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A Case of the Non-Directionality of Language Change: The Strength of Auxiliaries and Pronouns in South and West Slavic¹

I. Patterns of language change

This paper examines the issue of the directionality of language change, drawing on data from Slavic languages. In diachronic studies, the question of directionality relates to the assumption that processes of language change tend to be uniform and predetermined, that is, they follow regular patterns and normally give rise to expected modifications of grammatical structures. An example of such an allegedly regular pattern is the process of grammaticalization, which involves the reinterpretation of a lexical element as a grammatical item.

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Grammaticalization normally involves morphophonological weakening and semantic impoverishment of the affected structure. This can be exemplified by the reanalysis of a formerly free word as an affix (see section 1.3 for a discussion of Polish). Crucially, grammaticalization is often regarded as a directional change, which means that processes that occur in the opposite direction and are characterized by morphophonological strengthening are not expected to be possible. On the level of syntax, cases of language change that are regarded as directional involve the establishment of a more fixed word order in a language or the reinterpretation of phrasal movement as head movement.

There is a long linguistic tradition behind the assumption concerning the directionality and fixed patterns of language change (for discussion, see Anderson & Lightfoot, 2002). This approach has its roots in the way linguists viewed language and its properties in the 19th century. As noted by Lightfoot (1999), at that time linguistics was strongly influenced by novel, ground-breaking developments in science, such as Linné's botanical classification of species and Darwin's theory of evolution. These discoveries led to many new assumptions in physics and biology, such as the hypothesis that living organisms compete with each other and struggle for survival, and when faced with challenging environmental conditions, they undergo mutations that in a long run yield species that are prepared better for life in a particular environment. Linguists assumed that languages functioned like "living organisms" and adopted some of the hypotheses developed in other branches of science to explain processes of language change. Thus, they assumed that languages were reflections of the societies and nations that use them to communicate. Like societies, languages could allegedly follow a path from primitive simplicity, via a period of growth, to potentially a period of decay. To prevent the decay, the linguist's task was to improve the state of a language by discovering the rules of grammar and instructing speakers to speak their language correctly, following prescriptive rules.

Moreover, on a par with living species, languages were thought to compete with one another and struggle for survival. These processes were argued to follow a fixed, predestined path which would eventually lead to the increased simplicity of a language (Rask, 1818), or, conversely, to a stage of greater complexity. For example, on the level of morphology, language change purportedly followed the path from isolating to agglutinating and finally to inflectional types of languages (Schleicher, 1848). The change was presumed to be directional, proceeding in a predestined order, and no reversal of the process was considered possible. Admittedly, there exist modern theories on the nature of language

change that argue for directional universals, though – as an anonymous reviewer correctly observes – they no longer necessarily assume that the directionality of language change reflects an “adaptive” behavior of languages. For example, some scholars assume that the directionality of change is rooted in learnability issues, in the sense that languages may evolve “in the direction of features that are acquired early” (Bauer, 1995, p. 170) and that grammatical properties that are more difficult to acquire could be removed from the grammar in the process of language change. Such assumptions require more justification, and intuitively they are at odds with the observation that all languages are acquired by children with equal ease, no matter their apparent complexity.

As pointed out by Lightfoot (1999, p. 37), from a theoretical perspective such assumptions are problematic. First, a basic notion such as language simplicity is not easy to define and could be understood in different ways, such as depending on whether we take the perspective of the language speaker or the language hearer. For instance, on the level of phonetics, in relation to the articulation of consonants, word-final consonant devoicing could be seen as less demanding and simpler for the speaker. However, the same process requires more effort from the hearer as it makes it difficult for a speaker of languages such as Polish to distinguish words such as *kod* ‘a code’ and *kot* ‘a cat’ when they are pronounced without a context. On the empirical side, there is diachronic evidence suggesting that languages do not become “simpler”; for example, the loss of yers in the history of Polish led to highly complex consonant clusters. Likewise, on the level of syntax we observe many different word orders crosslinguistically, such as OV and VO, but it may be hard to argue that either of them could be easier to use or to acquire. It has been noted that the replacement of the OV word order with VO is quite common diachronically, but the reverse change is quite rare (Faarlund, 1990, p. 50). This propensity has been attributed by Biberauer, Newton, and Sheehan (2009; see also Fuß, 2017, p. 473) to general properties of phrase structure, in the sense that the shift from VO to OV is disfavored due to Holmberg’s (2000, p. 124) Final-Over-Final Constraint. Correspondingly, many researchers have argued for grammaticalization clines, which involve the development of a functional category from a lexical element through identical stages crosslinguistically (e.g. content item > grammatical word > clitic > inflectional affix > Ø, as in Hopper & Traugott, 1993, p. 7), though it has also been pointed out that the cline is just a statistically more common scenario, and processes that occur in the opposite direction are certainly possible.

