

# Toward a four-way pronoun hierarchy: A view from Slavic

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SSTRACT -

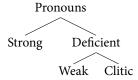
This paper examines how grammatical categories are structured in classes with different degrees of syntactic deficiency, paying special attention to pronouns. We take Cardinaletti & Starke's (1999) tripartite classification of pronouns as a starting point of our discussion and show that their three-way distinction is not sufficient to fully capture the phenomenon, based on old and modern Slavic data. We also demonstrate that their "Minimize Structure" principle is challenged by diachronic data from Slavic.

кеуwords weak pronouns · deficiency hierarchy · pronominal strength · clitics

## 1 CARDINALETTIAND STARKE'S THREE-WAY HIERARCHY OF PRONOUNS

Cardinaletti & Starke (1999) classify pronouns into three classes, i.e., strong pronouns, weak pronouns, and clitics, depending on their syntactic strength, as shown in (1).

(1) Deficiency hierarchy in Cardinaletti & Starke (1999)



They argue for an exclusively tripartite system, which consists of just one strong and two deficient forms (Cardinaletti & Starke 1999: 167). The deficient variants are argued to be the default options, hence the "Minimize Structure" principle. Against Cardinaletti & Starke's assertion of the absolute tripartite system, Cetnarowska (2004) proposes a four-way pronoun scale with two strong classes and two weak classes by adding strong but unstressed pronouns, as illustrated in (2).

(2) strong (stressed) pronouns > unstressed pronouns > weak pronouns > clitic WAS [+stress] 'you.gen.pl' was [-stress] 'you.gen.pl' go 'him' się 'refl'

Her main motivation comes from the availability of so-called double duty pronouns in Polish, which is exemplified by *was* with and without stress in (2). This type of pronoun functions as a strong pronoun with a focal stress or as a strong pronoun without stress. Strong unstressed pronouns can be coordinated with nominals, as in (3-a), and topicalized, as in (3-b), contrary to Cardinaletti & Starke's predictions on unstressed pronouns.

- (3) a. Widziałem was i mamę w kinie. see.PART.M.SG you.ACC and mom in cinema 'I saw you and mom in the cinema.'
  - b. Was NIE da się zapomnieć. you.gen.pl neg manage refl forget.inf 'One cannot forget you.'

(Pl, Cetnarowska 2004: 46)

Cetnarowska observes that strong unstressed pronouns are morphosyntactically identical with their stressed counterparts, differing from the latter only in terms of stress. This raises a possibility that stressed and unstressed pronouns actually form a single class which can be pronounced without stress whenever necessary.

This paper argues that the class of unstressed pronouns should be larger than was assumed in Cardinaletti & Starke's (1999) and Cetnarowska's (2004) proposals, and that unstressed pronouns may display non-uniform properties crosslinguistically. In Sections 2 and 3, a four-way pronoun hierarchy is proposed, based on data from Old Russian, Polish, Macedonian, and Slovenian. Section 4 concludes the paper.

#### 2 A FOUR-WAY PRONOUN HIERARCHY

#### 2.1 OLD RUSSIAN

Old Russian features all the four classes of pronouns that are discussed above. In addition to Cetnarowska's double duty pronouns, we propose that there can be a clearly distinct, non-reduced class that is inherently unstressed but syntactically free in the pronominal system, based on Old Russian data.

Unlike Modern Russian, which lacks pronominal and auxiliary clitics, Old Russian features reduced dative and accusative pronouns as well as 1st and 2nd person forms of the perfect auxiliary, all of which have been analyzed as second position enclitics. A more detailed analysis of these forms, however, suggests that more distinctions are necessary.

First, Old Russian utilizes non-reduced, orthotonic pronominal forms. These are clearly strong pronouns because they occur without positional restrictions and may bear focal stress. In (4-a), *mně* 'for me' and *tobě* 'for you' are contrasted. This type of pronouns can coordinate with a strong nominal, as shown in (4-b).

(4)a. a kodь ti mně хІьЬъ tu i tobě. and where EMPH me.DAT bread.NOM there also you.DAT.SG (OR, Birch bark letter 731) 'And where there is bread for me, there is also for you.' volno bu tob[i]. i freely God.DAT.M.SG and you.DAT.SG 'As God and you like.' (OR, Birch bark letter 757)

Second, morphologically reduced accusative pronouns such as  $m\varrho$ , which are traditionally analyzed as clitics, sometimes behave as weak pronouns. They can appear after prepositions, as exemplified in (5).

