HISTORICAL SYNTAX

The C system of relatives and complement clauses in the history of Slavic languages

ROLAND MEYER

Humboldt-Universität zu Berlin

This article scrutinizes the diachrony of relativizers and complement clause subordinators in Russian, Polish, and Czech. Historical morphology indicates a development from agreeing relative pronouns via noninflected relativizers to complement clause subordinators. This concurs with recent findings on Germanic (Axel-Tober 2017), but contradicts more traditional proposals that derive subordinators from demonstratives. The respective syntactic reanalyses are demonstrated on diachronic Slavic corpus data. Moreover, a quantitative comparison of sixteenth- to seventeenth-century East Slavic texts with and without West Slavic interference suggests that the use of *kotoryj* 'which' as a relative pronoun spread into Russian as an inner-Slavic contact-induced change.*

Keywords: relative clause, complement clause, historical linguistics, syntax, Slavic languages

1. INTRODUCTION. Diachronic transitions between different elements that occupy the (traditionally so-called) Comp position at the left clausal periphery are well known from the history of Germanic and Romance languages (cf. van Gelderen 2004, Axel 2009, and references therein). In particular, pathways between the specifier and the head of Comp (SpecC and C^0), two potential surface positions of relative clause markers, have been captured descriptively by the SPEC-TO-HEAD PRINCIPLE or HEAD PREFERENCE PRINCIPLE of van Gelderen (2004). The principle holds that realizing C^0 is preferable to realizing SpecC. Given that relative pronouns are often descendants of older demonstrative pronouns (Harris & Campbell 1995, Hopper & Traugott 2003:196ff., Roberts & Roussou 2003, van Gelderen 2004:81ff., 89ff., Axel 2009, among many others), this principle captures the diachronic pathway illustrated in 1.

(1) Old English (OE) *þat* (demonstrative pronoun) > OE *þæt* (relative pronoun in SpecC) > 13th c. English *þæt* (relative clause C^0)

The difference in surface positions (C^0 vs. SpecC) accounts for the respective elements' (i) (non)inertness for agreement and, in some cases, (ii) (lack of) cooccurrence restrictions with regard to other relative pronouns or adverbs.

Relative markers are generally rather susceptible to effects of language contact. English relative pronouns with a WH-base (*who*, *which*, …) were either enforced by contact with Romance (Fischer 1992) or even ultimately borrowed from Romance (Harris & Campbell 1995:284f., van Gelderen 2004, Axel 2009). A typical pattern of relativization in European standard languages (Comrie 1998:61, Haspelmath 2001:1494, Fleischer 2003:236)—namely, the postposed relative clause introduced by a relative pronoun, which, at the same time, agrees with its head noun and indicates its grammatical function in the relative clause—may originally be due to Latin influence (Haspelmath 2001:1507).

Demonstratives allegedly form a diachronic source both for relative markers and for object clause complementizers: German subordinate clauses with the complementizer *dass* 'that' are usually said to originate from a juxtaposition of two main clauses, the first of which contained a demonstrative object pronoun. During the Old High German period, a reanalysis toward a subordination structure took place, as shown schematically in 2.

(2) $[_S \ldots [_{NP.ACC} \text{ thaz}]] [_S \ldots] > [_S \ldots [_S \text{ thaz} \ldots]]$
         that   that

Axel (2009, Axel-Tober 2017), however, provides compelling arguments against this traditional view; on her account, *that*-complement clauses developed from relatives with a relative particle in C^0, roughly as in 3.

(3) $\ldots pro_i \, V^0 \, [_{CP} \, OP_i \, [_C \text{ thaz}] \ldots] \Rightarrow \ldots V^0 \, [_{CP} \, [_C \text{ thaz}] \ldots]$

The present article discusses the above scenarios in light of the history of the Slavic languages Russian (Rus.), Polish (Pol.), and Czech (Cz.). From a synchronic point of view, complementizers in these languages more often appear as cognates of relative particles than of demonstratives—for example, Rus. *čto* is ambiguous between '*that*-complementizer', '*what*-interrogative/relative pronoun (free relatives)', and in modern colloquial Russian even 'WH-based relative particle', while *(è)to* '*that*-demonstrative' is morphologically unrelated. So there is some initial indication in favor of the view expressed in 3, rather than the traditional one in 2. Nevertheless, this evidence must be supplemented by diachronic research that demonstrates the alleged developmental stages in qualitative and quantitative detail. Moreover, the following observations need to be accounted for.

(i)   Present-day standard relative and complement clauses are a rather recent development. Thus, Issatschenko (1980:513) complains 'dass [im Russian] selbst im 17.Jh. (außerhalb der Hochsprache) noch keine echten Relativsätze existierten' ('that in Russian, no real relative clauses existed (except for the high register) even as late as in the seventeenth century') (cf. Boretzky 1999).

(ii) Both diachronically and synchronically, varieties and registers of Czech, Polish, and Russian differ(ed) considerably in their distribution of complementizers and relative markers (a crosslinguistically common fact; cf. Fleischer 2003, 2005 and Murelli 2011).

(iii) The historical origin of the present-day standard relativizer Rus. *kotoryj*/Pol. *który*/Cz. *který* 'which.REL.PRON' has not yet been clarified.

For the sake of illustration of point (i) above, consider the rich variation in relative clause formation in sixteenth/seventeenth-century Russian, including *that*-CPs containing a doubled coreferential NP as in 4, or relative clauses introduced by the originally Old Church Slavic (OCS) pronoun *jaže* 'which.N.PL' in 5.[1]

(4) požalovalъ esmi   Grišu … derevneju Kučinymъ, **čto** byla **ta**
    reward.M.SG AUX.1SG G.ACC   village.INS K.INS   that was this
        derevnja za   Rodeju …
        village.F.SG at/for R.
    'I rewarded Griša … with the village K., which had belonged to R.'
                                                    (Mosk. gr. 1546; Borkovskij 1979)

---

[1] Abbreviations used in the glosses throughout this article are the following: 1/2/3: 1st/2nd/3rd person, ACC: accusative, AOR: aorist, AUX: auxiliary, CVB: converb, DAT: dative, F: feminine, GEN: genitive, IMP: imperative, INS: instrumental, IPFV: imperfective aspect, LOC: locative, M: masculine, N: neuter, NEG: negation, NOM: nominative, PFV: perfective aspect, PL: plural, PRP: prepositive, PRS: present, PST: past, PTCL: particle, REL.PRON: relative pronoun, POSS: possessive, REFL: reflexive, SBJV: subjunctive, SG: singular.

(5) da   vsjak koždo … xranitъ svoju stranu i   město i   vsja
    PTCL but everyone protects his   country and city   and everything.N.PL

    jaže   na brannuju potrebu   ustrojajutъ
    which.N.PL for defense   needs.ACC install.3PL

  'and everyone protects his country and city and everything which he in-
  stalls for the purpose of defense'   (Skaz. Palicyna, 1620; RRuDi)

The structures in 4–5 would be impossible nowadays. The modern standard relativizer is Rus. *kotoryj*/Pol. *który*/Cz. *který* 'which.REL.PRON'. The relative particle Rus. *čto*/Pol. *co*/Cz. *co* 'that', illustrated in 6, is marked as strongly colloquial today.

(6) a. Očen' žal' tech   mal'čikov, **čto** byli   rasstreljany na
    very sad those.GEN.PL boy.GEN.PL that were.PL shot   on

      barrikadach.
      barricades

    'We are very sad about the boys who were shot on the barricades.'