This paper provides more evidence against the notion of strict directionality in language change and it shows, on the basis of Slavic data, the ways two classes of functional elements, namely auxiliary and pronominal clitics, underwent changes in opposite directions in terms of their prosodic and morphosyntactic strength.

II. The weakening of the auxiliary ‘be’ in periphrastic tenses in Slavic

1. The structure of complex tense forms in Slavic

1.1 The main verb

Contemporary South Slavic languages make use of periphrastic tense forms which are structured with the auxiliary ‘be’ and the *l*-participle, as exemplified in (1) for Bulgarian.

- (1) a. Ivan e pročel knjigata
 Ivan is_{AUX} read_{PART.M.SG} book-the
 “Ivan has read the book” (Bg)

The structure is reminiscent of the periphrastic tense found in Old Slavic. It differs from the corresponding forms in Germanic and Romance languages as the verb ‘be’ is the exclusive auxiliary used with all types of main verbs. This is a rare pattern outside Slavic; in Germanic and Romance languages, it is found only in the dialect of Terracina (Italo-Romance) and Shetlandic (a variety of Scots English, see Bentley & Eythórsson, 2004). In most Germanic and Romance languages, such as in German, French, and Italian, the auxiliary ‘be’ is used only with unaccusative verbs.²

The main verb used in the periphrastic structure is the *l*-participle. In contrast to the participles used in periphrastic structures in Germanic and Romance languages, the *l*-participle is morphologically different than the passive participle.

² As an anonymous reviewer correctly observes, two Slavic languages, Kashubian and Macedonian, display complex tense forms that are reminiscent of the ones attested in Germanic and Romance. They are formed with a morphologically invariant form of the passive participle functioning as the main verb, accompanied by the auxiliary “have” (or, in the case of Kashubian, also the auxiliary “be” used with unaccusative main verbs). See Migdalski (2006, ch. 3), Tomić (2012), and Nomachi (2016) for discussion.

- (2) a. Ivan e čel knjigata
 Ivan is_{AUX} read_{PART.M.SG} book-the
 “Ivan has read/been reading the book”
- b. Knigata e četana/*čela ot Ivan
 book-the_F is read_{PASS.F.SG}/read_{PART.F.SG} by Ivan
 “The book is being read by Ivan” (Bg)

The *l*-participle is a Slavic innovation which diachronically has its source in a class of Proto-Indo-European adjectives ending in **-lo-*. When used with human reference, they describe someone’s characteristic features or an inclination to perform a certain action. They serve as stems of proper names and names of occupations in Indo-European languages, such as *discipulus* ‘student’ or *legulus* ‘gatherer of fallen olives’ in Latin; *dêlos* ‘apparent, evident’ in Ancient Greek; *bitil* ‘applicant’, *tribal* ‘cattle driver’, or *Unterläufel* ‘delegate’ in Old German; see Damborský (1967), Wojtyła-Świerzowska (1974, p. 103), and Igartua (2014). Within Slavic, *-lo* forms can still be used as adjectives, though in most Slavic languages they are restricted to adjectives derived from unaccusative verbs, but their most prominent usage is as participles. Admittedly, periphrastic tense structures formed with the *l*-participle are not very common in Old Church Slavonic texts, which may indicate that they were possibly a novel structure that was not suitable for religious texts.

In Old Church Slavonic, the *l*-participle was used in all periphrastic tense forms, but their temporal interpretation depended on the aspectual form of the auxiliary ‘be’. The imperfective form of the auxiliary (such as *běaxo* in 3a) gave rise to the future or future perfect interpretation of the structure, whereas past perfect forms employed the perfective variant of ‘be’ (such as *bōdemъ* in 3b).

- (3) a. ... vъskojō sę i rodili bōdemъ
 why even bear_{PART.PL} be_{PRF.IPL}
 “Why will we have been born?” (OCS; Schmalstieg, 1983, p. 159)
- b. Мънози же от ijudei běaxo prišly kъ Martě
 many FOC from Jews be_{IMPF.3PL} come_{PART.PL.M} to Martha
 i Marii da utěšetъ i
 and Mary to comfort them
 “And many of the Jews had come to Martha and Mary to comfort them”
 (OCS; Lunt, 1974, p. 98)

The aspectual meaning of the whole predicate was rendered by the *l*-participle, which can also occur in perfective and imperfective variants, as indicated for contemporary Slavic by the Bulgarian example in (4).

