACC] REL.SG.M.ACC -COMP pity.1sG_[ACC]

 'I pity him, whom I pity' (ROM 9:15)

Gothic — matching data (Harbert 1978)

- (8) ei **sa -ei þis matjai**, ni gadauþnai comp rel.sg.m.nom -comp dem.sg.m.gen eat.opt.3sg_[NOM] not die.opt.3sg_[NOM] 'that the one, who eats of this may not die' (JOHN 6:50)
- (9) gaarma **þan -ei arma**pity.1sG_[ACC] REL.SG.M.ACC -COMP pity.1sG_[ACC]

 'I pity him, whom I pity' (ROM 9:15)
- (10) nist mein du giban, alja **þaim** -ei
 is not 1sg.poss.nom to give.inf_[DAT] except for rel.sg.m.dat -comp
 manwiþ was
 prepare.ptcp be.pret.3sg_[DAT]
 'it is not mine to give except for to the one, for whom it was prepared'
 (MARK 10:49)

Gothic — overview matching

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

Gothic — Nom vs. Acc data (Harbert 1978)

(11) **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' (JOHN 11:3)

Gothic — NOM vs. Acc data (Harbert 1978)

```
siuks ist
(11)
       ban
            -ei
                        frijos
       REL.SG.M.ACC -COMP love.PRES.2SG.[ACC] sick be.PRES.3SG[NOM]
       'the one whom you love is sick'
                                                                    (JOHN 11:3)
```

```
(12)
      jah þo
            -ei ist
                             us
                                          Laudeikaion jus
      and REL.SG.N.ACC -COMP be.PRES.3SG[NOM] from Laodicea
                                                     2.PL.NOM
      ussiggwaid
      read.[ACC]
```

'and you read the one which is from Laodicea' (COL 4:16)

Gothic — overview nom vs. Acc

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

Gothic — NOM vs. DAT data (Harbert 1978)

(13) iþ **þamm** -ei leitil fraletada leitil frijod but REL.SG.M.DAT -COMP little forgive.PASS.PRES.3SG[DAT] little love[NOM] 'but the one whom little is forgiven loves little' (LUKE 7:47)

Gothic — NOM vs. DAT data (Harbert 1978)

- (13) iþ **þamm** -ei leitil fraletada leitil frijod but REL.SG.M.DAT -COMP little forgive.PASS.PRES.3SG[DAT] little love[NOM] 'but the one whom little is forgiven loves little' (LUKE 7:47)
- (14) þaim -ei iupa sind fraþjaiþ
 REL.PL.N.DAT -COMP above be.PRES.3PL[NOM] think about.OPT.PRES.2PL[DAT]

 'think about those which are above' (COL 3:2)

Gothic — overview NOM — DAT

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

Gothic — ACC vs. DAT data (Harbert 1978)

(15) ushafjands ana bamm -ei lag pick up.pres.ptcp $_{[Acc]}$ on $_{[DAT]}$ rel.sg.n.dat -comp lie.pret.3sg 'picking up that what he lay on' (LUKE 5:25)

Gothic — ACC vs. DAT data (Harbert 1978)

```
(15) 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)
```

```
(16) ei galaubjaiþ 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)
```

Gothic — overview ACC — DAT

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

Gothic: overview summary

EXT INT	[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 winner of the case competition allowed to surface?

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

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

The unrestricted type

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

EXT INT	[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 $% \left(1\right) =\left(1\right) \left(1\right) \left($

The internal-only type

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

EXT INT	[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

The external-only type

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

EXT INT	[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

The matching type

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

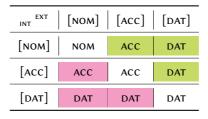
EXT INT	[NOM]	[ACC]	[DAT]
[NOM]	NOM	*	*
[ACC]	*	ACC	*
[DAT]	*	*	DAT

All types together

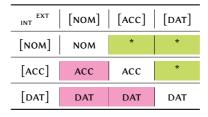
INT EXT	[NOM]	[ACC]	DAT]
[NOM]	NOM	ACC	DAT
[ACC]	ACC	ACC	DAT
[DAT]	DAT	DAT	DAT
EXT INT	[NOM]	[ACC]	DAT]
[NOM]	NOM	*	*
[ACC]	ACC	ACC	*
		•	

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

Gothic as the unrestricted type



German as the internal-only type



German — matching data (Vogel 2001)

(17) Uns besucht, wer Maria mag.

2PL.ACC visit.PRES.3SG_[NOM] REL.AN.NOM Maria.ACC like.PRES.3SG_[NOM]

'Who visits us likes Maria.'

German — matching data (Vogel 2001)

- (17) Uns besucht, wer Maria mag.