                          (Russian; RNC)

   b. toho   tmavě růžového krokodýla,   **co** jsme ho   koupili   v
      that.ACC dark   pink.ACC crocodile.ACC that AUX him buy.PST.1PL in

      cirkusu.
      circus.LOC

   ' … that dark pink crocodile which we bought in the circus.'

                          (Czech; ČNK)

Table 1 provides a synchronic overview of the relevant demonstratives and relative markers in the languages under discussion.

	DEMONSTRATIVE PRONOUN		RELATIVE PRONOUN			RELATIVE PARTICLE	SUBJUNCTION
	'that one'		'which'	'who/what'		'where, that'	'that'
OCS	tъ	*i, ja; sъ	iže, jaže	(kъto, kogo)	(č'to, čego)	(jako) (iže)	jako (eže)
POL	ten	ów	który	kto, kogo	co, čego	co	iž, że
Cz	ten	onen	který	kdo, koho	co, čeho	co	že
RUS	tot	étot	kotoryj	kto, kogo	čto, čego	čto	čto

TABLE 1. Demonstrative pronoun 'that', relative pronoun 'what/which', relative particle 'where, that', and complementizer 'that' in OCS, Polish, Czech, and Russian.

In this article, I argue that the homonymies apparent from Table 1 are not accidental: they indicate historical changes that affected the category and syntactic function of connectors (= HYPOTHESIS 1).

(7) Relative pronoun > Relative particle > Subjunction

i-že	iže	iž, že, že
čto, č-ego	co, čto	čto

These changes, if confirmed, also concern the whole external syntax of the embedded clause: from a free modifier of a noun phrase, it would have evolved into the internal or external argument of a matrix verb.

The second major issue to be addressed in this article is the origin and spread of Rus. *kotoryj* 'which' as a relative pronoun. As I try to show, it is very plausible to assume that *kotoryj* as a connector for postnominal relative clauses is a contact-induced innovation in East Slavic, based on seventeenth-century Pol. *który* 'which' (= HYPOTHESIS 2).

The article proceeds as follows. I first discuss the diachronic development of relative and complement clause connectors in OCS (§2.1), Czech and Polish (§2.2), and Russian (§2.3) in turn, providing the most detail on Russian. Section 3 analyzes the con-

comitant structural syntactic change implicit in hypothesis 1 and develops a scenario of reanalysis. Conclusions are drawn in §4.

The empirical observations in this article are based on two types of sources: (i) single illustrative examples are drawn from the secondary literature, and (ii) more extensive evidence was drawn from the diachronic research corpora RRuDi for Russian and PolDi for Polish (Meyer 2012), which are available for online query at http://hu.berlin /rrudi and http://hu.berlin/poldi. Additional corpora that were used are indicated together with the respective examples.

2. THE DIACHRONIC DEVELOPMENT OF RELATIVE AND COMPLEMENT CLAUSE CONNECTORS.

2.1. OLD CHURCH SLAVIC. Relative clauses in OCS were very consistently introduced by the relative pronoun *iže* 'who, which' (Večerka 2003:175ff., 393ff.), which is a morphologically complex item consisting of the personal pronoun *i 'he' and the particle *že*. While other relative markers remained rare and exceptional, *i-že* or one of its inflectional forms did sometimes occur as a fixed, nonagreeing relative marker, as illustrated in 8.

(8) se   že   reče   o   dsě   **eže**   xotěaxǫ prijęti
    this PTCL say.AOR.3SG about spirit.M.PRP that.N.ACC shall.3PL receive

     i   věrujǫšti
     him.M.ACC believing.PL

    'This he said about the spirit which those who believed in him should
    receive.'   (J 7.39; Večerka 1989–2003:186)

In single instances, the neuter form *e-že* could even mark subordinate *that*-clauses. The most widespread subordinate complementizer *jako*, by contrast, only rarely occurred as a relative particle. Thus, the available OCS data, albeit essentially synchronic (originating from the ninth to tenth centuries), nicely conform to the scenario described by hypothesis 1: *iže* generally acted as an agreeing relative pronoun, but its forms already served occasionally as nonagreeing relative markers and sometimes even as subordinate complementizers.

2.2. CZECH AND POLISH. Historical Czech and Polish textual sources can be traced back no earlier than to the thirteenth and fourteenth centuries, respectively. There is no documentable connection between these two West Slavic languages and the South Slavic OCS; correlations and potential common origins can only be reconstructed. In the case at hand, however, the oldest Pol./Cz. relative marker *jen-ż/ž(e)* 'who, which' is clearly a variant of OCS *i-že*, formed in a parallel manner: *jen* 'he' + *že* (particle). Table 2 provides a summary of the diachronic variation in the system of Polish and Czech connectors.

The relative pronoun *jen-ż/ž(e)* was in use until the sixteenth century (Czech) and the fifteenth century (Polish), respectively, and was then replaced by forms of Pol. *który*/Cz. *který* 'which' and the original interrogative pronoun Pol. *kto* (Cz. *kdo*) 'who', *co* 'what'. Supported by normative efforts toward the end of the eighteenth century, Cz. *jenž* remained in use as a formal counterpart of the new, stylistically neutral, relative pronoun *který*; moreover, it still persists today as the POSSESSIVE relative pronoun *jehož/jejíž/jehož* 'whose (M/F/N possessum)' (Rappaport 2000).

The relative particles arose as fixed, nonagreeing inflectional forms of *jen-ż/ž(e)*— *jenž*, *jež*, *ješto*, and so forth—in the late fourteenth century, as illustrated for Czech in 9.

(9) Vršovici,   **již**   [DalL: **ješto**]   byli kněží svadili,
    V.NOM.PL which.NOM.PL [which.PTCL.N.SG] AUX Lord's disunited

těch   sú Moravěné mnoho zbili.
those.GEN.PL AUX M.   many   beat.PST
'The Vršovici, who had disunited the Lord's (people), of those the Mora-
vians beat up many.'   (Czech; DalC, mid-14th c./DalL, 15th c.; Bauer 1960:200f.)

	RELATIVE PRONOUN			RELATIVE PARTICLE		SUBJUNCTION	
	'which'	'who, what'		'that'		'that'	
POL	jenż(e)	który(ż) (to)	kto(ż), kogo(ż)	co(ż), čego(ż)	jiżto, ježto	co		iż, że
	predominant in 14th–15th c.	expanding since mid-15th c.			uninflected; since 15th c.	with resumptive pronoun; since 14th c.		(h)iże, iż, jenż, (j)eż, że until 15th c. (10); since then, iż and że most common
CZ	jen-ž(to)	který(ż) (to)	kdo, koho	co, čeho	(jako); jenž, jež, ješto	co	(jako); ano	že
	extinct from 16th c.; normatively revived since 18th c.	expanding since 14th c.			uninflected (9); partly with resumptive (10)	replaces ješto since 15th c.	jako early, rare; ano with perception verbs	13th–14th c. (j)eż, ješto, jenž, že (11); že prevalent since 15th c.

TABLE 2. Diachronic variation in Polish and Czech connectives, with references to example numbers in the text (data gathered from Urbańczyk 1935, 1953–2002, Bauer 1960, Trávníček 1961, PolDi, DČNK).