- (4) Ivan e čel/pročel knjigata
 Ivan is_{AUX} read_{IMPF.PART.M.SG} /read_{PRF.PART.M.SG} book-the
 “Ivan has read the book” (Bg)

Since the *l*-participle is attested in structures that refer to both the future and the past (see 3), it can be concluded that the auxiliary contributes to the temporal interpretation of the periphrastic structure, while the *l*-participle is tenseless. This is in fact to be expected, given that participles have adjectival morphology. In present-day Slavic languages, the *l*-participle is a tenseless, non-finite verbal form as well, and it is used in complex tense structures that have past (see 1) or future meanings.

- (5) a. Jan będzie pisał list
 Jan be_{PRF.ISG} write_{PART.M.SG} letter_{ACC}
 “Jan will be writing a letter” (Pl)
- b. Kad budemo govorili s Marijom...
 when be_{PRF.IPL} speak_{PART.PL} with Marija
 “When/if we speak with Marija...” (S-C)

1.2. The auxiliary ‘be’

In Old Church Slavonic, the auxiliary verb ‘be’ occurred in the forms presented in (6). As the chart shows, there were two variants of the verb in the 3rd person: the strong (accented) variant *jestъ* in the singular and *sqtъ* in the plural, and the reduced, unaccented forms, *je* and *sq*, respectively. An anonymous reviewer points out that the reduced forms were very rare and were attested only in some texts.

- (6) The paradigm of *byti* ‘be’ in the present tense in OCS

	singular	dual	plural
1	jesmь	jesvě	jesmь
2	jesi	jesta	jeste
3	jestъ (<i>je</i>)	jeste	sqtъ (<i>sq</i>)

(OCS; cf. Schmalstieg, 1983, p. 138)

The reduced forms were extended to the whole paradigm in the history of Slavic (Vaillant, 1966, pp. 441–442) and the extension had a repercussion for the syntax of complex tense structures, as will be shown below.

The verb ‘be’ was also used as a copula in Old Church Slavonic, whose paradigm was identical to the auxiliary. However, it had a slightly different distribution, as the copula could be omitted, whereas omission of the auxiliary was impossible (Růžička, 1963, p. 202). In Old East Slavic, the syntactic contrast between the auxiliary and the copula was more pronounced. The auxiliary in Old Russian was a second-position enclitic, whereas the copula could appear clause-initially, preceding adjectives and present active participles (Van Schooneveld, 1959, p. 142), as shown in (7). Note that the conjunction *i* does not count as a host for the clitic *by*, as it is not stressed.

- (7) I by obladjä Olegъ Poljany
 and be_{AOR.3SG} ruling Oleg Poljane
 “And Oleg was ruling over the Poljane”
 (Old Russian, *Povest’*; Van Schooneveld, 1959, p. 143)

Moreover, in the 11th century the auxiliary began to be dropped in East Slavic texts. The omission was not uniform across the paradigm because as late as in the 16th–17th centuries the auxiliary was still occasionally overt in the 1st and the 2nd person in the singular and in the plural, but they subsequently fell out of use completely (Van Schooneveld, 1959, chapter 4). In consequence, past tense forms in modern East Slavic languages consist of just the *l*-participle, which occurs without an auxiliary.

- (8) Ana napisala pis’mo
 Ana write_{PART.F.SG} letter
 “Ana wrote a/the letter” (Rus)

In South Slavic languages, the prosodic reduction of the auxiliary led to the development of a new paradigm of weak forms. As pointed out by an anonymous reviewer, in East Slavic languages, the auxiliaries became reduced (Kwon, 2009; Majer, 2014), resembling the path of auxiliary reduction observed in Modern Polish, which is discussed in the next section.

1.3. The weakening of the auxiliaries in the history of Polish

As was shown in example (2) for Bulgarian above, in South and in West Slavic languages auxiliaries are clitic forms of the verb “be”, which morphologically correspond to the copula.

- (9) a. Čel sŭm knigata
 read_{PART.M.SG} am_{AUX} book-the
 “I have read the book”

b. Az sŭm čel knjigata
I am_{AUX} read_{PART.M.SG} book-the

c. Dovoln sŭm
glad_{M.SG} be_{PRES.1SG}
“I am glad”

(Bg)

Polish, however, is an exception as the auxiliary has been morphologically impoverished into a person-number marker (as in 10a) and no longer corresponds to the form of the copula, illustrated in (10b). Thus, the development that occurred in the history of Polish involves the reduction of the auxiliary ‘be’.