(5) postrьčьть užь na mę i na moe deti. provoke.3sG already against me.ACC and against my kids '(He) then provokes against me and against my children.' (OR, Birch bark letter 831)

Third, the reduced reflexive pronoun  $s_{\ell}$  should be classified as a full-fledged clitic. It appears as a second position clitic in early Old Russian manuscripts, as shown in sentence (6-a) from early 12th century. In late Old Russian,  $s_{\ell}$  undergoes gradual grammaticalization into a verbal suffix, which is illustrated by data in (6-b) from the 15th century.

- (6) a. poklaneju ti sę.
  bow.1SG you.DAT REFL.ACC
  'I bow to you.' (OR, Birch bark letter 605)
  - b. zando g̃ne ne možemъ nicimъ jemu udobriti-*sę*. because lord NEG can.1PL by-nothing him.DAT satisfy-REFL 'because, oh lord, we can let him be satisfied by no means.' (OR, *Birch bark letter 94*)

Finally, Old Russian features unstressed pronominal elements that have syntactic freedom. According to Zaliznjak (2008: 70–71), there are double duty pronouns with and without stress, just like *was* in Polish. He called these pronouns *poluproklitiki* (semi-proclitics). Nominative strong

pronouns such as *jazъ* 'I', *ty* 'you.sG', *my* 'we', *vy* 'you.PL', *čьto* 'what', and *kъto* 'who' belong to this category. In (7), the strong personal pronoun *ja* appears in the sentence-initial position, followed by the tonic verb *vъzmu*, which is also followed by the accusative dual pronominal clitic *vy*. As *vy* is a second position enclitic, it should be preceded by only one orthotonic word. Thus, the personal pronoun *ja* cannot carry an independent stress with itself in this string.

(7) ja vъzmu vy na ščitъ.

I take.1sg you.du.acc to shield
'I will protect you two.' (OR, Hypatian Chronicle, 1150, 151)

In addition to double duty pronouns, the present tense forms of the perfect auxiliary *byti* 'to be' in 1st/2nd person may also be classified as strong unstressed pronouns. They are morphologically non-reduced, maintaining the lexical morpheme *je*-, and not tied to specific syntactic positions, but they do not bear independent stress.

At least in some manuscripts, they appear as pronominal subjects rather than agreement markers. A comparison between weak subject pronominals in the Fiorentino dialect of Italian and Modern Standard French helps to justify this analysis. As illustrated in (8), in Fiorentino, the subject clitic gli is obligatorily used along with the non-agreeing predicate è venuto, in the presence of the strong subject delle ragazze. Brandi & Cordin (1989: 121–123) analyze the clitic gli functions as a subject-oriented agreement marker located under  $I^{\circ}$ .

(8) \*(Gli) è venuto delle ragazze.

SCL is come.PART.M.SG some girls

'Some girls came.' (Fiorentino, Brandi & Cordin 1989: 121)

In contrast, weak subject pronouns in Modern Standard French behave differently from gli. The examples in (9-a)-(9-c) show that the weak subject pronoun il is optional in the presence of the strong subject pronoun lui, which indicates that il is indeed a weak subject, and not an agreement marker, unlike in the case of gli in the Fiorentino dialect (see also the similar comparison between Standard French and European French in Culbertson 2010).

(9) a. **wsp - participle** 

Quel livre a-t-*il* lu? which book has-epen-wsp read.part 'Which book did he read?'

b. participle - ssp

Qu'a mangé *lui*? what-has eaten.part he.nom

'What did he eat?'

c. ssp - wsp - participle

Quand *lui* a-t-*il* téléphoné? when he.nom has-epen-wsp telephoned.part

'When did he telephone?'

(Modern Standard French)

Old Russian auxiliary forms show the same distributional patterns as Modern Standard French weak subject pronouns, as demonstrated in (10-a)-(10-c). As shown in (10-b) and (10-c), the auxiliary is not obligatory in the presence of a strong subject pronoun.

