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14

# Verb Movement in Slavonic Conditionals

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# 14.1. Introduction

A striking feature of the historical development of the morphosyntax of a number of Slavonic languages is the reanalysis of what were once inflected conditional auxiliaries as uninflected conditional-mood markers. Such a development has taken place in East Slavonic (Russian, Ukrainian, and Belorussian), Slovak, Lower Sorbian, Slovene, Macedonian and to some extent also in Serbian. The details of the development vary among the different languages. In Slovak, for instance, the conditional marker co-occurs with the perfect tense, and a form of agreement has been reintroduced; in others it co-occurs with the former past participle alone. The purpose of this chapter is to examine some of the asymmetries between the conditional auxiliary and other auxiliaries in two historical varieties of Slavonic in the hope of moving towards an account of why the loss of an inflected conditional auxiliary should be a feature of Slavonic. The chapter begins (§14.2) by examining the conditional in Old Church Slavonic, a language whose morphosyntactic rules for the conditional may resemble those of the Slavonic parent language. The conditional auxiliary in Old Church Slavonic is traditionally termed a semi-enclitic. This §examines how this term can be integrated into a formal linguistic framework (Principles and Parameters or Minimalism). It is claimed that the conditional auxiliary undergoes movement from T<sup>0</sup> to C<sup>0</sup>. The existence of this movement can be deduced from the behaviour of the conditional with respect to negation and pronominal clitics. The second variety under consideration (§14.3) is Old Russian. It is argued that, as compared to Old Church Slavonic, the clitic and non-clitic forms of the auxiliary have been redistributed in Old Russian. For one form, second and third person singular by, movement was obligatory. This created the conditions for a change, discussed in §§14.3.4–6, whereby C<sup>0</sup> became a basic rather than derived position

<sup>&</sup>lt;sup>1</sup>For details of these developments, see Stanislav (1967–73: III.451–2) and Pauliny (1981: 191–2) for Slovak; Stone (1993: 638) for Lower Sorbian, and more generally also Panzer (1967: 24–32).

for the conditional auxiliary. This change is a case of grammaticalization of movement, a process whereby an item acquires the characteristics of the position to which it habitually moves. The implications of such a process for historical linguistics more generally are discussed in §14.4.

## 14.2. OLD CHURCH SLAVONIC

# 14.2.1. The language and its texts

Old Church Slavonic is the language of a canon of religious texts associated with the missionary activity of SS Cyril and Methodius in Moravia between 863 and 869 and of their followers in the South Slavonic lands in the following two centuries. The texts themselves are written in a South Slavonic dialect, based on the Bulgarian-Macedonian dialect then spoken to the north of the Greek city of Salonika, and the canonical texts date in their current form from the ninth and tenth centuries.

Most of the texts are translated from Greek. For some aspects of historical syntax, this may be a serious problem, and on the whole we should be careful about inferring Old Church Slavonic word order patterns from the available texts. However, the Old Church Slavonic periphrastic conditional had no direct equivalent in Greek, and the patterns found in the texts are therefore more likely to be representative of contemporary Slavonic usage.

The discussion of Old Church Slavonic is based on exhaustive extraction of conditionals from the Old Church Slavonic Gospels, supplemented by data on other constructions primarily from these texts, but also by available data from other Old Church Slavonic texts, in particular the *Codex Suprasliensis*. Gospel examples are cited from the *Codex Marianus* unless indicated otherwise.

## 14.2.2. The conditional in Old Church Slavonic

The conditional in Old Church Slavonic, as is the general pattern in other conservative Slavonic varieties, is formed using the conditional of the verb *byti* 'to be' plus the active past participle ('*l*-participle').<sup>2</sup> An example is given in (1), and the relevant Old Church Slavonic and (for comparison) Old Russian paradigms are set out in Table 14.1 (see Vaillant 1948: 298). Notice that the second and third person singular forms are identical in all cases, and are the only forms with a zero inflectional ending. The two Old Church Slavonic paradigms coexist, and may reflect dialect differences.<sup>3</sup>

<sup>&</sup>lt;sup>2</sup>Slavonic languages have both an active past participle, used alongside an auxiliary to form periphrastic tenses and aspects in the active voice (perfect, pluperfect etc.), and a passive past participle, used adjectivally or in constructions resembling passives in other languages.

<sup>&</sup>lt;sup>3</sup>The *bimĭ* paradigm is historically a conditional, whereas the *byxŭ* paradigm is an earlier aorist form redeployed as a conditional. Synchronically, both are used only as conditionals.

(1) Ašte bi věděla darŭ b[o]žii ... biif would-2SG know-PP gift God's you would-2sG prosila u nego i dalŭ bi vodo živo. ask-PP with him and give-PP you would-3s water living 'If you knew God's gift ... you would ask him and he would give you the water of life.' (John 4:10)

TABLE 14.1. The paradigm of the conditional auxiliary in
Old Church Slavonic and Old Russian

	Old Church	h Slavonic	c Old Russia	
first person singular	bimĭ	byхй	byx"	
second person singular	bi	by	by	
third person singular	bi	by	by	
first person plural	bimŭ	byxomŭ	byxom"	
second person plural	biste	byste	byste	
third person plural	bọ, bišę	byšę	byša	
first person dual	_	byxově	byxovi	
second person dual	_	bysta	bysta	
third person dual	_	bysta, byste	bysta	

The conditional is one of a number of periphrastic verbal forms in the language. Periphrastic forms using the active past participle express also the perfect, pluperfect, and future perfect. Old Church Slavonic also has an elaborate clitic system, with which the auxiliaries interact. The behaviour of the auxiliaries is, however, not entirely consistent with that of typical clitics in the language, and this is reflected in the fact that auxiliary forms of *byti* have traditionally often been termed 'semi-enclitics' (Vaillant 1948: 360, 1977: 263–4; Večerka 1989: 42). The 'semi-enclitic' behaviour of the auxiliary will be investigated by examining its interaction with clitics and negation.

## 14.2.3. Predicate movement

First, however, a basic analysis of a movement phenomenon is required in order to deal with other aspects of the syntax of conditionals. In addition to allowing the auxiliary-participle order of the first two conditional clauses in (1), Old Church Slavonic allows the participle to precede the auxiliary as in (2) (and also in the third conditional clause in (1)). This pattern is permitted in all periphrastic verbal constructions.

This is part of a wider phenomenon whereby a variety of complements may precede the auxiliary or even a main verb that selects them. For instance, passive

(adjectival) past participles may appear to the left of the verb *byti* 'to be', as in (3); adjectives may precede their copula, as in (4); and secondary predicate noun phrases may precede their verb, as in (5). It is desirable to develop a unitary account of these phenomena, which henceforth I shall term collectively 'predicate movement', using the term 'predicate' to cover the variety of participial, adjectival, and nominal elements that participate in the construction.