 2PL.ACC visit.PRES.3SG[NOM] REL.AN.NOM Maria.ACC like.PRES.3SG[NOM]

 'Who visits us likes Maria.'
- (18) Ich lade ein, wen auch Maria mag. 1sg.nom invite.pres.1sg_[Acc] rel.an.acc Maria.nom like.pres.3sg_[Acc] 'I invite who Maria also likes.'

German — matching data (Vogel 2001)

- (17) Uns besucht, wer Maria mag.

 2PL.ACC visit.PRES.3SG[NOM] REL.AN.NOM Maria.ACC like.PRES.3SG[NOM]

 'Who visits us likes Maria.'
- (18) Ich lade ein, wen auch Maria mag. 1sg.nom invite.pres.1sg_[Acc] Rel.An.Acc Maria.nom like.pres.3sg_[Acc] 'I invite who Maria also likes.'
- (19) Ich foLavendere, wem immer ich 1SG.NOM foLavendere.PRES.1SG[DAT] REL.AN.DAT ever 1SG.NOM vertraue.

vertraue.PRES.3SG[DAT]
'I follow whoever I trust.'

German — overview matching

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

(20) Uns besucht, wen Maria mag. $2PL.ACC\ visit.PRES.3SG_{[NOM]}\ REL.AN.ACC\ Marianom\ like.PRES.3SG_{[ACC]}$ 'Who visits us, Maria likes.'

- (20) Uns besucht, **wen Maria mag**.

 2PL.ACC visit.PRES.3SG_[NOM] REL.AN.ACC MariaNOM like.PRES.3SG_[ACC]

 'Who visits us, Maria likes.'
- (21) *Uns besucht, wer Maria mag.

 2PL.ACC visit.PRES.3SG_[NOM] REL.AN.NOM MariaNOM like.PRES.3SG_[ACC]

 'Who visits us, Maria likes.'

- (20) Uns besucht, **wen Maria mag**. 2PL.ACC visit.PRES.3SG_[NOM] REL.AN.ACC MariaNOM like.PRES.3SG_[ACC] 'Who visits us, Maria likes.'
- (21) *Uns besucht, wer **Maria mag**.

 2PL.ACC visit.PRES.3SG_[NOM] REL.AN.NOM MariaNOM like.PRES.3SG_[ACC]

 'Who visits us, Maria likes.'
- (22) *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.'

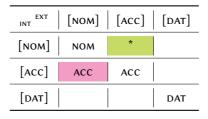
- (20) Uns besucht, **wen Maria mag.**2PL.ACC visit.PRES.3SG_[NOM] REL.AN.ACC MariaNOM like.PRES.3SG_[ACC]

 'Who visits us, Maria likes.'
- (21) *Uns besucht, wer **Maria mag**.

 2PL.ACC visit.PRES.3SG_[NOM] REL.AN.NOM MariaNOM like.PRES.3SG_[ACC]

 'Who visits us, Maria likes.'
- (22) *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.'
- (23) *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



(24) Uns besucht, **wem Maria vertraut**.

2PL.ACC visit.PRES.3SG[NOM] REL.AN.DAT MariaNOM trust.PRES.3SG[DAT]

'Who visits us, Maria trusts.'

- (24) Uns besucht, **wem Maria vertraut**.

 2PL.ACC visit.PRES.3SG_[NOM] REL.AN.DAT Marianom trust.PRES.3SG_[DAT]

 'Who visits us, Maria trusts.'
- (25) *Uns besucht, wer **Maria vertraut**.

 2PL.ACC visit.PRES.3SG_[NOM] REL.AN.NOM MariaNOM trust.PRES.3SG_[DAT]

 'Who visits us, Maria trusts.'

- (24) Uns besucht, **wem Maria vertraut**.

 2PL.ACC visit.PRES.3SG_[NOM] REL.AN.DAT Marianom trust.PRES.3SG_[DAT]

 'Who visits us, Maria trusts.'
- (25) *Uns besucht, wer **Maria vertraut**.

 2PL.ACC visit.PRES.3SG_[NOM] REL.AN.NOM MariaNOM trust.PRES.3SG_[DAT]

 'Who visits us, Maria trusts.'
- (26) *Ich vertraue, wem **Hitchcock mag**.

 1SG.NOM trust.PRES.1SG[DAT] REL.AN.DAT Hitchcock.Acc like.PRES.3SG[NOM]

 'I trust who likes Hitchcock.'

- (24) Uns besucht, **wem Maria vertraut**.

 2PL.ACC visit.PRES.3SG_[NOM] REL.AN.DAT Marianom trust.PRES.3SG_[DAT]

 'Who visits us, Maria trusts.'
- (25) *Uns besucht, wer **Maria vertraut**.