(10) a. Czytał-*em* książkę
read_{PART.M.SG}+AUX.PRES.1SG book_{ACC}
“I (have) read a book”

b. Jestem zadowolony
be_{PRES.1.SG} glad_{M.SG}
“I am glad”

(Pl)

The person-number marker may take the form of a clitic when it follows the clause-initial element or an affix when it follows the *l*-participle. The two distributional variants have been studied extensively in the literature (Borsley & Rivero, 1994; Franks & Bański, 1999; Kowalska, 1976; Mikoś & Moravcsik, 1986; Rappaport, 1988; Rittel, 1975; Witkoś, 1998).

(11) a. My-*śmy* znowu wczoraj poszli do parku
we_{AUX.IPL} again yesterday go_{PART.VIR.PL} to park
“We went to the park yesterday again”

b. My znowu wczoraj poszli-*śmy* do parku

(Pl; see Franks & Bański, 1999)

The current form of the auxiliary in Polish is a result of diachronic auxiliary reduction presented in the chart in (12) (Andersen, 1987, p. 24; Decaux, 1955, pp. 126–128). The strong (orthotonic) variants are taken from Old Polish, whereas the reduced ones in the last two columns are taken from 16th-century and Modern Polish. The orthotonic 3rd-person auxiliaries *jest*, *je*, and *są* were found only in emphatic predication structures and they disappeared between the 15th and the 17th century (Decaux, 1955, pp. 127–128). The dual forms were lost in the 16th century (Długosz-Kurczabowa & Dubisz, 2001, p. 308) with the loss of the dual number.

(12) Diachronic development of the Polish verb ‘to be’

	ORTHOTONIC FORM (Old Polish)	REDUCED FORMS	
		16 th century Polish	Modern Polish
1SG	jeśm	-(e)śm/- (e)m	-(e)m
2SG	jeś	-(e)ś	-(e)ś
3SG	jest/jeść/je	-	-
1PL	jesm(y)	-(e)smy	-(e)śmy
2PL	jeście	-(e)ście	-(e)ście
3PL	są	-	-
1DUAL	jeswa	-(e)swa	-
2DUAL	jesta	-(e)sta	-
3DUAL	jesta	-(e)sta/-0	-

(Andersen, 1987, p. 24)

The distribution of orthotonic variants of the auxiliary in Old Polish is exemplified in (13). They may appear in different positions in the structure, and they may even co-occur with the enclitic auxiliaries, as in (13b–c).

(13) a. Wiem ze stworzyciela wszego luda porodziła jeś
 know_{1SG} that creator all_{GEN} mankind_{GEN} bear_{PART.F.SG} 2SG
 “I know you bore the creator of all mankind”

b. Tom jest oglądała
 That_{+1SG} 3SG.EMPH see_{PART.F.SG}
 “That I did see”

c. Jest ja ciebie zepchnął albo uczynił-em tobie co złego?
 3SG.EMPH I you_{ACC} repulse_{PART.M.SG} o r
 do_{PART.M.SG}+1SG you any harm
 “Did I repulse thee or do thee any harm?”

(Old Polish; Andersen, 1987, p. 28)

The examples in (14) illustrate the use of reduced auxiliaries, which encliticize on the first element in the clause and thus appear in the second position.

(14) a. Ani-ś mię zepchnął, ani rzucił, ani-ś
 not_{+2SG} me repulse_{PART.M.SG} nor desert_{PART.M.SG} nor_{+2SG}
 niektóre złości uczynił
 any harm do_{PART.M.SG}

- b. Bo-cie-*m* się cała darowała
 for-you+_{1SG} REFL entire give_{PART.F.SG}
 “For I gave myself wholly to thee”

(Old Polish; Andersen, 1987, p. 28)

Rittel (1975) and Kowalska (1976) observe that reduced auxiliaries occurred in two positions. First, they may occur as clitics after the clause-initial element, which was usually a conjunct, pronoun, *wh*-word, a particle or an adverb. This strategy was especially common in subordinate clauses.

- (15) a. A teraz-eś mi tę robotę náznaczył
 and now+_{AUX.2SG} me_{DAT} this work assign_{PART.M.SG}
 “And now you have assigned this work to me”

(*Zwierciadło duchowej łaski* 1645)

- b. Ju-że-ście się go dośytz namęczyli
 already+_{FOC}+_{AUX.2PL} REFL him_{ACC} enough tire_{PART.PL}
 “You have tired him enough already”

(Pl, *Żywot Pana Jezu Krysta* 1522; Kowalska, 1976, p. 43)

Second, they may occur immediately following the *l*-participle, and then they may be interpreted as an affix. This strategy was most common in clauses that contain verbs, nouns, adjectives or numerals in the initial position, and over time it steadily prevailed.