- (3) Vamŭ že i vlasi glavy visi ištŭteni sotŭ.

  you-DAT PRT also hairs head-GEN all count-PP are

  'Every hair of your head is counted.' (Matt. 10:30)
- (4) Brakŭ ubo gotovŭ estŭ.

  wedding PRT ready is

  'For the wedding is ready.' (Matt. 22:8)
- (5) Xramŭ moi xramŭ molitvě narečetů sę.

  temple my temple prayer-DAT call-3S REFL

  'My temple is called a temple of prayer.' (Matt. 21:13)

In some of these cases the moved predicate is clearly phrasal, as can be seen from the example in (5) (also Matt. 3:11, 3:15, 6:26, 10:31, 13:32, 14:33 etc.). Therefore, in order to maintain a unitary account of all these phenomena, it is necessary to assume phrasal movement to be involved, rather than head movement.

As for the landing site of this movement, clitic placement may offer some clues. The participle or other element in this construction must precede a pronominal clitic, but precedes the sentential clitics *bo* 'therefore', and *že* 'contrast marker' only if these clitics would otherwise end up in the disallowed clause-initial position (see Večerka 1989: 58 on the special case of the interaction of sentential clitics and the conditional). That is, there is absolute parallelism between a pronominal clitic, like *mi* in (6), and a sentential clitic, like *že* in (7), when nothing precedes that participle or similar element. This is shown in (6) and (7).

- (6) Dana mi estŭ vĭsěka vlastĭ na neb[e]se i na zemi. given-PP me-DAT is every power over heaven and over earth 'Every power over heaven and earth is given to me.' (Matt. 28:18)
- (7) Rečeno že bystŭ...
  say-PP PRT was
  'But it was said...' (Matt. 5:31)

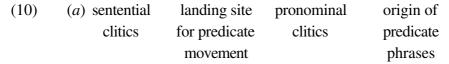
When some element precedes, a sentential clitic may precede the participle, as with  $\check{z}e$  in (8), whereas a pronominal clitic still follows the participle. Thus we have the sentence in (9a), rather than (9b) or (9c), either of which would parallel (8).

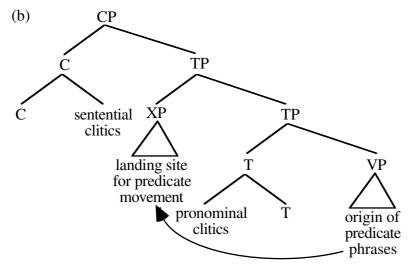
- (8) G[lago]ljo vamŭ ěko nikotory že pror[o]kŭ prijetenŭ say-1SG you-DAT that no PRT prophet accept-PP estŭ vŭ otečŭstvii svoemŭ. is in homeland his 'I say to you that no prophet is accepted in his homeland.' (Luke 4:24)
- (9) A otŭ načela sŭzŭdaniju, and from beginning creation-DAT
  - (a) moža i ženo sŭtvorilŭ č estŭ b[og]ŭ. man and woman create-PP them is God
  - (b) \*moža i ženo ě sŭtvorilŭ estŭ bogŭ. man and woman them create-PP is God
  - (c) \*moža ě i ženo sŭtvorilŭ estŭ bogŭ.

    man them and woman create-PP is God

    'And from the beginning of creation, God created them man and woman.' (Mark 10:6)

This fact suggests that moved predicate phrases move across the site of pronominal clitics, but ordinarily, that is, in the absence of overriding prosodic requirements, they do not move across sentential clitics. To put this another way, the relative ordering of predicate phrases and sentential clitics is sensitive to prosodic rules of clitic placement in this instance, whereas the relative ordering of the predicate phrase and pronominal clitics is not. Predicate phrases therefore move to a position between sentential clitics and pronominal clitics. They may undergo a further movement process in order to save a (sentential) clitic stranded in initial position (for instance prosodic inversion, in the sense of Halpern 1995 and King 1996). The relative ordering of positions required is therefore that given in (10a). A suggested implementation of this ordering is given in (10b).





Assuming that sentential clitics right-adjoin to  $C^0$  and pronominal clitics left-adjoin to a lower functional head, such as  $T^0$ , then predicate movement can be identified as movement to a position between these two. Since it is movement of a phrase it must be to a phrasal position rather than a head position. Given this, it is natural to assume that the movement is akin to topicalization, and involves movement to adjoin to the phrasal projection TP.

Given the claim that this movement is movement of a phrase, we must further assume that if a participle alone moves leaving behind a direct object, as is the case with the participle *dalŭ* 'given' and the direct object *vodo živo* 'water of life' in the third clause of (1), it is the entire verb phrase (VP) that moves, with the direct object either raising out of the verb phrase either into an object agreement projection (AgrOP) or a light verb projection (vP) or scrambling to an adjoined position.<sup>4</sup>

# 14.2.4. Negation

Old Church Slavonic shows an asymmetry in the position of negation between the conditional and another periphrastic verbal form, the perfect. In the perfect, formed from the present tense of *byti* 'to be' and the (active) past participle, the negative marker *ne* must appear in initial position within the verb group, irrespective of whether the participle precedes the auxiliary, as in (11), or vice versa, as in (12). For full details of Old Church Slavonic negation, see Večerka (1989: 33–7; 1995).

- (11) ...i ne uvědělŭ jesi byvůšaago vi nemi. and NEG ascertain-PP be-2SG what-happened in it '...and you have not ascertained what happened in it.' (Su. 475.10–11)
- (12) *Něstů umrůla* nů sŭpitů.

  NEG-be-3S die-PP but sleeps

  'She has not died, but is sleeping.' (Luke 8: 52)

Predicate movement does not move an element across negation, as (11) shows. Assuming that the position of negation is constant, this suggests that predicate movement moves an element to a position following negation. Orders where the negative marker intervenes between auxiliary and past participle (in either order) are not attested, except for minor cases involving the verb *dokoničati* 'to finish'

<sup>&</sup>lt;sup>4</sup>The most widely advocated analyses involve either movement of the past participle alone to I<sup>0</sup> (T<sup>0</sup>), or some head position immediately dominating the verb phrase (Bošković's 1995 'participle movement'), or movement of the past participle to C<sup>0</sup>, or some relatively high clausal position ('long head movement', Lema and Rivero 1989, Rivero 1991, 1993, 1994). Both analyses involve head movement only. However, the current position is justified by the need to maintain a parallel between leftward movement of past participles and leftward movement of other predicate constituents, a parallel not possible within these analyses.

(Večerka 1989: 34). Večerka (1989: 34) finds the pattern where the auxiliary immediately follows the negative, as in (12), to be four times as frequent as the one where the lexical verb immediately follows the negative, as in (11).

It might be expected that a parallel distribution would hold for the conditional, but this turns out not to be the case. As with the periphrastic perfect, the negative marker in the conditional may precede both auxiliary and lexical verb, provided that the auxiliary precedes the lexical verb (Sławski 1946: 23–4). that is, there is a parallel for (12). This is illustrated in (13).

(13) ...ašte bi side bylŭ, *ne bi* bratrŭ moi *umrŭlŭ*. if would-2SG here be-PP NEG would-3SG brother my die-PP 'If you had been here, my brother would not have died.'