As Bauer (1960:201) notes, the earlier redaction of this text (DalC) contains a relative pronoun, whereas a later one (DalL) resorts to a nonagreeing relative particle in the same place, pointing to a development in the expected direction. In oblique cases as in 10, the relative particle was often accompanied by a resumptive pronoun (which is an obligatory rule today).

(10) svú   dokonalú   mocí,   **gessto   gij**   nic   nemuož
     his.INS complete.INS power.INS that.N.SG.PTCL her.DAT nothing NEG.could
          odepřieti
          resist
     'by his absolute power, which nothing could resist'   (Czech; Lact, 1511)

Turning to complement clauses, we observe striking morphophonological variation in complementizers until the fifteenth century. For example, the following Polish biblical example shows *yze* (= /(j)iże/) in the *Rozmyślanie przemyskie* (Rozm., mid-fifteenth century), but *ze* (= /że/) in the slightly earlier *Ewangelium Kanoników Regularnych Laterańskich* (Urbańczyk 1953–2002).

(11) Ale przisla   goczina,   **ze** [Rozm: **yze**] kazdi,   ktoz
     but came.F.SG hour.F.NOM that [which.NOM.SG] everyone who.PTCL
          zabye   was,   domnim<a>wa …
          kill.3SG you.ACC think.3SG
     'But a time came at which everyone who would kill you would think … '
                                                        (Polish; EwKReg, ca. 1425)

In late fourteenth-century Czech, we find, for example, the subordinate complementizers *ež* and *jenž*, both of which could still also function as relative particles.

(12) a. vzvěděv, **ež** Vít opat v Uhřiech bieše,
    learn.CVB.PST that V.NOM abbot.NOM in Hungary.PRP.PL was.IPFV.3SG
    své posly poň poslal
    his.ACC.PL legates.ACC.PL to.him sent.PST.M.SG
    'Learning that Vít was an abbot in Hungary, he sent his legates to him'
        (Czech; Pas, 1379; DČNK)

  b. když uzřěchu, jenž nemuož křížě nest<i>, …
    when see.PST.PL that NEG.could cross.GEN.SG carry
    'When they saw that (he) could not carry his cross … '
        (Czech; Vít, 1380–1400?; DČNK)

Early Polish and Czech data containing the descendants of *iže thus add further support to hypothesis 1: forms of the inflected relative pronoun (stage 1) began to serve as nonagreeing relative particles (stage 2), and then also came into use as general complement clause subordinators (stage 3), which form the predecessors of the modern complementizers (stage 4). Strictly speaking, however, stages 2 and 3 overlap temporally and cannot be clearly dissociated; it may well be possible that forms of the relative pronouns developed into 'all purpose' subordinators (stage 2/3), whose descendants are the present-day complementizers. Be that as it may, what has to be explained, in any event, is the development of a complement clause structure from an original relative clause (introduced by a relative pronoun).[2]

Turning from the *iže-based to the WH-based connectors, we see the result of a change of *co* from an agreeing to a nonagreeing relativizer already in the earliest written witnesses. As Urbańczyk (1935) notes for historical Polish, the first documented vernacular texts, the *Roty sądowe* (fourteenth/fifteenth century), already use *co* as a noninflected relativizer, with a presumptive pronoun in oblique cases. A very early example of this stage is provided in 13, from the (digitized) *Aneks do Słownika staropolskiego* (2010–2014).

(13) Jaco Smiſław nema vſzitka tich ouecz | czſo Januszeui
    that S.NOM NEG.have use those sheep.GEN.PL that J.DAT
    pocradzoni.
    stolen.N.PL
    'That Smisław has no use for those sheep which were stolen from Janusz.'
        (Roty sądowe, Pozn nr. 27, 1387)

---

[2] Czech historical linguists have held somewhat contradictory views on the etymology of the complementizer *že*: Trávníček (1961:55ff.) argued that it originated from a modal particle *že*, which optionally combined with a further demonstrative particle *(j)e*, resulting in *(j)(e)že*. According to Bauer (1960:142), the demonstrative component is a pronoun rather than a particle. It should be noted that neither of these analyses captures the fact that there is a large number of variants among the predecessors of *že* in the thirteenth and fourteenth centuries (*jež*, *ješto*, *jenž*, etc.), all of which are homonymous with Old Czech relative particles and inflectional forms of the relative pronoun. The only connector that almost exclusively occurs as a complementizer is *ež*, but even here, single examples with a relative meaning can be found.

(i) Ačť jsú vám bratřie u Boze páni vaši, ež jsú
    though be.3PL you.DAT brothers at God ruler.NOM.PL your.NOM.PL which be.3PL
    křestěné, tiem je viece milujte, nehrdajte jimi
    baptized.PL this.INS them more love.IMP.PL NEG.despise them.INS
    'If your brothers in God are your rulers, who are baptized, then love them the more, do not despise them.' (Štítný; VokWeb, 1376)

Moreover, Trávníček's (1961) and Bauer's (1960) proposals may be applicable to Czech, but fail to capture the obvious parallels in the development of Polish *iż* and Russian *čto*.

Interestingly, there are even instances of left-dislocated clauses introduced by *co* in these very documents (cf. 14), which do not support a relative clause analysis; they rather point to *co* as a general subordinator. This route was not subsequently followed in Polish, however.

(14) **Cſzo** potrek paſzkoui kone   pobral | tego   Heſka vſitka nema.
      that P.NOM P.DAT horse.ACC.PL took   that.GEN H.NOM use.GEN NEG.has
      'That Piotrek stole horses for Pasek, from this Heska has no gain.'

                                                         (Roty sądowe, Pozn nr. 25, 1387)

Of course, *kto*/*co* 'who/what' also occur as agreeing relative pronouns in the earliest documents; however, they do not usually attach to a LEXICAL noun phrase (= so-called HEADED relatives; cf. 21a below), only to a demonstrative pronominal head *to* 'this' (= LIGHT-HEADED relatives) or to no visible head at all (= FREE relatives) (see Citko 2004, Szucsich 2007a for this taxonomy). Obviously, relative clauses introduced by the relative particle *co* either were based on a (nonattested) earlier use of *kto*/*co* as connectors in HEADED relatives, or their restrictions on the syntactic environment were dropped at some point. The situation is similar in Czech: in fourteenth-century texts, we find ample evidence of *kto*, *co* as relative pronouns in light-headed or free relative clauses. By the end of the fourteenth century, *co* AS A RELATIVE PARTICLE extends into the realm of headed relatives; see 15. However, such examples are exceedingly rare in literary texts.

(15) kak jest Kristus se   ctí   přijat   a vděčně   od
      when is.3SG K.   with honor.INS adopted.N.SG and gratefully by
      obecného lidu,   **ješto** slyševše   o   něm tolik
      common people.GEN.SG which heard.CVB.PL about him so.many
      divóv,   **co** j' jich   činil,   i viděvše, jakož …
      miracles.GEN.PL that he them.GEN.PL did.M.SG and seen.CVB.PL that
      'When Christ is adopted with honor and grace by the common people,
      who have heard so many miracles about him, which he did, and have
      seen that … '   (Štítný: Řeči; VokWeb, end 14th c.)