- (16) a. Egypciowi podáli-śmy ręce
 Egypt_{DAT} give_{PART.PL+1PL} hands
 “We gave our hands to Egypt”

(Wereszczyński 1592 *Excitacz do podniesienia wojny...*)

- b. Y zdrowie swoje położyli-ście dla mnie
 and health your give_{PART.PL+2PL} for me
 “And you gave your health for me”

(Pl, Grzegorz z Żarnowca 1582 *Postylle część wtóra*; Kowalska, 1976, p. 43)

The weakening of the auxiliary and then its reanalysis from a clitic into an affix has sometimes been described as a case of grammaticalization (see, for example, Haspelmath, 2004, 2015). In syntactic terms, the auxiliary reduction involved the reanalysis of phrasal movement of the *l*-participle (currently attested in South Slavic) as head movement in Modern Polish, as evidenced, for example, by the subject gap requirement present in South Slavic, but not in Modern Polish (for details, see Migdalski, 2006).

- (17) a. Az sŭm čel knigata
 I am_{AUX} read_{PART.M.SG} book-the
 “I was reading the book” (Bg; Lema & Rivero, 1989)
- b. *Az čel sŭm knigata
- (18) a. Ty-ś czytał książkę
 you+_{AUX.2.SG} read_{PART.M.SG} book
 “You have read the book”
- b. (Ty) czytał-eś książkę
 you read_{PART.M.SG}+_{AUX.2.SG} book (Pl)

The weakening of the auxiliary has been accounted for in a number of ways. Długosz-Kurczabowa and Dubisz (2001, pp. 307–308) argue that a contributing factor was a change in lexical stress in Polish, which became regular and established on the first syllable of a word in the 14th–15th c. but shifted to the penultimate syllable in the 18th century. More commonly though, the change is argued to be a result of an increased usage of complex tense forms after the decline of the simple tense forms (the aorist and the imperfect) in Old Polish (Kowalska, 1976, p. 42), which led to the auxiliary weakening. This postulate is intriguing because it has also been observed that the loss of the simple tenses coincided with the loss of the auxiliary ‘be’ in Old East Slavic. Moreover, the usage of the complex *l*-participle tense forms increased in Old East Slavic earlier than in Old Church Slavonic (Stieber, 1973, p. 53), which indicates that the complex tense forms started to assume the role of the default past tense before Old East Slavic split into dialects. The issue is addressed in more detail towards the end of this paper.

III. The strengthening of pronominal forms

This section shows that pronominal elements in some Slavic languages have undergone a diachronic change in the opposite direction. Namely, they shifted from verb-adjacent to second-position clitics, and in Polish they were further strengthened and reinterpreted as weak pronouns.

In modern Slavic, only two languages, Bulgarian and Macedonian, have clitics that are referred to as verb-adjacent as they cannot be separated from their verbal hosts, such as the finite verb *dade* in (19).

- (19) a. Vera *mi go dade včera*
 Vera *me_{DAT} it_{ACC} gave_{3SG} yesterday*
 “Vera gave it to me yesterday”

b. *Vera *mi go včera dade* (Bg/Mac; Franks & King, 2000, p. 63)

Most other Slavic languages (Serbo-Croatian, Slovene, Czech, Slovak) have second-position clitics, which are not selective about the category of their hosts and appear after the first syntactic constituent, such as the subject (20a), a participle (20b), and an adverb (20c).

- (20) a. Mi *smo mu je predstavili juče*
 we *are_{AUX} him_{DAT} her_{ACC} introduce_{PART.M.PL} yesterday*
 “We introduced her to him yesterday”

b. Predstavili *smo mu je juče*
 introduce_{PART.M.PL} *are_{AUX} him_{DAT} her_{ACC} yesterday*
 “We introduced her to him yesterday”

c. Juče *smo mu je predstavili*
 yesterday *are_{AUX} him_{DAT} her_{ACC} introduce_{PART.M.PL}*
 “Yesterday we introduced her to him”

(S-C; see Bošković, 2001, pp. 8–9)

Radanović-Kocić (1988) shows that Old Church Slavonic had three clitics that occurred in the second position without exception: the focus particle/conjunction *že*, the complementizer *bo*, and the focus/question marker *li*, whereas pronominal clitics were largely verb-adjacent. Their distribution is exemplified in (21).

- (21) a. Elisaveti *že isprl̃ni sę vr̃mę roditi ei. I rodi sñb*
 Elizabeth CONJ fulfilled REFLtime give-birth_{INF} her_{DAT} and gave-birth son_{ACC}
 “And it was time for Elizabeth to have her baby, and she gave birth to a son.”
 (OCS, *Luke* 1: 57; Pancheva et al., 2007)

b. Ašte desnaě tvoě r̃oka s̃b̃lažñet̃ tę.
 if right your hand sin_{PRES.3SG} you_{ACC}
 “If your right hand causes you to sin.”