(John 11: 21)

Surprisingly, however, the negative may also intervene between the auxiliary and lexical verb, although this order is attested less frequently than the dominant negation-auxiliary-verb order:

(14)Dobrěa bi bylo emu ašte sę be-PP him-DAT if would-3SG better would-3sG **REFL** rodilŭ č[lově]kŭ tŭ. ne NEG be-born-PP man that 'It would be better for him, if that man had never been born.' (Matt. 26: 24)

Another order (negation-verb-auxiliary) is attested rarely, only twice in the Gospels (Večerka 1989: 35). Both cases are in main clauses (also Luke 12:39):

(15)Ašte ne hi otŭ b[og]a bylŭ sŭ. ne if NEG would-3S from God be-PP this-one NEG tvoriti ničesože. moglŭ hi be-able-PP would-3SG do anything 'If he were not from God, he would not be able to do anything.' (John 9:33)

I have attempted to give statistical data summarizing the various order in Table 14.2. The data for the perfect are inferred from Večerka's (1989: 34) description of word order with the perfect in all the canonical Old Church Slavonic texts.<sup>5</sup> Exact data could not be derived from that source, and the figures in the perfect column of Table 14.2 are therefore approximations only, based on

<sup>&</sup>lt;sup>5</sup>The canonical Old Church Slavonic texts are the *Codex Zographensis*, *Codex Marianus*, *Codex Assemanianus*, *Savvina Kniga*, *Psaltericum Sinaiticum*, *Euchologium Sinaiticum*, *Clozianus*, *Codex Suprasliensis* and *Kiev Leaves*.

Večerka's comments about word order in the perfect in the canonical Old Church Slavonic texts.<sup>6</sup> The two instances of the order auxiliary–negation–participle involve *ne dokonĭčati* 'to fail to finish', which is probably a single lexicalized unit and can therefore be excluded. Data for the conditional are given for the Gospels in the *Codex Marianus* and for the assorted religious texts in the first thirty-nine chapters of the *Codex Suprasliensis*.<sup>7</sup> Throughout, instances of constituent negation and negation of the synthetic conditional of *byti* 'to be' are excluded.

TABLE 14.2. Word order in negative verbal forms in Old Church Slavonic

Type of periphrasis	Perfect	Conditional		
		Marianus	Suprasliensis	
Word order pattern				
negation – auxiliary – participle	>70	16	24	
auxiliary – negation – participle	2	1	14	
negation – participle – auxiliary	c. 18	2	0	
participle – negation – auxiliary	0	0	0	

The difference between the perfect and the conditional can be attributed to the structure of embedded clauses. Conditionals appear more frequently in embedded clauses than in main clauses, whereas perfect forms show the reverse distribut-ion. In the *Codex Suprasliensis*, of the thirty-eight relevant instances of condit-ionals, sixteen are in main clauses, and in all of them negation precedes the auxil-iary. Similarly, in the *Codex Marianus*, negation always precedes the auxiliary in main clause conditionals. In the twenty-two embedded conditionals in the *Codex Suprasliensis* both patterns are found, with auxiliary-first order predominating.

These patterns can be accounted for by proposing that the complementizers used with conditionals in embedded clauses may 'attract' the conditional auxiliary to a position earlier than it would otherwise have occupied. This accounts for the fact that examples of the order auxiliary–negation–participle do not appear in main clauses, where, in the absence of a complementizer, such attraction does not take place. With overt complementizers the possibility of this movement is variable. Those with which the conditional most frequently occurs favour this attraction. Večerka (1989: 35) notes that the sequence complementizer a 'if' +conditional auxiliary (with no intervening material) is more or less fixed in Old Church Slavonic. The absence of this compenentizer in conditional clauses in

<sup>&</sup>lt;sup>6</sup>Večerka states that there are over seventy instances of the order negation-auxiliary-participle in the perfect in the canonical Old Church Slavonic texts, and that this pattern outnumbers the order negation-participle-auxiliary by about four to one.

<sup>&</sup>lt;sup>7</sup>Data for the *Codex Suprasliensis* were extracted using the electronic version of the text in the Corpus Cyrillo-Methodianum Helsingiense of the University of Helsinki.

the *Codex Marianus* is partly responsible for the low frequency of auxiliary–negation patterns in that text. The complementizer a differs from such other 'conditional' complementizers as da 'in order that' in requiring rather than merely permitting the verb in its clause to be conditional. Although da readily appears with a conditional verb, it appears substantially more frequently with verbs in the indicative (Bräuer 1957). This is perhaps why attraction of the conditional auxiliary over negation is optional with da. This optionality can be illustrated by the differing redactions of Luke 4: 42, given according to the *Codex Marianus* in (16a) and *Codex Zographensis* in (16a).

```
(16) (a) ...drŭžaaxo i, da ne bi otŭšelŭ otŭ nixŭ.

(b) ...drŭžaaxo i, da bi ne ošĭlŭ otŭ nixŭ.

held-3P him that NEG-would-3S-NEG leave-PP from them '...and they held him, so that he would not leave them.' (Luke 4: 42)
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A third complementizer *ašte* 'if' also readily (although again, only optionally) appears with the conditional, and, like da, optionally attracts the conditional auxiliary to a position preceding negation and other intervening material (see the variation in the Gospel redactions discussed in Večerka 1989: 35–6).<sup>8</sup> This movement takes place in (17a) (=(14)) (cf. Su. 165.14, 442.17), but not in (17b) (cf. Matt. 24: 22, Mark 13: 20, 14: 21, John 9: 33, 15: 22, 15: 24).