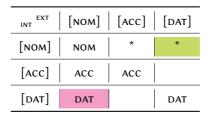
 2PL.ACC visit.PRES.3SG_[NOM] REL.AN.NOM Marianom trust.PRES.3SG_[DAT]

 'Who visits us, Maria trusts.'
- (26) *Ich vertraue, wem **Hitchcock mag.**1sg.nom trust.pres.1sg_[DAT] rel.an.dat Hitchcock.acc like.pres.3sg_[NOM]
 'I trust who likes Hitchcock.'
- (27) *Ich vertraue, wer Hitchcock mag.

 1sg.nom trust.pres.1sg_[DAT] rel.an.nom Hitchcock.acc like.pres.3sg_[NOM]

 'I trust who likes Hitchcock.'

German — overview NOM — DAT



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

1sg.nom invite.pres.1sg_[ACC] rel.an.dat also Marianom trust.pres.3sg_[DAT]

'I invite whoever Maria also trusts.'

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

 1sg.nom invite.pres.1sg_[ACC] rel.an.dat also Marianom trust.pres.3sg_[DAT]

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

 1SG.NOM invite.PRES.1SG_[ACC] REL.AN.ACC also Marianom trust.PRES.3SG_[DAT]

 'I invite whoever Maria also trusts.'

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

 1SG.NOM invite.PRES.1SG_[ACC] REL.AN.DAT also Marianom trust.PRES.3SG_[DAT]

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

 1sg.nom invite.pres.1sg_[ACC] rel.an.acc also Marianom trust.pres.3sg_[DAT]

 'I invite whoever Maria also trusts.'
- (30) *Ich vertraue, wem **auch Maria mag**.

 1sc.nom trust.pres.1sc[DAT] REL.AN.DAT also Marianom like.pres.3sc[ACC]

 'I trust whoever Maria also likes.'

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

 1sg.nom invite.pres.1sg_[ACC] rel.an.dat also Marianom trust.pres.3sg_[DAT]

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

 1SG.NOM invite.PRES.1SG_[ACC] REL.AN.ACC also Marianom trust.PRES.3SG_[DAT]

 'I invite whoever Maria also trusts.'
- (30) *Ich vertraue, wem **auch Maria mag**.

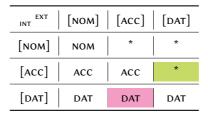
 1SG.NOM trust.PRES.1SG[DAT] REL.AN.DAT also Marianom like.PRES.3SG[ACC]

 'I trust whoever Maria also likes.'
- (31) *Ich vertraue, wen auch Maria mag.

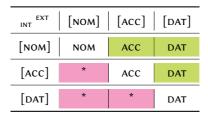
 1sc.nom trust.pres.1sc[DAT] REL.AN.ACC also Marianom like.pres.3sc[ACC]

 'I trust whoever Maria also likes.'

German — overview ACC — DAT



No external-only type



Polish as the matching type



Polish — matching data (Citko 2013 after Himmelreich 2017)

(32) Jan lubi **kogo -kolkwiek Maria lubi**.

Jan like.3sG_[Acc] REL.ACC.AN.SG ever Maria like.3sG_[Acc]

'Jan likes whoever Maria likes.'

Polish — matching data (Citko 2013 after Himmelreich 2017)

- (32) Jan lubi **kogo** -kolkwiek Maria lubi.
 Jan like.3sG_[ACC] REL.ACC.AN.SG ever Maria like.3sG_[ACC]
 'Jan likes whoever Maria likes.'
- (33) Jan pomaga **komu -kolkwiek ufa**.

 Jan help.3sg_[DAT] REL.DAT.AN.SG ever trust.3sg_[DAT]

 'Jan helps whomever he trusts.'

Polish — overview matching

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

(34) *Jan lubi **komu -kolkwiek dokucza**.

Jan like.3sG_[ACC] REL.DAT.AN.SG ever tease.3sG_[DAT]

'Jan likes whoever he teases.'

- (34) *Jan lubi **komu -kolkwiek dokucza**.

 Jan like.3sG_[ACC] REL.DAT.AN.SG ever tease.3sG_[DAT]

 'Jan likes whoever he teases.'
- (35) *Jan lubi kogo **-kolkwiek dokucza**.

 Jan like.3sG_[ACC] REL.ACC.AN.SG ever tease.3sG_[DAT]

 'Jan likes whoever he teases.'

- (34) *Jan lubi **komu -kolkwiek dokucza**.

 Jan like.3sG_[ACC] REL.DAT.AN.SG ever tease.3sG_[DAT]

 'Jan likes whoever he teases.'
- (35) *Jan lubi kogo -kolkwiek dokucza.

 Jan like.3sG_[ACC] REL.ACC.AN.SG ever tease.3sG_[DAT]

 'Jan likes whoever he teases.'
- (36) *Jan ufa komu -kolkwiek wpuścil do domu. Jan trust. $3sG_{[DAT]}$ REL.DAT.AN.SG ever let. $3sG_{[Acc]}$ to home 'Jan trusts whoever he let into the house.'