(OCS, *Matthew* 5:30; Radanović-Kocić, 1988, p. 154)

Moreover, Radanović-Kocić (1988) investigates the placement of pronominal clitics in the history of Serbian. She observes that whereas in the oldest Serbian texts (12th–15th c.) their distribution mirrored the pattern found in Old Church Slavonic, in later texts pronominal clitics gradually gravitate towards the second position.

- (22) a. Brižljiva *ga* crkva ne pušta
 caring him_{ACC} church NEG lets
 “The caring church doesn’t let him”
 (Croatia, 19th c.; Radanović-Kocić, 1988, p. 165)

- b. Ova *se* čeljad ruga
 this REFL people mocks
 “These people are mocking”
 (Adriatic Coast, 16th c.; Radanović-Kocić, 1988, p. 165)

The change was not uniform across the languages and dialects spoken in the area. Some texts in which pronominal clitics were still verb-adjacent in the 19th c. come from Montenegro. Migdalski (2016, 2018) takes this fact to be significant and points out that these are also the dialects that preserved simple tense distinctions the longest, which may suggest a correspondence between the availability of verb-adjacent pronominal cliticization and the presence of morphological tense.³

- (23) a. Ako iguman sakrivi *mi*
 if prior does-wrong me_{DAT}
 “If the prior does me wrong”
 (Montenegro, 18/19th c.; Radanović-Kocić, 1988, p. 166)

- b. Na stepen arhimandritski *se* uzvisio
 on rank archimandrite REFL rise_{PART.M.SG}
 “He rose to the rank of archimandrite”
 (Montenegro, 18/19th c.; Radanović-Kocić, 1988, p. 168)

- c. Drugo ništa ne predstavljaju *mi*
 else nothing NEG represent me
 “They are nothing else to me”

- d. Kći nebesna usliša *mi* molbu
 daughter heaven hear_{AOR.3SG} me_{DAT} prayer
 “The daughter of the heavens heard my prayer”
 (Montenegro, 18/19th c.; Migdalski, 2018, p. 200)

³ An anonymous reviewer states that Sorbian, whose literary variants preserved simple tense forms, and which has second position clitics, may be a counterexample to this generalization. However, in Sorbian the aorist is possible only with perfective verbs, and the imperfect is formed only from imperfective verbs (Stone, 2002, pp. 635–636). This resembles the distribution of the aorist in contemporary Serbian, which has been analyzed by Arsenijević (2013) and Todorović (2016) as an aspectual form, with no inherent past tense interpretation, as it can characterize habitual or even future events. See also Migdalski (2018, pp. 192–193) for a discussion of the Sorbian facts and their relevance for theories that associate language change with language acquisition.

The correspondence between the availability of tense morphology and verb-adjacent cliticization is confirmed by Old Slovene, where pronominal clitics shifted to second position very early, as shown by the fact that they are found already in *The Freising Manuscripts*, the oldest Slovene manuscript from the 10th–11th century.

- (24) a. I' vueruiú da mi ie na zem zuete beufi. (line 8)
 and believe_{ISG} that me_{DAT} is_{AUX} on this world was_{PAST.ACT.PART}
 “And I believe that, having been in this world...”
- b. I da bim na zem zuete tacoga grecha pocazen vzel (line 25)
 and that be_{COND.ISG} on this world such sin penance take_{PART.M.SG}
 “And that I may in this world accept penance for such sin”
- c. paki se uztati na zodni den. Imeti mi ie sivuot (line 9)
 again REFL rise_{INF} on judgment day have_{INF} me_{DAF} is life
 “And to rise again on the day of judgement. I am to have life” (10th-11th c. Slovene, *Glagolite po naz redka zloueza*, *The Freising Manuscripts*; Migdalski, 2016, p. 266)

The availability of second-position cliticization in *The Freising Manuscripts* coincides with Vaillant’s (1966, p. 60) observation that the simple past tenses were lost early in Old Slovene, and in the earliest texts the aorist is limited to certain verb forms. Jung and Migdalski (2021) provide more evidence for the correspondence between verb-adjacency and tense marking on the basis of Old Russian data. Synchronically, verb-adjacent cliticization is attested only in Bulgarian and Macedonian (see 19 above), which are also the only Slavic languages which productively use the aorist and the imperfect and interpret them as past tense forms.