Thus, both in Polish and in Czech, the development of *co* follows a path from relative pronoun to relative particle very early on. Concomitantly, its scope of application is extended into headed relative clauses, and a restriction to colloquial or informal registers is beginning to develop. The ultimate origin of Cz. *který*/Pol. *który*—whether an autochthonous development, or a calque from translations—has not been settled. For Czech, Zubatý (1918:37f.) observed that from the fourteenth until the sixteenth centuries, *který* was used almost exclusively with indefinite, unspecific, and generalized antecedents, whereas *jenž* was restricted to definite and person antecedents. In the fifteenth to sixteenth centuries, *který* was semantically extended, and *jenž* gradually lost; however, like many linguistic phenomena of renaissance Czech, it underwent an artificial revival in the mid-nineteenth century. The relative frequencies of *jenž(to)* vs. *který(ž)(to)* in all of their inflectional forms over time are illustrated for the material of the ČNK in Figure 1.

In Polish, *który* as a relative clause marker was extremely rare in the earliest preserved religious writings (sermons and psalters from the late thirteenth to fourteenth centuries); by the mid-fifteenth century (*Rozmyślanie przemyskie*) it had reached about equal frequency with *jenże*, and it replaced the latter by the end of the sixteenth century (Urbańczyk 1935). In the sixteenth-century Bible of Queen Sophia, the frequency relation between *który* and *jenże* varies widely according to the scribe, namely, from 30 : 204 (13% *który* use, scribe 1) up to 156 : 65 (71% *który* use, scribe 3), following Ur-
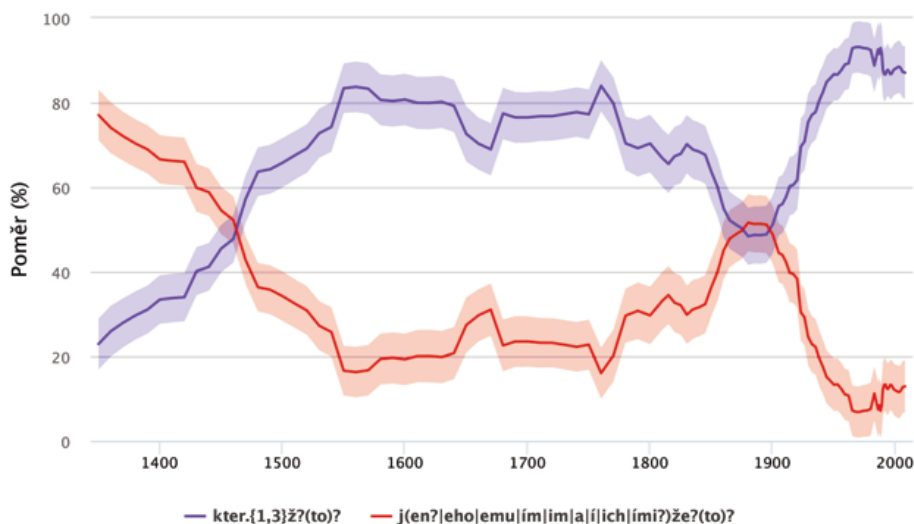
FIGURE 1. Relative frequencies of *který(ž)(to)* vs. *jenž(to)* in the ČNK (http://syd.korpus.cz); horizontal axis: year; vertical axis: amount (%).

bańczyk's counts. Somewhat speculatively, he attributes the former number to Czech influence, while the latter 'would represent the modern Polish tendency' (Urbańczyk 1935:24). Evidence from early-fifteenth-century mundane sources (court charters) points to a dialectal effect: *jenże* outnumbers *który* in all dialects but (East Polish) Mazowsze, which in turn might have influenced the speech of Krakow townsmen (op. cit.). In both languages, it is likely that postposed *který*/*który*-relatives originated from COR-RELATIVE DIPTYCHA (Lehmann 1984, 1995), as also suggested by Bauer (1960:204) for Czech and by Urbańczyk (1935:5) for Polish (see §3.2 for Russian); see 16.

(16) **kteráž**   vdova   …   chtěla   by   slúžiti
which.F.NOM.SG widow.F.NOM.SG want.F.SG AUX.SBJV.3SG serve
 svým   vdovstvím   Bohu,   **tét'**   svatý Pavel
 self.POSS.REFL widowhood.INS.SG God.DAT this.DAT.SG saint P.
 nevelí   za muž
 NEG.order.3SG marriage
'which widow would like to serve God with her widowhood, that widow
St. Pavel does not order to marry'   (Štítný; VokWeb, 1376)

(17) **ktory**   clouek   czyni   volø   othcza   mego,
which.M.NOM.SG man.M.NOM.SG do.3SG.IPFV will.ACC father.GEN my.GEN
 tenczy   przydze   do krolefstwa   nebeskego
 this.M.NOM.SG come.3SG.PFV to kingdom.GEN heavenly.GEN
'whatever man does the will of my father, will enter the heavenly
kingdom'   (Kaz. Gn.; Urbańczyk 1935:5f.)

2.3. RUSSIAN. The diachronic situation in Russian is especially complicated, due to the overlay of at least two different systems, namely Church Slavonic (*iže* as relative pronoun, *jako* as complementizer) and Old East Slavic (*koj*/*kto* and agreeing *čto* as relative pronouns, *aže*/*ože*, among others, as complementizers). In the traditional literature (e.g. Borkovskij 1979), this mixed bag is often just enumerated without stylistic distinctions. In this section, I argue that there is indeed evidence of two instances of change in line with hypothesis 1, one involving the OCS relativizer *iže*, and one affecting the relativizer *čto* (the latter being restricted to light-headed and free relatives). Ob-

viously, the fifteenth to seventeenth centuries was the decisive period of development toward the modern standard, which was then codified in the mid-eighteenth century.

Relative pronoun > relative particle > subordinate complementizer. *Iže* was used as a relative pronoun, relative particle, and general complementizer (in its inflectional forms *iže*, *eže*, sometimes *jaže*) in documents written in, or strongly influenced by, Church Slavonic and in the early chronicles. The development clearly started from the agreeing relative pronoun, with nonagreeing relative particles appearing later and becoming predominant for relative clauses of the Church Slavonic variety during the fifteenth to seventeenth centuries; see Table 3. Whether the complement clause subordinator *eže*, *iže*(, *jaže*) 'that' arose simultaneously with the relative particle, or strictly later, is unclear. In any event, it was soon replaced by the complementizer *čto*, which came from the East Slavic vernacular. Concomitantly, *kotoryj* 'which' gained ground as a new agreeing relative pronoun. As is argued below, the extension of the latter was actually a contact phenomenon influenced by West Slavic Polish.

RELATIVE PRONOUN	'which'	iže	in Church Slavonic (CS) texts and chronicles
		kotoryj	11th–14th c. rare; expanding 15th–17th c.
	'who, what'	(koj) kto, kogo	in East Slavic (ES) texts 13th–15th c.; replaced
		čto, čego	by *kotoryj*
RELATIVE PARTICLE	'that'	iže, jaže, eže	nonagreeing; increasing since 15th c.
		čto	13th–15th c. increasing (4)
SUBJUNCTION	'that'	jako, ako(že), aky, da, ašče, kak(o)	*jako* predominant in earliest texts
		iže, jaže, eže	in CS texts and chronicles, decreasing since 15th c.
		aže, ože	early ES charters
		čto	becomes predominant 15th–17th c.

TABLE 3. Russian connectors (data from Borkovskij 1979, Zaliznjak 2004, Mendoza 2007, RRuDi).

