

# Relative clauses in South Slavic and the predictability of morphosyntactic features

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14th European Conference on the Formal Description of Slavic Languages  
Leipzig, 2–4 June 2021

## 1 Introduction

various elements introducing relative clauses:

- (1) a. This is the problem **which** we should solve first.
- b. This it the problem **that** we should solve first.

differences in the etymology (cf. Hopper & Traugott 1993, Heine & Kuteva 2002):

- interrogative-based – e.g. *which/who(m)*
- demonstrative-based – e.g. *that*

differences in the position of the elements:

- relative pronouns – e.g. *which/who(m)*, German *der/die/das*
- relative complementisers – e.g. *that*, South German *wo*

observation in Germanic: combinations restricted by the etymology – only asymmetric combinations attested as genuine “rel+rel” combinations

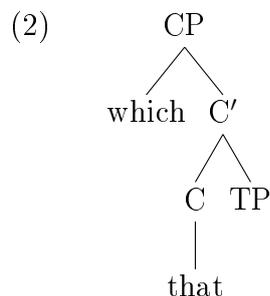
→ questions:

- how strong the generalisation is cross-linguistically – Slavic data
- how apparently excluded combinations can be analysed synchronically
- what independent evidence we have for the featural properties of individual elements

proposal: combinations restricted by the distribution of [rel] features that are determined by the etymology but can show subsequent deviations

## 2 Germanic

doubly filled COMP effects involving an overt pronoun and an overt complementiser:



*wh*-pronoun + *d*-complementiser: English (see van Gelderen 2009), marginally Swedish:

- (3) a. It's down to the community **in which that** the people live.  
 (van Gelderen 2013: 59, ex. 8)
- b. Detta är studenten **vilken som** bjöd in Mary.  
 this is the.student which that invited in Mary  
 'This is the student who invited Mary.' (Bacskai-Atkari & Baudisch 2018)

*d*-pronoun + *wh*-complementiser: South German dialects (Brandner & Bräuning 2013, Weiß 2013, Fleischer 2017)

- (4) Des Geld, **des wo** ich verdiene, des geheert mir.  
 the.N money that.N REL I earn.1SG that.N belongs I.DAT  
 'The money that I earn belongs to me.'  
 (Hessian; Fleischer 2017)

four logically possible configurations – only two attested as genuine “rel+rel” (both members independently and productively attested as relative markers)

	<i>d</i> -complementiser	<i>wh</i> -complementiser
<i>d</i> -pronoun	–	+
<i>wh</i> -pronoun	+	–

*d*-pronoun + *d*-complementiser attested in Old English (van Gelderen 2009) and in Waasland Dutch (Boef 2013):

- (5) Dat is de man **die dat** het gedaan heeft.  
 that is the man who that it done has  
 'That is the man who has done it.' (Boef 2010)
- Dutch: relatives with a single *dat* (as a complementiser) found in Vlaams-Brabant Dutch (Boef 2013) → the complementiser marks finiteness, not [rel]
  - Old English: doubling in the process of reanalysis of one of the *d*-pronouns (*that*) into a complementiser, removing the original complementiser *þe* (van Gelderen 2009) – *þe* possibly only a finiteness marker, or the pronoun still a demonstrative but not [rel]

no combinations of *wh*-pronoun + *wh*-complementiser

### 3 The data

Slavic languages regularly use *wh*-based elements (cf. Kljajevic 2012: 36)

two major strategies also in South Slavic languages

Serbian/Croatian (Gračanin-Yuksek 2013):

- (6) a. čovjek **što** puši  
man that smokes  
'a/the man that smokes/is smoking'
- b. čovjek **koji** puši  
man which.NOM smokes  
'a/the man who smokes/is smoking'

both elements phonologically identical to their *wh*-operator counterparts (Halpern 1995):

- (7) a. **Što** je Marija videla?  
what AUX Mary seen  
'What did Mary see?'
- b. **Koji** čovek je voleo Mariju?  
which.NOM man AUX seen Mary.ACC  
'Which man saw Mary?'

variation in Macedonian (Bužarovska 2009):