The shift from verb-adjacent to second-position cliticization could be viewed as a strengthening and degrammaticalization of the pronominal forms. As has been observed in the literature, second-position clitics are in general more syntactically mobile and prosodically stronger than verb-adjacent clitics. For example, they can be separated from each other by a parenthetical, as shown in (25) for Serbo-Croatian, in contrast to verb-adjacent pronominal clitics in Bulgarian, which form a cluster.

- (25) a. Ti si me, kao što sam već rekla,
 you are_{AUX} me_{DAT} as am_{AUX} already say_{PART.F.SG}
 lišio ih juče
 deprive_{PART.M.SG} them yesterday
 “You, as I already said, deprived me of them”

(S-C; Bošković, 2001, p. 60)

- b. *Te *sa*, kaktó *ti* kazah, predstavili gi na Petür.
 they are_{AUX} as you_{DAT} told introduced them_{ACC} to Peter
 “They have, as I told you, introduced them to Peter.”

(Bg; Bošković, 2001, p. 189)

The strengthening of pronominal clitics is even more pronounced in the history of Polish. As demonstrated by Migdalski (2016), in the oldest prose text in Polish dating from the late 13th/early 14th, *Holy Cross Sermons (Kazania Świętokrzyskie)*, pronominal clitics are infrequent, but they tend to occur in regular positions after the clause-initial element, which can be a verb (see 26a), so they can be analyzed as second-position elements, but in some instances also as verb-adjacent clitics.

- (26) a. a togodla *ji* we złe chustki ogarnęła
 and therefore him_{ACC} in bad cloth wrap_{PART.F.SG}
 “and therefore she wrapped him in bad cloth.”

(Sermon III, *On St. Michael's Day*)

- b. Należli *ji*, prawi, pieluszkami ogarnienego a w jaśkach położonego
 find_{PART.M.PL} him_{ACC} say_{AOR} nappies_{INST} wrapped and in cribs laid
 “They found him wrapped in nappies and laid in cribs.”

(Sermon III, *On St. Michael's Day*)

- c. owa *ji* pirzwej widział Habraham
 so him_{ACC} first see_{PART.M.SG} Abraham
 “So he was first seen by Abraham.”

(Migdalski, 2016, p. 303)

In later texts, such as *Queen Sophia's Bible/Sárospatak Bible (Biblia Królowej Zofii)*, pronominal forms become strengthened and are syntactically mobile. As indicated in (27), the clitic forms are juxtaposed together with strong forms in the same pragmatic/semantic contexts.

- (27) a. Tegdy wziął Pan Bog człowieka i postawił *ji* w raju
 then took God man_{ACC} and put him_{ACC} in paradise
 rozkoszy, aby działał a ostrzegał jego. I przykazał *jemu*...
 bliss_{GEN} so-that worked and protected him_{ACC} and commanded him_{DAT}
 “The Lord God took the man and put him in the Garden of Eden to work it
 and take care of it. And the Lord God commanded him.”

(Genesis, 2:15-16)

- b. uczyńmy *jemu* wspomóżenie podobne k *niemu*
 make him_{DAT} helper similar to him_{DAT}
 “(Let us) make a helper suitable for him.”

(Genesis, 2:18; Migdalski, 2016, p. 304)

Moreover, the clitic variants do not need to appear in a designated syntactic position, so they do not need to target the second position; instead, they have largely have the same distribution as other pronouns.

- (28) a. I przywiodł *je* przed Adama, aby *je* opatrzył
 and brought them_{ACC} before Adam so-that them_{ACC} saw
 a jimiona *jim* dał
 and names them_{DAT} give_{PART.M.SG}
 “He brought them to the man to see what he would name them.”
 (Genesis, 2:19)
- b. Nazwał jest Adam jimiona *jich* wszelikiemu stworzeniu zwierzęcemu
 name_{PART.M.SG} is_{AUX} Adam names them_{GEN} all beings animal
 “Adam gave names to all the livestock.”
 (Genesis, 2:20; Migdalski, 2016, p. 305)

In this way, pronominal clitics adopted a distribution similar to the one observed in Modern Polish, where they are interpreted as weak pronouns. Namely, as analyzed first in detail by Rappaport (1988), pronominal clitics in Polish are syntactically mobile and may occur in many positions in the clause, although they avoid clause-initial placement (29a). They can also appear in different orders with respect to each other (29b) and can be separated from each other (29c). As was demonstrated earlier, pronominal clitics do not have such free distribution. Therefore, pronominal clitics in Modern Polish are assumed to be weak pronouns (see Cetnarowska, 2003; Witkoś, 1998), in the sense of Cardinaletti and Starke (1999).⁴