Čto had started out as an agreeing relative pronoun in thirteenth- to fifteenth-century East Slavic texts. After being used as a nonagreeing relative particle, as in 4 above, it became predominant as a *that*-complementizer in the fifteenth to seventeenth centuries (but see Borkovskij 1979:119 for sporadic earlier examples). *Čto* as a general subordinator superseded the original East Slavic *aže/ože*. The Novgorod birchbark charters (twelfth–fifteenth centuries) (Zaliznjak 2004) represent a variety in which *čto* was often used as a relativizer (forty out of seventy relative clauses, according to Mendoza 2007:50), including many nonagreeing instances, but almost never as a general subordinator: in the birchbark charters of Zaliznjak (2004), we can find only two relevant instances, both with a correlate in the main clause, as in 18.

(18) na mene se šli **na tomъ** [*čto* esi kon' poznalъ u němcina]
to me REFL refer on that that AUX.2SG horse recognized at German
'Refer to me concerning that you recognized a horse at the German's (place)'   (charter 25, 1400–1410)

By the seventeenth century, however, *čto* was widespread and common (as in 19), with *jako* being restricted to Church Slavonic or to highly literary registers (20).

(19) Feodoritъ pišet o tom stolpu, **čto** imelъ 3 versty
F.NOM writes about this.M.PRP pillar.M.PRP that had.M.SG 3 verst
obojako.
twice
'Theorodit writes about this pillar that it was twice 3 versts long.'
(Chron., 1617)

(20) narekъ   sebe   caremъ Dmitriem, … glagolja, **jako**
     call.AOR.3SG REFL.DAT tsar.INS D.INS   say.CVB.PRS that
        izъběglъ   ot   rukъ   ubijstvennyxъ.
        escape.PST.M.SG from hand.GEN.PL muderers'
          '(he) called himself tsar Dimitrij … saying, that he had escaped the mur-
          derers' hands.'
                                                                        (Plač, 1612)

These two developments constitute good evidence for the course of change repre-
sented in hypothesis 1—from agreeing to nonagreeing relativizers and on to general
subordinators. In the case of *čto*, the relative particle stage may be clearly distinguished
from the complementizer stage. These changes are language-internal and systematic,
and thus support the generality of the pattern that has been observed in other language
families (cf. Axel-Tober 2017).

  KOTORYJ. Returning to the realm of agreeing relative pronouns, we observe the ex-
pansion of *kotoryj* 'which' (in this function) roughly since the seventeenth century. It
has previously been argued (Hüttl-Folter 1987, 1996) that this innovation was due to
language contact, namely to the influence of translations from French literature in the
early eighteenth century. According to Hüttl-Folter, these texts for the first time display
a unified and consistent system of relative and object clause markers, with *kotoryj* as
relative pronoun and *čto* as complementizer. The Russian nobility, being mostly
French-Russian bilinguals, would have transmitted or enforced the new relative pro-
noun. However, our findings show that the *kotoryj*/*čto* system was already in place
some fifty years earlier in the so-called *Vesti-kuranty* (mid-seventeenth century). The
Vesti-kuranty were handwritten news digests translated and compiled from West Euro-
pean and Polish sources, read aloud regularly to the tsar and the boyars. Their writers
mostly came from a Ruthenian and/or Kievan background or had received their educa-
tion in Kiev; since 'translationese' features occur rather frequently in the *Vesti-kuranty*,
they cannot be taken as direct evidence of a development internal to Russian. Neverthe-
less, they show that the modern Russian distribution of relativizers and complementiz-
ers was already present in the Western contact varieties of seventeenth-century writers.
In our sample of the *Vesti-kuranty* (i.e. No. 0–24 (1656–1665) of Dem'janov 2009), the
relative marker *kotoryj* greatly predominates (212 of 262 relative clauses), and *čto* is the
only complement clause subordinator.

  So is the relative pronoun *kotoryj* a phenomenon of borrowing from Western transla-
tions into Russian? On the view that I would like to present here, the career of *kotoryj*
should rather be ascribed to an (earlier) inner-Slavic situation of language contact,
namely the influence of Polish on Russian during the time of the Polish-Lithuanian 'Real
Union' (1569–1795). As Moser (1998a,b) has shown in detail, syntactic loans during this
period were common, since one third of the population of the Polish-Lithuanian kingdom
were actually East Slavs, and there were many bilinguals especially among the rural no-
blemen. In the Russian writings of the Polish-Russian bilingual author Kotošixin (mid-
seventeenth century), the *kotoryj*/*čto* system of relativizers and complementizers is fully
established. The main route of borrowing, however, led through Ruthenian, the common
historical predecessor of Belorussian and Ukrainian. In the seventeenth century, the so-
called *prosta mova* 'simple speech', a variety based on the East Slavic vernacular with
massive loans from Polish, had acquired the function of a written standard language in
the Ruthenian territories.

  Ruthenian scribes had command both of a profoundly educated Church Slavonic and
of *prosta mova*. As far as relativization in Ruthenian is concerned, Rabus (2009) shows

that *kotoryj* acted as the almost exclusive relativizer in literary texts written in *prosta mova* in the seventeenth century, whereas eighteenth-century literary texts either mix Church Slavonic *iže* and *kotoryj* or favor *jakij*, which later became the unmarked relative pronoun in modern Ukrainian.

The Ruthenian scribes enjoyed a high reputation in Moscow and exerted influence not only on Church Slavonic (i.e. Uspenskij's 2012 'third South Slavic influence') but also on the Russian literary and chancellary language through their work for the central printing institution, the *pečatnyj dvor*. Moser classifies a number of—clearly Russian, not Polish or Ukrainian—works by such authors as 'interference' texts (based on internal and external criteria) and contrasts them with 'interference-free' texts from the same period. For a detailed evaluation of hypothesis 2, I digitized a sample of both groups of texts from the edition in Lixačev et al. 1997–2010, vols. 15 and 16, then imported and annotated it in the GATE corpus annotation tool (Cunningham et al. 2011; cf. Meyer 2011, 2012), and finally evaluated a sample of 1,260 categorized relative and complement clauses, using the R statistics package (http://www.r-project.org/). This procedure turned up a clearly different distribution of relative markers in 'interference' vs. 'interference-free' texts, which was strongly significant (Fisher's exact test: $p = 1.826\mathrm{e}^{-13}$); see Table 4. There were no preferences for specific case forms of the relative pronoun.

	'INTERFERENCE-FREE' TEXTS		'INTERFERENCE' TEXTS	
agreeing *iže*; *koj/kto*, *čto*	87	(51%)	181	(51%)
nonagreeing *iže*, *eže* … ; *čto*	71	(42%)	66	(18%)
kotoryj 'which'	11	(7%)	110	(31%)
TOTAL	169		357	

TABLE 4. The distribution of relative markers in relation to interference.

Two clear contrasts may be observed here: the 'interference' texts contain relatively fewer NONAGREEING forms of the old relativizers, and (many) more instances of the 'new' relativizer *kotoryj*. The former difference is in line with the fact that the 'interference-free' texts show fewer Church Slavonic and more East Slavic features. The 'interference' texts, by contrast, were written by scribes with a stronger normative orientation toward traditional Church Slavonic (i.e. agreeing) forms. The latter contrast constitutes clear evidence for hypothesis 2: the relative pronoun *kotoryj* was already on the rise as a syntactic loan from Polish into East Slavic during the period of intense language contact (seventeenth century) via Ruthenian.

3. SYNTACTIC CHANGE. The previous section presented changes in the realm of relativizers and complementizers as an essentially lexical issue. However, hypothesis 1 also implies a true SYNTACTIC reanalysis, which deserves some scrutiny. In the present section, I argue that so-called light-headed relative clauses, as well as *that*-clauses with a pronominal correlate, represent relevant intermediate steps on the path of reanalysis from relative to complement clauses in the history of Russian.