```
(17)(a) ...ašte se
                      bi
                                 ne
                                      rodilŭ
                                                   č[lově]kŭ
                                                              tŭ.
         if
               REFL would-3S NEG be-born-PP
                                                   man
                                                               that
        "...if that man had not been born."
            (Matt. 26: 24)
    (b) Ašte ne
                 bimĭ
                                            gl(agol)alŭ imŭ...
                             prišelŭ i
             NEG would-1S come-PP and speak-PP
                                                       them-DAT
        'If I had not come and spoken to them...'
```

(John 15: 22)

It is worth emphasizing that the crucial difference between a, on the one hand, and da and  $a\check{s}te$  on the other, is the fact that while the former occurs exclusively with conditional verbs, the latter both allow (in fact, favour) indicatives. When an indicative verb is used, it does not need to occupy a position adjacent to da. In (18), the indicative verb  $b\varrho dete$  is not adjacent to the complementizer da.

<sup>&</sup>lt;sup>8</sup>Unlike da, the norm seems to be for  $a\check{s}te$  not to attract the auxiliary: the pattern in (17.b) is clearly the majority one.

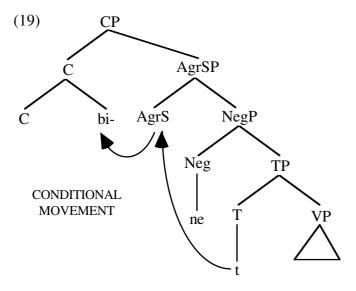
<sup>&</sup>lt;sup>9</sup>See also the examples listed in Bräuer (1957: 56, 60, 76–7), and discussion of such examples in MacRobert (1980: 63, 87) and Večerka (1989: 54–6).

(18)Vinemlěte milostynę vašeję ne tvoriti prědů be-careful-IMP-2P alms NEG do-INF in-front-of your čl[o]v[ě]ky da vidimi bodete imi. people that seen be-FUT-2P by-them 'Be careful not to give alms in front of other people so that you should be seen by them.' (Matt. 6:1)

Why should conditional movement be optional with da and a s t e but compulsory with a? It seems natural to link this to the fact that a 'if' requires a conditional clause, but the other complementizers do not. e

It can be concluded that leftward movement of the conditional is compulsory with a, but merely optional with da and  $a\check{s}te$ . As for main clauses, leftward movement of the conditional, in so far as it is possible to judge, is ruled out: auxiliary-negation-verb order does not seem to occur in main clauses.

Since the conditional auxiliary precedes negation, it must occupy a head-position higher than negation. I shall assume a split IP, with the order of projections AgrP–NegP–TP, for reasons to do with the variation between Old Church Slavonic and Old Russian. Old Church Slavonic auxiliaries normally occupy  $T^0$ . In conditional movement, the conditional auxiliary moves first to Agr<sup>0</sup>, then moves further, right-adjoining to  $C^0$ . Such movement is obligatory if the mood phrase is selected by the complementizer a, optional if selected by da or  $a\breve{s}te$ , and impossible if the conditional is in a main clause.



Notice that once movement from  $T^0$  to  $C^0$  has taken place, predicate movement of the participle to adjoin to TP will have no effect on the surface order, since the auxiliary is no longer within TP. Irrespective of whether predicate

 $<sup>^{10}</sup>$ Perhaps the sequence a + conditional auxiliary is stored as such in the lexicon and inserted directly into  $C^0$ . Agreement features would then raise covertly to  $C^0$  in order to check for appropriate subject-verb agreement.

movement takes place, the surface order will be auxiliary–negation–participle, representing either [ $_{CP}$  auxiliary<sub>i</sub> [ $_{NegP}$  negation [ $_{TP}$  participle<sub>j</sub>  $t_i$  [ $_{VP}$   $t_j$ ]]]] (if the participle has moved) or simply [ $_{CP}$  auxiliary<sub>i</sub> [ $_{NegP}$  negation [ $_{TP}$   $t_i$  [ $_{VP}$  participle]]]] (if it has not).

This predicts that negation-verb-auxiliary order, derived through predicate movement in the absence of conditional movement, should be permitted, albeit infrequently, wherever it is possible to forgo conditional movement. It was shown in (15) that this is true in main clauses. Furthermore it would be expected, as one option, after *da* and *ašte*, although not after *a*, where conditional movement is obligatory. Although this order is not found with an active past participle, the sentences in (20) illustrate the equivalent configuration with a passive past participle *prědanů* 'handed over' in (20) (see also, with a predicative adjective, Luke 16: 12).

(20) ...da *ne prědanů bimi* Ijuděomů.

that NEG handed-over would-1S Jews-DAT

'...that I might not be handed over to the Jews.' (John 18: 36)

## 14.2.5. Pronominal clitics

Another asymmetry is found in the positioning of pronominal clitics in the perfect and conditional (Večerka 1989: 59–63). The frequency of the various word order possibilities is given in Table 14.3, derived from data given in Večerka (1989: 63) for the canonical Old Church Slavonic texts.

TABLE 14.3. Word order with pronominal clitics in Old Church Slavonic periphrastic verbal forms

Type of periphrasis	Perfect		Conditional	
	no.	%	no.	%
word order pattern				
pronoun-auxiliary-participle	28	18	34	33
participle-pronoun-auxiliary	115	73	28	27
auxiliary-participle-pronoun	3	2	21	21
auxiliary-pronoun-participle	3	2	18	18
pronoun–participle–auxiliary	8	5	0	0
participle–auxiliary–pronoun	0	0	1	1

Source: Večerka (1989: 60)

Fundamentally, it is necessary to account for the fact that orders where the auxiliary precedes the pronoun are infrequent with the perfect (only six examples out of 157)<sup>11</sup>, whereas this order is almost as frequent as the inverse order with

 $<sup>^{11}</sup>$ The availability of the order auxiliary-participle-pronoun may be due to an independent development favouring the position immediately following the lexical verb for the reflexive clitic  $s_e$ , which is present in all three examples of this pattern.

the conditional. Examples are provided below. Cases where the pronoun precedes the auxiliary in the perfect are given in (21). Conditional examples are given in (22) and (23). In (22), the pronoun precedes the auxiliary as in the perfect. The auxiliary-pronoun orders characteristic of the conditional are illustrated in (23).

(21) (a) Vŭskojo ostavilŭ? esi тę me-ACC be-2S why leave-PP 'Why have you left me?' (Matt. 27: 46)

- (b) ...ěko vйzljubilй mę esi... for love-PP me-ACC be-2S "...for you have loved me..." (John 17: 24)