- (34) *Jan lubi komu -kolkwiek dokucza.

 Jan like.3sG_[ACC] REL.DAT.AN.SG ever tease.3sG_[DAT]

 'Jan likes whoever he teases.'
- (35) *Jan lubi kogo **-kolkwiek dokucza**.

 Jan like.3sG_[ACC] REL.ACC.AN.SG ever tease.3sG_[DAT]

 'Jan likes whoever he teases.'
- (36) *Jan ufa komu -kolkwiek wpuścil do domu.

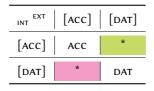
 Jan trust.3sG_[DAT] REL.DAT.AN.SG ever let.3sG_[ACC] to home

 'Jan trusts whoever he let into the house.'
- (37) *Jan ufa kogo -kolkwiek wpuścil do domu.

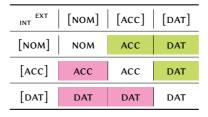
 Jan trust.3sG[DAT] REL.ACC.AN.SG ever let.3sG[ACC] to home

 'Jan trusts whoever he let into the house.'

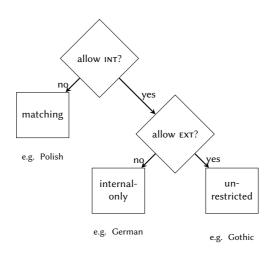
Polish — overview ACC vs. DAT



The table again



Is the winner of the case competition allowed to surface?



Two aspects

Two aspects

■ Which case wins the case competition? NOM < ACC < DAT

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

[ACC] ACC ACC E	оат]	[DAT	[ACC]	[NOM]	EXT INT
	OAT	DAT	ACC	NOM	[NOM]
	OAT	DAT	ACC	ACC	[ACC]
[DAT] DAT DAT	OAT	DAT	DAT	DAT	[DAT]

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

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

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

No always internal type

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

Greek as always external type

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

Greek NOM_{INT} vs. ACC_{EXT} (Daskalaki 2011)

(38) Efχarístisa ópjus **me voíðisan**. thank.PST.3PL_[ACC] REL.PL.M.ACC CL.1SG.ACC help.PST.3PL_[NOM] 'I thanked whoever helped me.'

Three possibilities for Greek

EXT INT	[NOM]	[ACC]	[GEN]
[NOM]	NOM	ACC	GEN
[ACC]	*	ACC	GEN
[GEN]	*	*	GEN

Three possibilities for Greek

EXT INT	[NOM]	[ACC]	[GEN]
[NOM]	NOM	ACC	GEN
[ACC]	*	ACC	GEN
[GEN]	*	*	GEN
EXT INT	[NOM]	[ACC]	[GEN]
	[NOM]	[ACC]	[GEN]
INT			l
[NOM]	NOM	ACC	GEN

Three possibilities for Greek

EXT INT	[NOM]	[ACC]	[GEN]
[NOM]	NOM	ACC	GEN
[ACC]	*	ACC	GEN
[GEN]	*	*	GEN
EXT INT	[NOM]	[ACC]	[GEN]
	[NOM]	[ACC]	[GEN]
INT	l		

EXT INT	[NOM]	[ACC]	[GEN]
[NOM]	NOM	ACC	GEN
[ACC]	NOM	ACC	GEN
[GEN]	NOM	ACC	GEN

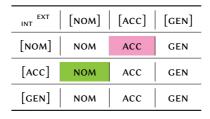
Greek NOM_{INT} vs. ACC_{EXT} (Daskalaki 2011)

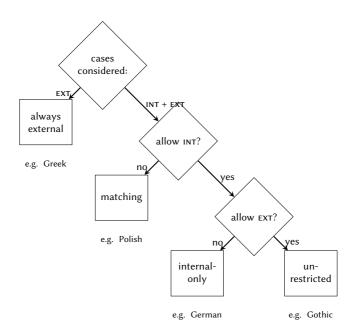
(39) Ir θ an ópji **káleses**. come.PST.3PL[NOM] REL.PL.M.NOM invite.PST.2SG[ACC] 'Whoever you invited came.'

Greek NOM_{INT} vs. ACC_{EXT} (Daskalaki 2011)

- (39) Irθan ópji káleses. come.PST.3PL_[NOM] REL.PL.M.NOM invite.PST.2SG_[ACC] 'Whoever you invited came.'
- (40) *Irθan **ópjus káleses**.
 come.PST.3PL_[NOM] REL.PL.M.ACC invite.PST.2SG_[ACC]
 'Whoever you invited came.'

Greek: always external





Possible patterns for headless relatives

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

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