3.1. SYNCHRONIC ANALYSIS OF SLAVIC RELATIVE CLAUSES. Citko (2004) establishes an irreducible three-way structural distinction of relative clauses in Slavic, as illustrated in 21. The subtypes come with different restrictions on their external heads and on their relative markers, as illustrated in 21 with examples from modern standard Polish. Thus, relative clauses headed by a lexical noun phrase require the relative pronoun *który* 'which' (21a), relatives headed by a 'light' pronominal correlate contain the bare WH-relative pro-

noun (*kto* 'who', *co* 'what') (21b), and HEADLESS or FREE CHOICE relatives lack an overt external head and come with the subordinator *co(kolwiek)* 'what(ever)' (21c).

(21) a. Jaś śpiewa **piosenkę**, **którą**   Małgosia śpiewa.
         J. sings song.ACC which.ACC M.   sings
           'Jaś sings the same song as the one which Małgosia sings.'
                                                      (HEADED RELATIVE)

     b. Wezm   **tego**, **kto** pierwszy przyjdzie.
        take.1SG that   who first.NOM comes
          'I will take the one who shows up first.'   (LIGHT-HEADED RELATIVE)

     c. Jan czyta, **co(kolwiek)** Maria mu poleciła.
        J. reads what(ever) M.   him recommend.PST.PFV.SG
          'Jan reads whatever Maria recommended to him.'
                                                      (HEADLESS/FREE RELATIVE)
                                          (Polish; Citko 2004, Szucsich 2007a)

As discussed by Citko (2004:105ff.) and Szucsich (2007b:699), there is a certain amount of variation between relativizers for 21a and 21b, with *który* sometimes appearing in light-headed relatives and *co* 'what' in headed relatives. The former may be explained away as ellipsis of the NP subconstituent (Citko 2004:109). *Co* as a relative particle (complementizer) seems to be typical of colloquial registers both in synchrony and in diachrony (cf. ex. 6 and §2.2, as well as Murelli 2011 for a typological overview). 'Light' heads may involve a demonstrative (*ten* 'this') or a quantificational or indefinite pronoun (*wszystko* 'everything', *coś* 'something'). While the interpretation of light-headed relatives varies according to the head pronoun and may also be indefinite or negative (Citko 2004:104), headless relatives always receive a universal or a definite interpretation. Their hallmark, however, is the obligatory match of case forms between the relativizer within its own clause and the whole relativized DP in the matrix clause (MATCHING EFFECT). Citko (2004) analyzes all three subtypes of relatives as DPs embedding the relative clause CP as a complement, with an intermediate NP layer in headed relative clauses that hosts the nominal subconstituent of the relative phrase.

(22) a. headed relative clause:
        [DP D [NP [N **piosenkę**i]i] [CP [DP **którą piosenkę**i]j C′ … [TP … tj …]]]
     b. light-headed relative clause:
        [DP [D **tego**i] [CP **kto**i [C′ C [TP … ti …]]]]
     c. headless relative clause:
        [DP [D **co**i] [CP Ø [C′ C [TP … ti]]]] *or*
        [DP [D Ø] [CP **co**i [C′ C [TP … ti …]]]]

Citko does not take a firm stance on 22c, but argues that both proposed structures allow for the derivation of the matching effect: either the wh-phrase acts as head of the relative clause and thus has to fulfill its selectional requirements (e.g. case), or the matrix predicate can select directly into the embedded [Spec, CP] position, skipping over the intervening DP. By contrast, in headed and light-headed relatives, the nominal and pronominal subconstituent, respectively, fulfill the case requirement of the matrix predicate, whereas the wh-operator part can realize the relative clause-internal case requirement (cf. Citko 2004, Szucsich 2007b, and references therein for technical details). Szucsich (2007b) offers a different analysis (mainly) for headless relatives, structurally assimilating them to headed ones with an empty nominal subconstituent of the relative phrase. Since this CP-external N (cf. 22a) remains silent, it cannot realize a case requirement of the matrix on its own; instead, the only realized case in this chain of movement is the one on the relative pronoun, which leads to the matching effect.

In the context of the present article, the main points of these analyses are the follow-
ing. (i) Relative clauses come in three different structural variants. (ii) All of these vari-
ants involve a DP, and some also involve an NP shell above the relative CP, taking the
CP as a complement. (iii) Headed and light-headed relatives lack a case-matching ef-
fect, whereas headless relatives demand it. (iv) The derivation of headed relatives in-
volves extraction of the nominal subconstituent of the relative phrase to CP-external
position.

3.2. STRUCTURAL CHANGE IN RUSSIAN RELATIVE CLAUSES. In Russian diachrony,
agreeing simple WH-pronouns in headed relatives had become extremely rare since the
beginning of the seventeenth century. Instead, the nonagreeing relative particle, as il-
lustrated in 23, had increased in frequency.

(23) Elfimej Feodorov synъ,   zovom po prozvišu   Elka, **čto** i
     E.NOM F.POSS   son.NOM call.INS after nickname.DAT E.   that also
         prežne ego trudy   javny   byli   i
         earlier his works.NOM.PL visible.NOM.PL were.PL and
         viděnie
         prophecy.NOM.SG
     'Elfimej Feodor's son, called by his nickname Elka, whose works and
         prophecy had also been obvious earlier'   (Vid. Efima, ca. 1610)

In the very same text, the complementizer *čto* also occurs in structures that are perfectly
ambiguous between an interpretation as a relative clause with a resumptive pronoun
and as a nonsubcategorized (= adjunct) *that*-clause.[3]

(24) i   popa   po očam   maxala, **čto** on preže menja tružanika,
     and Pope.ACC over eyes.DAT hit.F.SG that he before me.ACC laborious.ACC
         inym   krest'janom … doru   daval.
         other.DAT Christians   seal.ACC gave
     'and I hit the Pope over the eyes, {who, that/because he} had given other
         Christians the seal before me.'   (Vid. Efima, ca. 1610)

Furthermore, it is noteworthy that *that*-clauses introduced by *čto* almost exclusively
come with a correlate in the main clause in texts of this period. This holds not only for
adjunct clauses (embedded into a preposition + correlate structure), but also for object
clauses; see 25.

(25) koli vidjat to, **čto** nikakimi lěkarstvy   zlaja
     when see.3PL that that no.INS.PL medicine.INS.PL malignant.F.NOM
         bolest'   vъ čelověku   ne možet byti izlečena
         disease.F.NOM in human.PRP.SG not can.3SG be healed.F.SG
     'when they see it that by no medicine can this malignant disease be healed
         in humans'   (O prič. gib. carstv, ca. 1680)

Complement clauses of this kind bear an obvious superficial resemblance to light-
headed relatives and to headed relatives introduced by the relative complementizer *čto*,
both of which were widespread in the same texts at the same time. Given these facts
about 'bridging' structures, I propose a stepwise reanalysis along the following lines: a
light-headed relative introduced by *čto* could be reanalyzed as containing the relative
particle *čto* and a resumptive pronoun. In a second step, the obligatory operator-variable
relation could be dropped, leaving a *that*-clause without a gap, but with a correlate in

---

[3] Note that in present-day Russian, nominative resumptives are excluded in this configuration, leaving the
that-clause as the only analytical possibility.

the main clause. Finally, the correlate could be dropped, resulting in a 'bare' *that*-complement clause. The proposed structural change is shown in detail in 26.