- (22) (a) Ašte me biste znali... me-ACC would-2P know-PP 'If you knew me...'

(John 14: 7)

- (b) ...i dalŭ ti bi vodo živo. and give-PP you-DAT would-3S water living "...and he would give you the water of life." (John 4: 10)
- (23) (*a*) ... da bухй pokajalŭ kŭ bogu. sę that would-1S repent-PP **REFL** to God "...in order that I might repent before God." (Su. 167.2)
  - prědali vladyčustvu i oblasti (b) ...da bo ithat would-3P him hand-over-PP possession and authority voevody.

governor

"...in order that they would hand him over to the possession and authority of the governor.'

(Luke 20: 20)

This distribution is consistent with previous assumptions, namely that the conditional auxiliary optionally right-adjoins to C<sup>0</sup>, whereas the perfect auxiliary generally does not. Continuing previous assumptions, I assume that pronominal clitics occupy a position left-adjoined to  $T^0$ . Predicate movement remains adjunction to TP.

The orders in (21) are achieved without movement of the perfect auxiliary. The auxiliary occupies  $T^0$ , and the pronominal clitic me left-adjoins to  $T^0$ . In (21b) the participle *izbavilū* undergoes predicate movement to adjoin to TP, appearing to the left of both clitic and auxiliary. The parallel conditional orders in (22a) and (22b) are produced in the same way: in these cases, conditional C AgrS NegP

C CONDITIONAL Neg TP

CONDITIONAL Neg TP

(TWO STAGES)

T DP V'

(pronom.)

PREDICATE

**MOVEMENT** 

auxiliary (subject)

lexical verb

(past participle)

DP

object

movement, which is optional or excluded in these contexts, has not occurred.

To produce the orders in (23), characteristic of the conditional, conditional movement must be invoked. In (23a), the conditional moves to  $C^0$ , and there is also predicate movement of the lexical verb. The result is that both the conditional auxiliary and the lexical verb move to a position that precedes that of the pronominal clitic. In (23b), only conditional movement takes place, with the result that the auxiliary, but not the lexical verb, ends up in a position preceding the clitic. The overall schema is shown in (24).

This analysis links ordering of the conditional auxiliary with respect to negation to the ordering of the auxiliary with respect to pronominal clitics, and predicts the same distributional possibilities in both cases. The distributional possibilities in both cases are the same with the different complementizers. Thus, with the complementizers da and ašte, the conditional auxiliary is not obliged to precede pronominal clitics, although it may. This optionality is shown by the pair of examples with da in (25). In (25a) the order is complementizer–clitic–auxiliary (da i bq) (cf. Mark 12: 13, John 11: 53; Su. 275.6), freely alternating with, in the same environment, the order complementizer–auxiliary–clitic (da bq i) in (25b) (cf. Matt. 6: 16, Mark 7: 24, 9: 22, Luke 4: 29, 18: 15, 20: 20).

(25) (a) Otŭ togo že dine sŭvěštašę da *i* from that PRT day conspired-3P that him-ACC *bo ubili*.

would-3P kill-PP 'From that very day they began to conspire to kill him.' (John 11: 53)

(Su. 303.12–13)

(b) ...i věse i do vrŭxu gory ... da bq and took-3P him-ACC to top mountain that would-3P i nizŭbrinoli.

him-ACC cast-down-PP

'...and they took him to the top of the mountain ... in order to cast him down.'

(Luke 4: 29)

Finally, there is variation between two syntactic patterns involving the sentential clitic bo 'therefore'. This variation is illustrated in (26) and (27). In (26), the sentential clitic bo follows the auxiliary in the context of the complementizer a, whereas with  $a\breve{s}te$  in (27) (see also Su. 241.27), the auxiliary follows bo.

- (26) ...a by bo ne molilă se ne by
   if would-3S PRT NEG pray-PP REFL NEG would-3S
   vüstavilă mrătvaago.
   rise-PP dead-GEN
   '...for if he had not prayed, he would not have risen from the dead.'
- (27) Ašte bo *byxŭ* ne *vědělŭ* ježe glagolotů... if PRT would-1S NEG know-PP that say-3P 'If I did not know that it is said...' (Su. 165.14–15)

This seems to suggest that conditional movement results in a closer relationship between the complementizer and the auxiliary in the case of a. This can be accounted for if it is claimed that conditional movement proceeds all the way to  $C^0$  only in the case of a, whereas it stops at an intermediate position, namely  $Agr^0$ , following bo, in the case of aste.

# 14.2.6. Integrating clitics and negation

Pronominal clitics and negation rarely co-occur in the attested Old Church Slavonic texts. The following comments are based on the eight examples found in the *Codex Marianus* and *Codex Suprasliensis*, and must therefore be treated with caution. When clitics and negation co-occur, two patterns are attested. In one pattern the clitic appears early in the clause and the auxiliary and negation follow, as in (28).

(28)Dobrěa bi bylo ašte *sę* emu bi would-3s be-PP him-DAT would-3P better if **REFL** č[lově]kŭ tŭ. ne rodilŭ NEG be-born-PP man that 'It would be better for him, if he had not been born.' (Matt. 26: 24) This pattern is not consistent with (24). In order to account for it, we need to assume variation in the position of the pronominal clitics, suggesting for instance that in (28), the clitics occupy a higher position than T<sup>0</sup>, perhaps right-adjoining to C<sup>0</sup>. The participle remains in V<sup>0</sup>. It is well known that the modern South Slavonic languages differ from each other with respect to the rules for placement of pronominal clitics. In Serbo-Croat, clitics occupy a high clausal position which has been analysed as right-adjunction to C<sup>0</sup> (Progovac 1996). In Bulgarian (Hauge 1976, King 1996: 274–8, Tomić 1996: 814–32), pronominal clitics primarily occupy a fixed position relative to the verb, namely an immediately preverbal position. That is, Bulgarian pronominal clitics occupy a position within the verbal projection, whereas earlier stages of South Slavonic reserved a position within a higher projection. In the light of this, variation within Old Church Slavonic is not unexpected.

In any case, this is the only example of this order in the Gospel translations. In the other cases where negation and pronominal clitics co-occur in the Gospel translations and the Codex Suprasliensis, the norm seems to be for the pronominal clitic (always reflexive) to follow the lexical verb as in the two examples in (29) (also Mark 14: 21; *Su.* 442.30, 303.12, 401.20, 428.15, but the clitic intervenes between auxiliary and lexical verb in *Su.* 433.1):