- (8) a. Covekot **koj** vlez e moj sosed.  
man.the.M.SG who.M.SG come.AOR.3SG is my.M.SG neighbour  
'The man who came in is my neighbour.'
- b. Covekot **što** go sretnavme e moj sosed.  
man.the.M.SG that 3SG.ACC.CL meet.AOR.1PL is my.M.SG neighbour  
'The man whom we met is my neighbour.'

similar in Bulgarian, with the colloquial complementiser *deto* (Rudin 2014) – corpus examples from Bužarovska (2009):

- (9) a. Imaše xora, **koito** ne viždaxa ništo pred sebe  
have.IMPERF.3SG people who.PL not see.IMPERF.3SG nothing before own  
si.  
CL  
'There were people who saw nothing in front of them.'
- b. Mu kazvali, ce ima xora, **deto** bjagat ot dobroto kato  
CL told.PL.PART that has people that run.3PL from good.the.N.SG like  
zajci ot kopoju.  
rabbits from hound.M.SG  
'He was told that there are people who run away from good like rabbits from a hound.'

Slovene (Hladnik 2010):

- (10) a. Poznam človeka, **katerega** so iskali.  
 know.1SG man.ACC who.ACC AUX.3PL looked.for  
 ‘I know the man who they were looking for.’
- b. Poznam človeka, **ki** so ga iskali.  
 know.1SG man.ACC that AUX.3PL M.ACC.CL looked.for  
 ‘I know the man that they were looking for.’

variation also in West Slavic (at least in non-standard varieties) – relative complementisers, i.e. Czech and Polish *co*, Slovak *čo* (Šimík 2008, Guz 2017, Minlos 2012)

## 4 Doubling

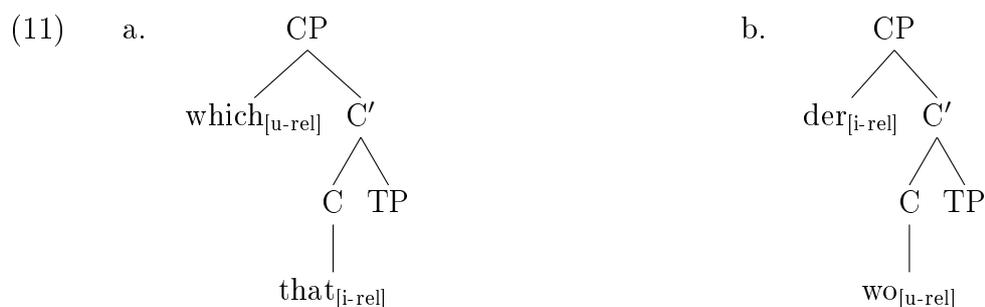
recall: doubling patterns appear to be asymmetric → hypothesis by Bacskai-Atkari (2020): differences due to differences in the interpretability of [rel] features

feature distribution:

- *d*-pronouns and *d*-complementisers: [i-rel]
- *wh*-pronouns and *wh*-complementisers: [u-rel]

interpretability apparently inherited from original definiteness features – demonstratives definite, *wh*-base indefinite (cf. Watanabe 2009)

asymmetric patterns ensure proper feature checking:



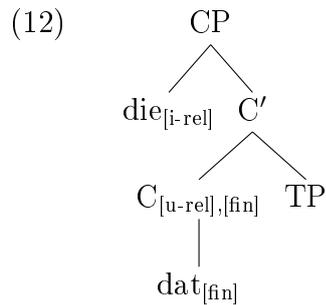
↔ symmetric patterns essentially problematic for feature checking:

- [i-rel] + [i-rel]: movement of the operator not motivated
- [u-rel] + [u-rel]: [u-rel] cannot be checked

but: some *d*-pronoun + *d*-complementiser combinations exist

- Waasland Dutch: *dat* marks finiteness, underspecified for [rel]
- Old English: *þe* losing [i-rel] and changing into being underspecified for [rel], marking finiteness only

→ *d+d* patterns can be accounted for – independent evidence for the *d*-complementisers as underspecified for [rel] – no head nouns in declaratives



lexicalising a finite C a general tendency in Germanic (Bacskai-Atkari 2018; 2020)

no *wh+wh* patterns in Germanic

*wh+wh* patterns in South Slavic:

- Serbian/Croatian: not attested (Goodluck & Stojanović 1996: 292)
- Slovenian: not attested (Hladnik 2010: 12–13)
- Macedonian: possible (Rudin 2014: 320)

Macedonian:

- (13) čovekot **koj-što** zboruva  
 the.man who-that talks  
 ‘the man who is talking’ (Rudin 2014: 316)

pattern in (13) productive: attested with all relative pronouns, except when the pronoun also has the form *što* (Rudin 2014: 320) – probably a phonological constraint (cf. similar constraints in multiple *wh*-fronting, see Bošković 2002)

both elements available as interrogative operators (Rudin 2014):

- (14) a. **Koj** zboruva?  
 who talks  
 ‘Who is talking?’
- b. **Što** sakaš?  
 what want.2SG  
 ‘What do you want?’

→ (13) apparently a *wh+wh* pattern

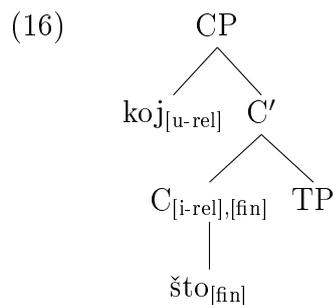
but: *što* also available as a declarative complementiser (Rudin 2014):

- (15) Se raduvam, **što** ve gledam.  
 REFL rejoice.1SG that you.PL.ACC see.1SG  
 ‘I am happy that I see you.’ (Tomić 2006: 419)

status of *što* as a complementiser in relative clauses (Rudin 2014):

- doubly filled COMP patterns indicate it cannot be a pronoun – word order constraint follows from the internal structure of the CP (Bacskai-Atkari 2018; 2020)
- independent evidence for *što* being a complementiser otherwise
- prepositions cannot take *što* (same as for English *that*)

structure in itself not problematic:



question: what the feature specification of *što* is

two possibilities:

- underspecification for [rel], just like *dat* in Waasland Dutch
- specification as [i-rel]

underspecification: plausible under a late insertion approach (Halle & Marantz 1993), inasmuch as the abstract underlying head is lexicalised by a partial match – assumption less problematic if the abstract head is [u-rel] than when it is [i-rel]

no independent evidence for the *wh*-operators to be [i-rel]

alternative: *što* is [i-rel] → implies a difference from the Germanic pattern

- doubling in Germanic primarily in embedded interrogatives and much less in relative clauses (Bacskai-Atkari to appear)
- relative declarative complementisers in South Slavic introduce factives

Serbian/Croatian (Arsenijević 2020: 341):

- (17)
- a. Jesam ti rekao **da** je Marija orišla na odmor?  
 AUX.1SG you.DAT told that AUX.3SG Marija gone on vacation  
 ‘Did I tell you that Marija went on vacation?’
- b. Jesam ti rekao **što** je Marija orišla na odmor?  
 AUX.1SG you.DAT told that AUX.3SG Marija gone on vacation  
 ‘Did I tell you that Marija went on vacation?’ (it is a fact that she did)

→ *što*-declaratives have referential properties (Arsenijević 2020) and are thus similar to relative clauses; see Krapova (2010: 1266) for Bulgarian and Macedonian

but: no head noun and no relative operator movement → *što* cannot be [u-rel] in these constructions → loss of this feature

loss of [u-rel] does not make [i-rel] automatically available:

- Serbian/Croatian: no *wh+wh* doubling in ordinary relative clauses
- Macedonian: *wh+wh* doubling in ordinary relative clauses – *što* available as [i-rel]

implicational hierarchy: *wh*-based declaratives a prerequisite for *wh+wh* doubling in ordinary relative clauses but not vice versa

## 5 Conclusion

doubling in South Slavic relative clauses – morphological inventory: both *wh*-pronouns and *wh*-complementisers available

typological predictions based on Germanic and Slavic:

- genuine *wh+wh* combination not attested
- exception: Macedonian – *wh*-complementiser *što* has different properties (independent evidence) → further reanalysis possible

→ morphological properties decisive for most patterns, they do not prohibit further grammaticalisation even in languages where the original *wh*-element is still available

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