(26) a. $[_{CP} \ldots V [_{DP} \mathbf{to}_i [_{CP} \mathbf{čto}_i [_C -][_{TP} \ldots t_i]]]]$ (light-headed relative) ⇒
   b. $[_{CP} \ldots V [_{DP} \mathbf{to}_i [_{CP} Op_i [_C \mathbf{čto}][_{TP} \ldots pron_i]]]]$ (rel. ptcl. + resumptive pron.) ⇒
   c. $[_{CP} \ldots V [_{DP} \mathbf{to} [_{CP} [_C \mathbf{čto}][_{TP} \ldots]]]]$ (*that*-clause with correlate) ⇒
   d. $[_{CP} \ldots V [_{CP} [_C \mathbf{čto}] [_{TP} \ldots]]]$ (*that*-clause)

While the successive steps in 26 do not correspond to absolutely disjoint diachronic stages, both structures acting as 'bridges'—26b and 26c—do become the predominant means of expression for relative clauses and *that*-clauses, respectively, during the relevant period of change. In texts from the 'interference' group, they form the virtually exclusive variants. Note that according to the above synchronic analyses of light-headed relatives, they are structurally close enough to *that*-clauses with a correlate, supporting the gradual change illustrated in 26.

   We saw above that the earliest instances of the relative pronoun *który* 'which' in Polish formed so-called CORRELATIVE DIPTYCHA. According to Lehmann (1984, 1995), these were a widespread intermediate stage along the path to pronominal relatives in Indo-European languages. This equally holds for Russian, as for example in 27.

(27) a **na kotorom podvori** stojatъ Nemci … , ne postaviti **na tomъ**
   and on which   courtyard stand Germans   not put   on this
      dvore   knjazju ni tatarina
      courtyard Lord   or Tatar
   'and do not leave a Lord or a Tatar on a courtyard on which the Germans stand'   (Russian; Smol. Gr. 1229; Borkovskij 1979)

In the texts of the 'interference' group, *kotoryj*-structures of this type were still especially frequent. This fact points to an autochthonous development supported by inner-Slavic contact, rather than a calque from West European languages, in which this intermediate stage had been over for a long time. The analyses of headed relative clauses in §3.1 can very well capture the reanalysis from a preposed correlative to a postposed relative clause, because their derivation explicitly involves a complex relative phrase, from which the nominal subpart is then extracted to the N position above CP. The complex relative phrase shows up overtly in structures like 27. This observation supports the reanalysis scenario advocated here, and, moreover, the specific role of inner-Slavic language contact for the development of relativization in Russian.

   4. CONCLUSION. In this article, I have argued for the following generalizations:

   (i) A change from relative pronouns first to a relative particle and then to the *that*-complementizer is plausible in Russian, Polish, and Czech. In Polish and Czech, this development can be traced fully for **iže*-based connectors, and partly for WH-based ones (*co*). In Russian, **iže*-based connectors only undergo the first step, while WH-based ones (*čto*) show the full pattern of change.

   (ii) The history of Russian, Polish, and Czech supports the idea of a systematic and diachronic connection between the realizations of relative and complement clauses (cf. Axel-Tober 2017). Concerning Russian, I have argued for a stepwise structural reanalysis from light-headed relatives via relatives introduced by the particle *čto* and *that*-clauses with a pronominal correlate to 'bare' *that*-complements. This is supported by changes in relative frequency for these items vis-à-vis their competing equivalents.

(iii)   The distribution of connectors in Old/Middle Russian is sensitive to register variation. In a similar vein, this applies to Polish and Czech.

(iv)   The Russian relative pronoun *kotoryj* is an innovation based on the influence of West Slavic Polish on East Slavic varieties, spread into Russian via the layer of so-called 'interference' texts. This and other facts support the hypothesis of a contact-induced change to *kotoryj* in Russian relative clauses in the sixteenth/seventeenth century.

The last point raises the question of where the *który*/*který*-relatives of Polish and Czech actually originated. While a proper answer is beyond the scope of the present article (see §2.2 for some pertinent remarks), this type of connector seems to be a relatively young, common development in the written registers of many European languages (Fleischer 2005). This is yet another instance of register-dependency observed with relativizers and complementizers, which stresses another important desideratum to be addressed in future research: the development of better (quantitative) methods for determining registers and the variant forms with which they correlate.

SOURCES

Chron: *Chronograf* 1617 g.; Lixačev et al. 2010, vol. 15
ČNK: Český Národní Korpus; http://ucnk.ff.cuni.cz
DalC: *Dalimilova kronika, rukopis Cambridgeský*, mid-fourteenth century; Vokabulář webový AVČR (http://vokabular.ujc.cas.cz)
DalL: *Dalimilova kronika, Lobkovický rukopis*, fifteenth century; Vokabulář webový AVČR
DČNK: Diachronic part of ČNK; http://ucnk.ff.cuni.cz
EwKReg, 1425; Urbańczyk 1953–2002
Lact, 1511; Vokabulář webový AVČR
NKJP: Narodowy Korpus Języka Polskiego; http://nkjp.pl
O prič. gib. carstv: *O pričinach gibeli carstv*, 1670–1680; Lixačev et al. 2010, vol. 14
Pas: *Pasionál muzejní*, second half of the fourteenth century; DČNK
Plač: *Plač o plenenii i konečnom razorenii Moskovskogo gosudarstva*, 1612; Lixačev et al. 2010, vol. 14
PolDi: Polish Diachronic Research Corpus; http://hu-berlin.de/poldi
RNC: Russian National Corpus; http://ruscorpora.ru
Rozm: *Rozmyślanie przemyskie*, mid-fifteenth century; PolDi
RRuDi: Regensburg-Berlin Russian Diachronic Corpus; http://hu-berlin.de/rrudi
Skaz. Palicyna: *Skazanie Avraama Palicyna ob osade Troice-Sergieva monastyrja*, 1610–1620; Lixačev et al. 2010, vol. 14
Vesti: *Vesti-kuranty*, 1656–1665; RRuDi

REFERENCES

Aneks do Słownika Staropolskiego. 2010–2014. Kraków: Państwowa Akademia Nauk, Instytut Języka Polskiego.

Axel, Katrin. 2009. Die Entstehung des *dass*-Satzes—ein neues Szenario. *Koordination und Subordination im Deutschen* (Special issue of *Linguistische Berichte* 16), ed. by Veronika Ehrich, Christian Fortmann, Ingo Reich, and Marga Reis, 21–41. Hamburg: Buske.

Axel-Tober, Katrin. 2017. The development of the declarative complementizer in German. *Language* [Historical Syntax] 93(2).e29–e65.

Bauer, Jaroslav. 1960. *Vývoj českého souvětí*. (Studie a práce lingvistické 4.) Praha: Nakladatelství ČSAV.

Boretzky, Norbert. 1999. Immanente Geschichte der russischen Sprache. *Handbuch der sprachwissenschaftlichen Russistik und ihrer Grenzdisziplinen*, ed. by Helmut Jachnow, 689–725. Wiesbaden: Harrassowitz.

Borkovskij, V. I. (ed.) 1979. *Istoričeskaja grammatika russkogo jazyka: Sintaksis—složnoe predloženie*. Moscow: Nauka.