Indeed, the passage of Mark paralleling (28) above (Mark 14: 21) manifests an order with the reflexive clitic *sę* following the participle, and the Matthew text in (29) in the Ostromir Gospels also shows the same order.

Again this suggests that the position of the reflexive clitic is subject to variation and change. It seems that, in (29), the pronominal clitic is contained within the verb phrase. Under the most straightforward analysis, the clitic is right-adjoined to the verb, and the verb remains in  $V^0$ :12

(30) [CP ašte [NegP ne [TP bišę [VP [V
$$^0$$
 [V $^0$  prěkratili] sę ]] ... ]]] if NEG would-3P cease-PP REFL

## 14.2.7. Conclusions about Old Church Slavonic

Investigation of the Old Church Slavonic conditional leads us to the conclusion that the conditioning factor for conditional movement is the nature of the element in  $C^0$ : conditional movement is obligatory with a, optional with da and  $a\check{s}te$ , and

 $<sup>^{12}</sup>$ An alternative would be to move the lexical verb to a position outside the verb phrase (by predicate movement), and left-adjunction of the clitic to  $T^0$ .

excluded in unembedded contexts. This means that in Old Church Slavonic it is possible to identify instances both where the auxiliary moves to  $C^0$  and where it fails to move. The availability of both options makes clear the derived nature of the positioning of the auxiliary in  $C^0$ , and favours faithful acquisition of the system.

#### 14.3 OLD RUSSIAN

This section examines the properties of conditional movement in another variety of Slavonic, Old Russian, and concludes that the conditioning factors for conditional movement are different from those in Old Church Slavonic. As before, negation and clitic placement are used as diagnostics.

#### 14.3.1. *Sources*

The analysis of Old Russian is based on exhaustive extraction of the conditionals in the Laurentian redaction of the Primary Chronicle (*Povest' Vremennyx Let*) (*PSRL* i.) (1377), the chancery documents in *Gramoty Velikogo Novgoroda i Pskova* (*GVNP*) (twelfth to fifteenth centuries), the First Novgorod Chronicle (*NPL*) (second half of the thirteenth century to the mid-fourteenth century), and the birchbark documents edited by Zaliznjak in *Drevnenovgorodskij dialekt* (*DND*) (eleventh to fifteenth centuries). Although the earliest manuscript of the Primary Chronicle dates from 1377, the text was composed much earlier. Linguistically it represents a conservative variety of Old Russian with Church Slavonic influence, and will be used here to exemplify the most conservative stage of Old Russian. It also has the advantage that, unlike in the other texts, the conditional is used in it fairly frequently. The other texts seem to reflect contemporary practice more faithfully, but the paucity of examples from these texts (thirty-four tokens in *DND*, eighteen in *GVNP*, and thirteen in *NPL*) makes it impossible to be certain of the details of some of the developments.

## 14.3.2. Negation

In the majority of cases, the Old Russian conditional auxiliary precedes negation. This is the case in embedded clauses headed by all complementizers, and in this context auxiliary-negation order appears to be obligatory. Examples are found with the complementizers a 'in order that' (DND B69, B100),  $a\check{s}\check{c}e$  'if' (PSRL II.241.19), and da 'in order that' (NPL 73.34–5, PSRL i.30.24, 265.23):

(31)...v"zdviže kramolu meži rus'skymi knjazi, da raised-3S strife between Russian princes in-order-that byša čelověci ne žili mirno... would-3P people NEG live-PP peacefully 'He sowed strife among the Russian princes, in order that people should not live in peace.' (NPL 73.34-5)

However, in main clauses, the auxiliary generally follows negation, regardless of the person–number features of the auxiliary (*PSRL* I.10.2, 86.4, 108.27, 117.18, 178.22). Examples are given in (32). Other orders are discussed below.

- (32) (*a*) Ašče bo by perevoznik" Kij, to by ne if PRT would-3S ferryman Kii then NEG would-3S xodil" Carjugorodu. go-3s Constantinople-DAT 'For if Kij had been a ferryman, then he would not have gone to Constantinople.' (*PSRL* I.10.2) (b) Ašče li bysta vědala. bysta prišla to know-PP then NEG would-3D come-PP if Q would-3D na město se... to place this
  - 'If they had known, then they would not have come to this place.'
    (PSRL I.178.22)

This can be dealt with within a framework structurally identical to that proposed for Old Church Slavonic above, since differences between Old Church Slavonic and Old Russian relate not to the processes themselves, but to the environments in which these processes are triggered. The conditional may undergo movement to  $C^0$ , bypassing negation. Whereas in Old Church Slavonic this movement is obligatory only with the complementizer a, in Old Russian it appears to be obligatory, as far as negation is concerned, with all the relevant complementizers. The environment for conditional movement is therefore larger in Old Russian than in Old Church Slavonic.

# 14.3.3. Clitics

As before, a second source of evidence on this point is the relative ordering of auxiliaries and clitics. In main clauses, which in general seemed to exclude conditional movement in Old Church Slavonic, conditional movement is available in Old Russian but is conditioned by the person-number features of the auxiliary itself. Specifically, the second and third person singular form of the auxiliary, *by*, regularly precedes pronominal clitics (also *PSRL* I.110.20, 136.4, 136.13, 242.18):13

(33) ...[iz] oc'ju by sja vyt'r'go
from eyes would-2S REFL escape-PP
'...you would have escaped from [other people's] eyes.'
(DND A7, 1080s–1100s)

<sup>&</sup>lt;sup>13</sup>An exception is perhaps *PSRL* I.263.1 in the Laurentian redaction (although not in other redactions of the same passage).

In the other forms the conditional auxiliary follows pronominal clitics (also *PSRL* I.254.7):

(34) Radi *sja byxom" jali* po dan'. happy REFL would-1P agree-PP to tribute 'We would happily agree to tribute.' (*PSRL* 1.58.22)

This asymmetry holds irrespective of whether the participle has been fronted or not. The minimal pair *proslavil*" by *i* in (35) (also *PSRL* i.263.1), as against *požerli ny byša* in (36) demonstrates the same asymmetry with a fronted participle.