- (29) a. (*Go) często (*go*) spotykam (*go*) na ulicy
 him_{ACC} often him_{ACC} meet_{PRES.1SG} him_{ACC} on street
 “I often meet him in the street”
- b. Jan chce *mu go* / *go mu* wypożyczyć
 Jan want_{3SG} him_{DAT} it_{ACC} it_{ACC} him_{DAT} lend_{INF}
 “Jan wants to lend it to him”
- c. Jan *mu* chce *go* wypożyczyć a nie sprzedać
 Jan him_{DAT} want_{3SG} it_{ACC} lend_{INF} and not sell_{INF}
 “Jan wants to lend it to him rather than sell it” (PI)

⁴ An anonymous reviewer reports that the clause-initial placement of the accusative form *go* is acceptable and used by many speakers of colloquial Polish. While I do not share the reviewer’s judgement, the variation in acceptability may be indicative of the language change discussed here. It seems that dative weak pronouns are more likely clause-initially, as was recently confirmed in a corpus study by Włodarczyk (2018).

As pointed out in Migdalski (2016), in Old Polish texts we observe a gradual strengthening of pronominal forms, coupled with the decline of the aorist and the imperfect. *Kazania Świętokrzyskie* features several usages of past tense forms, exemplified in (30), but they are highly infrequent or unattested in later texts.

- (30) a. *jemuż* *biesze* *imię* *Symeon*, *święty*, *prawdziwy*, *bogobojny*
 him_{DAT}+FOC be_{3SG.IMP} name Simon holy true God-fearing
 “His name was Simon, holy, true, God-fearing.” (Sermon III, *On St. Michael’s Day*)
- b. *pośpieszyczą* się *do* *kościola* *na* *modlitwę* *przed* *Boga* *wszemogącego*
 hurry_{3PL.AOR} REFL to church to prayer because God Almighty
i *poczęczą* się *modlić*
 and start_{3PL.AOR} REFL pray_{INF}
 “They hurried to church for a prayer to God Almighty, and they started to pray.” (Sermon VI, *The Cleansing Of The Blessed Virgin Mary*; Migdalski, 2016, p. 303)

The correspondence between the availability of tense morphology and types of cliticization has also been confirmed for Serbian, Slovenian, Macedonian, and Old Russian in Migdalski (2015, 2016) and Jung and Migdalski (2021). These analyses also demonstrate how the correspondence can be captured in syntactic terms.

Summary

This article has shown that two classes of functional elements, auxiliary verbs and pronominal clitics, underwent diachronic changes in opposite directions in Slavic. Namely, whereas some auxiliary verbs became prosodically and morphosyntactically reduced into clitics and affixes, the pronominal forms became strengthened and more independent syntactically. Interestingly, both these changes have been attributed to the same factor in the literature, which is the loss of tense morphology, which in syntactic terms could be interpreted as a weakening of the [T] feature. If correct, the presented analysis may indicate that there are no strict, universal rules of language change in the sense that there may be no predictable directionality of historical change. Although morphosyntactic reduction may appear to be more frequent, diachronic strengthening of lexical elements is also possible.

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Bezkierunkowość zmian językowych. Siła czasowników posiłkowych i zaimków osobowych w językach południowo- i zachodniosłowiańskich

Artykuł omawia zagadnienie kierunkowości zmian językowych, opierając się na danych z języków słowiańskich. W szczególności artykuł podejmuje kwestię istnienia uniwersalnych trendów i wzorców zmian diachronicznych w języku, takich jak jednorodne osłabienie słów pod względem prozodycznym i morfoskładniowym. Badane są dwa typy wyrazów funkcyjnych: czasowniki posiłkowe i zaimki osobowe. Jak wykazano, formy te podległy zmianom diachronicznym, które nastąpiły w przeciwnych kierunkach: podczas gdy czasowniki posiłkowe uległy prozodycznemu i morfoskładniowemu osłabieniu, w niektórych językach słowiańskich zaimki osobowe uległy wzmocnieniu.

Słowa kluczowe: zmiana diachroniczna; gramatyzacja; klityki zaimków osobowych; staro-cerkiewno-słowiański; język bułgarski; język polski; język serbski

A case of the non-directionality of language change: The strength of auxiliaries and pronouns in South and West Slavic

This paper discusses the directionality of language change on the basis of Slavic data. Specifically, it addresses the question of whether there exist predefined patterns and diachronic trends that affect words in terms of their prosodic and morphosyntactic strength. The paper investigates two classes of functional elements, auxiliary verbs and pronominal clitics, showing that they have undergone diachronic changes in opposite directions: while auxiliaries have weakened, pronominal forms have become strengthened in some Slavic languages.

Keywords: diachronic change; grammaticalization; pronominal clitics; Old Church Slavonic; Bulgarian language; Polish language; Serbian language

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