Citko, Barbara. 2004. On headed, headless, and light-headed relatives. *Natural Language and Linguistic Theory* 22.95–126. DOI: 10.1023/B:NALA.0000005564.33961.e0.

COMRIE, BERNARD. 1998. Rethinking the typology of relative clauses. *Language Design* 1. 59–86.

CUNNINGHAM, HAMISH, et al. 2011. Text processing with GATE (version 6). Sheffield: University of Sheffield, Department of Computer Science.

DEM'JANOV, V. G. 2009. *Vesti-kuranty. 1656 g, 1660–1662 gg, 1664—1670 gg. Č. 1: Russkie teksty*. Moscow: Rukopisnye pamjatniki drevnej rusi.

FISCHER, OLGA. 1992. Syntax. *The Cambridge history of the English language, vol. 2: 1066–1476*, ed. by Norman Blake, 207–408. Cambridge: Cambridge University Press. DOI: 10.1017/CHOL9780521264754.005.

FLEISCHER, JÜRG. 2003. A typology of relative clauses in German dialects. *Dialectology meets typology: Dialect grammar from a cross-linguistic perspective*, ed. by Bernd Kortmann, 211–44. Berlin: Mouton de Gruyter. DOI: 10.1515/9783110197327.211.

FLEISCHER, JÜRG. 2005. Relativsätze in den Dialekten des Deutschen: Vergleich und Typologie. *Linguistik Online* 24(3).171–86. DOI: 10.13092/lo.24.642.

HARRIS, ALICE C., and LYLE CAMPBELL. 1995. *Historical syntax in cross-linguistic perspective*. Cambridge: Cambridge University Press.

HASPELMATH, MARTIN. 2001. The European linguistic area: Standard Average European. *Language typology and language universals*, ed. by Martin Haspelmath, Wulf Oesterreicher, and Wolfgang Raible, 1492–1510. Berlin: Mouton de Gruyter.

HOPPER, PAUL J., and ELIZABETH CLOSS TRAUGOTT. 2003. *Grammaticalization*. Cambridge: Cambridge University Press.

HÜTTL-FOLTER, GERTA. 1987. O sintaksise 'Razsuždenija o okazatelstvachъ k miru … ' 1720 g. *Russian Linguistics* 11.279–96. DOI: 10.1007/BF00242082.

HÜTTL-FOLTER, GERTA. 1996. *Syntaktische Studien zur neueren russischen Literatursprache: Die frühen Übersetzungen aus dem Französischen*. Vienna: Böhlau.

ISSATSCHENKO, ALEXANDER. 1980. *Geschichte der russischen Sprache, vol. 2: Von den Anfängen bis zum Ende des 17. Jahrhunderts*. Heidelberg: Winter.

LEHMANN, CHRISTIAN. 1984. *Der Relativsatz: Typologie seiner Strukturen—Theorie seiner Funktionen—Kompendium seiner Grammatik*. Tübingen: Gunter Narr.

LEHMANN, CHRISTIAN. 1995. Relativsätze. *Syntax: Ein internationales Handbuch zeitgenössischer Forschung*, vol. 2, ed. by Joachim Jacobs, Arnim von Stechow, Wolfgang Sternefeld, and Theo Vennemann, 1199–1216. Berlin: De Gruyter.

LIXAČEV, D. S., et al. (eds.) 1997–2010. *Biblioteka literatury Drevnej Rusi*. Saint Petersburg: Nauka.

MENDOZA, IMKE. 2007. Relativsätze in den Birkenrindentexten. *Linguistische Beiträge zur Slavistik 13: JungslavistInnen-Treffen, Leipzig 2004*, ed. by Uwe Junghanns, 49–62. Munich: Sagner.

MEYER, ROLAND. 2011. *The history of null subjects in North Slavonic: A corpus-based diachronic investigation*. Regensburg: University of Regensburg Habilitation thesis.

MEYER, ROLAND. 2012. The construction and application of diachronic Slavonic corpora in linguistic research—RRuDi (Russian) and PolDi (Polish). *Diachrone Aspekte slavischer Sprachen* (Slavolinguistica 16), ed. by Björn Hansen, 223–42. Munich: Sagner.

MOSER, MICHAEL. 1998a. *Die polnische, ukrainische und weißrussische Interferenzschicht im russischen Satzbau des 16. und 17. Jahrhunderts*. Frankfurt am Main: Peter Lang.

MOSER, MICHAEL. 1998b. Scheinbelege in der historischen Syntax des Russischen. *Zeitschrift für Slawistik* 43.401–13. DOI: 10.1524/slaw.1998.43.4.401.

MURELLI, ADRIANO. 2011. *Relative constructions in European non-standard varieties*. Berlin: De Gruyter.

RABUS, ACHIM. 2009. Die Relativisatoren im Ruthenischen. *Diachronic Slavonic syntax: Gradual changes in focus* (Wiener slawistischer Almanach 74), ed. by Björn Hansen and Jasmina Grković-Major, 155–68. Munich: Kubon & Sagner.

RAPPAPORT, GILBERT C. 2000. The Czech possessive relative pronoun *jehož* and its paradigm: Synchronic morphosyntax and developmental pathways of the Slavic relative clause. *The Slavic and East European Journal* 44(1).1–28. DOI: 10.2307/309625.

ROBERTS, IAN, and ANNA ROUSSOU. 2003. *Syntactic change: A minimalist approach to grammaticalization*. Cambridge: Cambridge University Press.

SZUCSICH, LUKA. 2007a. Relativsätze in slavischen Sprachen und grammatische Freiheitsbeschränkungen. *Linguistische Beiträge zur Slavistik 13: JungslavistInnen-Treffen, Leipzig 2004*, ed. by Uwe Junghanns, 171–90. Munich: Sagner.

Szucsich, Luka. 2007b. The stucture of relative clauses in Slavic. *Investigations into formal Slavic linguistics* (Linguistik international 10), ed. by Peter Kosta, Joanna Blaszczak, Jens Frasek, and Ljudmila Geist, 697–714. Frankfurt am Main: Peter Lang.

Trávníček, František. 1961. *Historická mluvnice česká 3: Skladba*. Praha: SPN.

Urbańczyk, Stanisław. 1935. *Wyparcie staropolskiego względnego* jen, jenže *przez pierwotnie pytajne* który. (Rozpray wydziału filologicznego 65.) Kraków: Nakład Polskiej Akademji Umiejętności.

Urbańczyk, Stanisław (ed.) 1953–2002. *Słownik staropolski*. Warsaw: PAN.

Uspenskij, Boris A. 2012. *Istorija russkogo literaturnogo jazyka (XI–XVII vv.)*. Munich: Sagner.

van Gelderen, Elly. 2004. *Grammaticalization as economy*. (Linguistik aktuell/Linguistics today 71.) Amsterdam: John Benjamins.

Večerka, Radoslav. 1989–2003. *Altkirchenslavische (altbulgarische) Syntax*. (Monumentae linguae Slavicae dialecti veteris 27, 34, 36, 46, 47.) Freiburg im Breisgau: U. W. Weiher.

Zaliznjak, Andrej Anatol'evič. 2004. *Drevnenovgorodskij dialekt*, vol. 1. Moscow: Jazyki Slavjanskoj kul'tury.

Zubatý, Josef. 1918. Jenž, který, kdo, co. *Naše řeč* 2(1).37–44. Online: http://nase-rec.ujc.cas.cz/archiv.php?art=198.

[roland.meyer@hu-berlin.de]