- (35)Da ašče byxom iměli potščan'e i mol'by for if would-1P have-PP diligence and prayers prinosili bogu za n', ... proslavil" by í... bring-PP God-DAT for him glorify-PP would-3s him 'For if we had been diligent and prayed to God for him, ... then He would have glorified him...' (*PSRL* I.131.11)
- Vnegda stati čelověkom", ubo živy *požerli ny* when rise-up-INF people-DAT then alive devour-PP us *byša*.

  would-3P

  'When people rose up, they would devour us alive.'

  (*PSRL* I.242.18)

In embedded clauses, there is no such asymmetry: all forms of the auxiliary precede the clitics in clauses headed by the complementizers a and da 'in order that'. Relevant cases are given in (37). A case with a third person singular auxiliary is shown in (37a); a non-third-person auxiliary (first person dual) is given in (37b). 14

(37) (a) Poslisja k bratu ... da by ti pomogl". send-IMPER to brother-DAT that would-3S you-DAT help-PP 'Send to you brother ... that he should help you.'

(PSRL I.219.1)

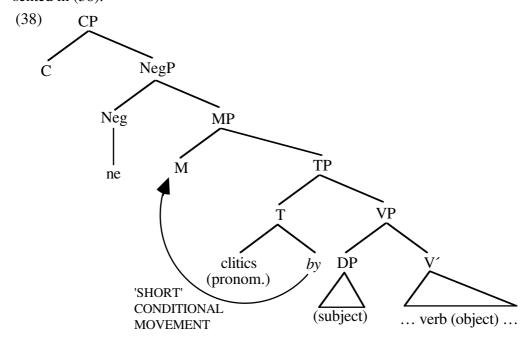
(b) Da byxovi sja snjala. that would-1D REFL go-away-PP 'We should go away.' (PSRL II.265.4)

<sup>&</sup>lt;sup>14</sup>Textual variants suggest that productive use of the rule was lost during the fourteenth century. Consider the contrast in the form of (34) in the Laurentian redaction (1377) and the Hypatian redaction (early fifteenth century) of the Primary Chronicle. The Laurentian version appears in (34). By contrast, in the Hypatian redaction (*PSRL* II.47.8) the order of auxiliary and clitic is reversed (*byxom*" *sja jali*).

These facts can be accounted for by claiming that by undergoes obligatory conditional movement, whereas for other forms conditional movement is triggered by the presence of an overt complementizer in  $C^0$ .

However, there appears to be a contradiction here since the system proposed to handle negation and that proposed to handle clitics are mutually exclusive. Specifically, in main clauses, the form *by* must not undergo conditional movement in order for the correct order with auxiliary following negation to be maintained. On the other hand, in the context of pronominal clitics, *by* must undergo conditional movement, in order to occupy a position preceding the clitic.

An account can be constructed if Old Russian conditional movement is assumed to be a staged process. That is, by would always undergo 'short' conditional movement, even in main clauses, thereby skipping the clitic position, but not negation. A mood projection (MP) has been proposed for Slavonic elsewhere, <sup>15</sup> and may reasonably be adopted here between NegP and TP as the host for the auxiliary when it undergoes short movement. Other forms of the auxiliary do not undergo 'short' conditional movement unless they are required by the presence of a relevant complementizer in C<sup>0</sup> to move all the way to C<sup>0</sup>. The relevant configuration, covering the cases in (33) versus (32a), is represented in (38).



Any account must also be compatible with the Old Russian perfect. Here, typical orders are negation–verb–auxiliary in (39), and auxiliary–negation–verb in (40).

(39) ...ne myslil" esm" do Pl'skovič' gruba ničegože...

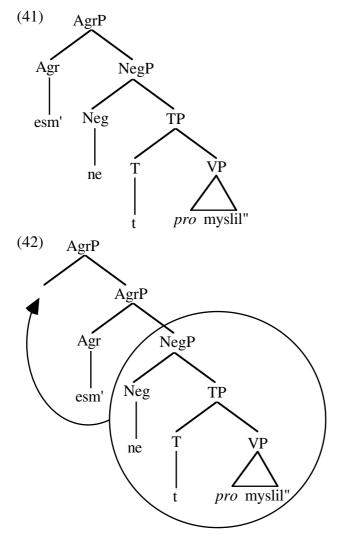
NEG think-PP be-1S to Pskovians bad-GEN anything-GEN

'I have not devised any evil against the Pskovians...' (NPL 66.6)

<sup>&</sup>lt;sup>15</sup>For a mood projection in Macedonian, see Tomić (1996: 823–9), and for Balkan languages generally Rivero (1994).

(40) ...i zla do vas" *esm' ne myslil*" nikotorago že... and evil-GEN to you be-1S NEG think-PP none PRT '...I have not devised any evil towards you...' (*NPL* 66.20)

Note the ungrammaticality of this second order in Old Church Slavonic (see Table 14.2) and the corresponding ungrammaticality of the Old Church Slavonic order negation–auxiliary–verb in Old Russian. In order to accommodate this, we must elaborate the account somewhat. The order in (40) is taken to be basic, with (39) representing an instance of predicate movement. Therefore, the perfect auxiliary underlyingly occupies a position above negation. The structure in (41) is assigned to the verbal form in (40): as before IP is split into AgrP and TP, with AgrP occupying a position above negation, and TP occupying a position below negation. The perfect auxiliary then occupies Agr<sup>0</sup> (presumably having moved there from T<sup>0</sup>), whereas the conditional auxiliary and the Old Church Slavonic auxiliaries occupy T<sup>0</sup> (perhaps moving covertly to check features in Agr<sup>0</sup>). Negation remains in Neg<sup>0</sup> and the verb in V<sup>0</sup>.



The verbal periphrasis in (39), represented in (42), is derived by movement of the verb to Neg<sup>0</sup>, followed by predicate movement of the whole negation–verb complex (NegP) to adjoin to AgrP.

# 14.3.4. The historical development in later Russian

In Old Church Slavonic each form of the auxiliary undergoes conditional movement to an equal extent. Effectively all forms of the auxiliary are 'semi-enclitic'. In Old Russian, although the entire paradigm may reasonably be described as semi-enclitic, since conditional movement occurs only in some cases, each form is not equally clitic-like. The form by always undergoes movement of some kind. In this section, I examine a related series of changes in the conditional system of Old Russian, suggesting that they all represent a fundamental change in the status of by from an inflectional element that moves to  $C^0$  to a sentential clitic base-adjoined to  $C^0$ . In terms of the general theory of language change, this change is an example of loss of movement: a common derived structure is reanalysed as underlying.

# 14.3.5. Syntactic ambiguity

Some sentences in which the conditional marker is in  $C^0$  are syntactically ambiguous in the sense that they are in principle amenable both to an analysis where the positioning of the conditional in  $C^0$  is derived and one where it is underlying. This is the case in the second and third person singular. Consider the third person singular conditional clause in (43). If by is present underlyingly in  $C^0$ , then this sentence apparently contains no auxiliary and no finite verb. Under normal circumstances, this would allow the movement analysis to be rejected during language acquisition because it would require there to be main clauses lacking a finite verb.

(43) Ašče *by* kto dobro drugu *činil*"... if be-COND-3SG someone good another-DAT do-PP 'If someone had done a good deed for someone else...'

(NPL 82.4–5)

However, in Old Russian the third person singular perfect auxiliary is normally null:

```
(44) ...knjaz' velikyi poslal" k vamo svoego syna...

prince grand send-PP to you self's son-ACC

'...the Grand Prince sent you his son...' (GVNP 35.4, 1302)
```

This opens up the possibility of an analysis of (43) where by is underlyingly in  $C^0$ , and the auxiliary is null. Such an analysis is less easily available for the second person singular by, since the second person singular perfect auxiliary (esi) is mostly overt.

The 'correct' derived nature of the positioning of by could nevertheless still be acquired by comparison with cases where the conditional is clearly in its lower underlying position. Clearly, there are logically two ways of acquiring the syntactic properties of the auxiliary. Either the syntactic properties of the whole paradigm can be acquired as a single fact, or each member of the paradigm can

be learned individually. In Old Church Slavonic, it does not matter which approach the learner takes. Each member of the conditional paradigm appears both in the derived and underlying position. The appearance of each form in the underlying position will alert learners to the existence of this position. In Old Russian, however, it is important for accurate replication of the grammar that learners consider the paradigm as a whole. This is because the form *by* appears only in the derived position. If learners acquire *by* separately, there will be no evidence that it is underlyingly an auxiliary. On the other hand, if learners treat the whole conditional paradigm as a single unit, the evidence of other forms, which appear both in the derived and underlying position, will be sufficient for the learner to acquire conditional movement correctly.

The fact that by is the only monosyllabic member of the paradigm, and the fact that it contains no recognizable verbal (person-number) ending would have mitigated against it being treated as a part of a larger paradigm. Some learners will have begun by acquiring its syntactic properties separate from those of the other members of the paradigm. Such learners will acquire by as a mood marker (rather than auxiliary) base-generated within CP.

I hypothesize that by was reanalysed as underlyingly in  $C^0$  at the latest early in the fourteenth century. The reanalysis applied both to third-person-singular by and to second-person-singular by. This left the auxiliary heads (Agr<sup>0</sup> and T<sup>0</sup>) filled by null auxiliaries.

In the second person singular, the auxiliary was usually overt, and therefore the option of filling the auxiliary 'slot' with an overt auxiliary in the second person singular becomes available immediately. The perfect auxiliary, the present tense of the verb *byti* 'to be', appears in the conditional alongside the conditional marker in the texts examined from the mid-fourteenth century. An example is given in (45). All examples except one of perfect auxiliaries in the conditional in the texts examined are in the second person, whether singular or plural.

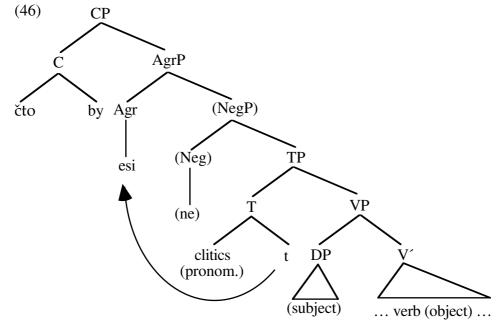
Dobyša čelom" nov"gorod'ci... arxiepiskopu... (45)čtoby archbishop-DAT that+COND asked-3P **Novgorodians** gospodine exal" 'esi narjadil" kostry vo Orěxově.' be-2s sir go-PP set-up-PP defences in O.-PREP 'The Novgorodians ... asked the archbishop ... that "you, Sir, should go and set up defences in Orexov." (NPL 100.14-16)

Although this has sometimes been analysed as a hypercorrection (Nikiforov 1952: 139), its sheer frequency in texts of various stylistic levels suggests that it is a naturally occurring innovation. Notice also that the same innovation has

<sup>&</sup>lt;sup>16</sup>See also other fourteenth- and fifteenth-century examples, with second person singular, *DND* G24, G40, G49 (four examples), G55, G63, G76, D9, D15; *GVNP* 53.12, 53.18; *NPL* 100.16, 100.19; and with second person plural *DND* G37, D13; *GVNP* 50.5, 50.6 (two examples), 96.10; *PSRL* i.197.9.

occurred in Slovak, where it is clearly a productive phenomenon (Stanislav 1967–73: III.451–2, Panzer 1967: 30–2, Pauliny 1981: 191–2).

The new configuration is illustrated in (46).



Notice that there is nothing in this reanalysis that forces loss of agreement. Both third-person-singular by and second-person-singular by may retain their agreement features even when they are base generated in  $C^0$ . They (or perhaps the entire complex in  $C^0$ , that is,  $\check{c}toby$  in (46)) will select for an AgrP and TP headed by an auxiliary with the relevant person-number features. Effectively, at this stage, the conditional paradigm will be as in (47) (illustrated using the verb  $\check{c}initi$  'to make, do'), with an agreeing conditional auxiliary in the plural and in the first person singular, but an uninflected particle accompanied by a perfect auxiliary carrying agreement in the other persons of the singular.

(47) byx" činil" byxom" činili by esi činil" byste činili by ø činil" byša činili

Gaps in the evidence of the Old Russian texts examined prevent us from establishing the existence of the stage hypothesized in (47) with any certainty. The following example, in which the synthetic form of the first person singular (*byx*" ... *postavile* 'I would build') is maintained alongside the innovative analytic form of the second person singular (*by esi* ... *dale* 'you would give'), is perhaps suggestive that such a stage did indeed exist:

(48)čto by g[ospodi]ne dale měsce mně esi na that COND be-2SG give-PP plot sir to-me on jaz" byx" dorě i g[ospodi]ne sobě izbu cleared-land and Ι cond-1SG sir self-DAT hut postavile...

build-PP

'Sir, if you would give me a plot on the cleared land, then I would build myself a hut...'

(DND G40, 1360s–80s)

The next stage is the elimination of agreement. By is still restricted to its original person-number combinations. It is reasonable to suppose that subject—complementizer agreement is difficult to acquire, given that complementizers do not normally carry agreement features. Some learners may fail to acquire the fact that by is restricted to two person-number combinations, and instead leave it unmarked for person and number. This will lead to a period of competition, since for four of the person-number combinations, both conditional auxiliary and conditional marker are now available in the plural and in the first person singular.

(49) byx" činil" OR by esm' činil" byxom" činili OR by esmi činili by esi činil" byste činili OR by este činili by ø činil" byša činili OR by ø činili

It is reasonable to suppose that, in such a competition, the analytic conditional marker will win out. Even at the start of the competition stage, *by* would be far more frequent in usage than any of the other forms, since it is the only option in the most frequent form, the third person singular.

Finally, with complete loss of the perfect auxiliary in both the perfect and conditional, agreement disappears throughout the paradigm. This last stage is attested only in the fifteenth century in the texts examined (*GVNP* 69.14, 339.14). For earlier cases, see Sobolevskij (1962: 244), from which the following example, dating from 1339, is taken:

(50) Ašče *by* slěpi *byli*...

if COND blind-PLUR be-PP

'If you (plur.) were blind...'

(*Moscow* (*Sijskij*) *Gospels* 20v, John 9.41)

#### 14.3.6. Positional restrictions

Halpern (1995:14) highlights the difference between second-word (2W) clitics and second-phrase (2D) clitics. The former appear in second position regardless of phrase boundaries, whereas the latter are sensitive to phrase boundaries and do not interrupt phrases. Within prosodic inversion analyses, second-constituent clitics appear in second position because some phrase moves over them, whereas second-word clitics, if they find themselves in a prohibited clause-initial position, undergo prosodic (phonological rather than syntactic) inversion with the phonological word that follows them. In conservative Old Russian the conditional auxiliary does not interrupt phrases. This follows from the analysis adopted above, since even when it acts as a clitic, the conditional auxiliary moves leftwards to particular syntactic positions, and never undergoes prosodic inversion. Modern Russian and later Old Russian *by* may appear within phrases (*GVNP* 50.8, 50.9; *PRP* 28.16, 28.17). A fifteenth-century example is given in (51).

(51)gostju našemu po vašei Α zemli put' and merchants-DAT COND our in your land road byl" by čist", ot lixix" by ljuděi COND be-PP clear and from evil COND people-GEN on im" puti pakosti bylo. ne road trouble-GEN them-DAT NEG be-PP. 'And the roads should be free to our merchants in your land, and there should be no trouble for them from evil people along the way.' (GVNP 50.8-9)

When by becomes an invariant conditional marker originating within  $C^0$ , it remains a clitic, and is still subject to a restriction that it may not appear in clause-initial position. Before the change, in main clauses by moved to  $M^0$  and no further, and could therefore satisfy this requirement so long as some constituent underwent predicate movement or topicalization. However, after the change, the position of by is fixed in  $C^0$ , and there may be cases where it finds itself in the disallowed initial position, and hence subject to prosodic inversion with the following non-phrasal phonological word. This accounts for the innovation of the clause type in (51).

#### 14.4. IMPLICATIONS FOR THEORIES OF SYNTACTIC CHANGE

I have outlined an account of change in Russian which involves a category change (from  $T^0$  to  $C^0$ ). If it is accepted that  $C^0$  represents a 'more grammatical' category on a continuum from most grammatical (functional) to least grammatical (lexical) categories, then this shift represents an instance of grammaticalization.

Movement of an element from an underlying position to a derived position can be removed from the grammar either by eliminating the movement itself or by treating the derived position as basic. The Russian case instantiates the second option, and is interesting from a theoretical perspective in that most well-studied instances of the elimination of movement, such as the loss of verb-second in French or the loss of verb-raising in English (see Roberts 1993*a*), instantiate the first option.

Grammaticalization of movement of this kind is attested elsewhere. One further example is the grammaticalization of the Welsh main clause affirmative complementizer mi. This was formerly a preverbal first-person-singular subject pronoun occupying [Spec, CP]. Since Welsh was (and is) a verb-initial language, this was a derived position. Movement was eliminated by reanalysing the pronoun as a complementizer, appearing underlyingly in  $C^0$ . In Welsh this reanalysis can be recognized in two ways: the appearance of a new (postverbal) subject pronoun in clauses with mi, and, later, the spread of mi to clauses of all personnumber combinations (for details see Willis 1998). Clearly the Welsh change shares a number of features of the Russian change. In particular, both undergo

two stages: the reanalysis of an element as underlyingly in its derived position  $(C^0)$ , and the loss of agreement associated with its earlier underlying position. It remains to be seen whether these features allow the identification of 'grammaticalization of movement' as a type of syntactic change.

The Russian change also confirms the role of ambiguity in reanalysis, first highlighted in Timberlake's (1977) study of syntactic reanalysis. We can identify sentences of the type in (43), repeated here as (52), as the drivers of change.

(52) Ašče *by* kto dobro drugu *činil*"... if be-COND-3S someone good another-DAT do-PP 'If someone had done a good deed for someone else...'

(NPL 82.4–5)

Sentences of this sort were open to an ambiguous analysis by learners, either with by in  $C^0$  and the participle accompanied by a null auxiliary, or with by as the auxiliary itself. It is doubtful whether the change could have proceeded without this preexisting ambiguity.

## 14.5. CONCLUSIONS

The two varieties of Slavonic analysed in this chapter share many common features in periphrastic verbal forms. However, they differ in the way in which the 'semi-enclitic' nature of the conditional auxiliary is realized. In Old Church Slavonic, all forms of the auxiliary underwent movement under certain conditions. This created the conditions for stability: no form of the auxiliary could be reanalysed as categorically distinct from the others. In Russian, however, the privileged status of the form *by* is evident even in the conservative language: only *by* underwent movement in all environments. I have argued that this created the conditions for change: the reanalysis of the Russian conditional auxiliary as a conditional marker can be viewed as grammaticalization of this movement to such an extent that the moved position is reanalysed as underlying.

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