(10) a. participle - AUX

dalъ *jesmь* given.PART AUX.1SG

b. ssp - participle

azъ dalъ

I.NOM.1SG given.PART

<sup>&</sup>lt;sup>1</sup>For detailed discussions of the categorial status of the auxiliary byti in Old Russian, see Kwon (2009) and Jung (2020).

c. **ssp - Aux - participle** azъ jesmь dalъ

Thus, the Old Russian perfect auxiliary should be analyzed as a weak subject, and not an agreement marker. This must be the consequence of degrammaticalization, which is also observed in the copula-to-pronoun shift in Turkish and Hebrew (Katz 1996). The data in (11) support this analysis, showing that the auxiliary can function as a subject pronoun of a finite verb, on a par with emphatic strong subject pronouns.

- (11) a. a togo žь *jesmi* ne znaju, u kogo kupilъ. and that EMPH AUX.1SG NEG know.1SG from whom buy.PART 'And I don't know from whom I bought.' (OR, *Kirik's Queries*, Zaliznjak 2004: 179)
  - b. a ženy ne vidělъ *jesi* budešь vъ sně. and woman NEG see.PART AUX.2SG AUX.FUT.2SG in dream 'And you will not have seen a woman in a dream.'

(OR, Pskov Judicial Charter, 46, Zaliznjak 2004: 179)

In (11-a), the main verb znaju in a finite form in the present tense co-occurs with the finite auxiliary form jesmi. In (11-b), there are two finite auxiliaries in one sentence. In Slavic languages, including Old Russian, Infl licenses agreement only on one verbal head per clause, and thus a finite main verb and a finite auxiliary (or two finite auxiliaries) are incompatible in a clause. Thus, the finite auxiliary forms jesmi and jesi in (11-a)-(11-b) cannot be identified as verbal heads.

In (11-a), the second position enclitic  $z_b$  is an emphatic topic or focus marker (McCoy 2003), which we analyze as occupying the C° head. Given the position of jesmi between C° and a finite VP, jesmi is adequately analyzed as occupying Spec,IP as a subject constituent, resulting in the agreement on the finite verb znaju. In the same fashion, in (11-b), jesi occupies Spec,IP as a subject, agreeing with the auxiliariy  $budes_b$ . Zaliznjak (2004: 179) also offers a similar analysis: such auxiliary forms as jesmi and jesi in (11-a)–(11-b) are the weak variants of strong nominative personal pronouns ja.NOM and ty.NOM, just as mi.DAT and me.ACC are the weak variants of mo ne.DAT and me.ACC.

While Zaliznjak (2004) considers the present tense auxiliary forms, including those in (11), to be second position enclitics, we analyze them as strong pronouns because they are not under a positional restriction. For example, in (12-a) the auxiliary *jesmb* does not occupy the second position of the clause. The auxiliary does not have to be adjacent to a verb, as evidenced by (12-b), in which *jeste* and *velěli* are separated by *mně*.

- (12) a. toliko vъzęlъ *jesmь* о prokopьě... only take.PART AUX.1SG from Prokopija 'I have only taken from Prokopija...' (OR, *Birch bark letter* 736b)
  - b. čto *jeste* mně velěli ou putila konь vzęti.
    that AUX.2PL me.DAT order.PART from Putil horse take.INF
    'that you ordered me to take a horse from Putil.' (OR, *Birch bark letter* 697)

The syntactic freedom of the auxiliary would be more clearly demonstrated by coordination data. Unfortunately, we found no relevant example, but this does not mean that coordinated structures are not possible. The OR corpus we used also lacks any instances whatsoever of strong subject pronouns in a coordinate structure.

While the auxiliary-as-subject is syntactically free, it does not assume an independent stress. The lack of stress of the auxiliary-as-subject is indirectly supported: a strong subject pronoun often has a contrastive interpretation, marked by the emphatic markers  $\check{z}e$  and ti, as shown in (13).

(13) *jazь* ti jesmь sde Ljubecь požeglь.

I.NOM ЕМРН AUX.1SG here Ljubec burn.PART
'As for me, I burned Ljubec here.' (OR, *Hypatian Chronicle*, 1147, 130)

The auxiliary-as-subject never appears with these markers (e.g. \**jesmb ti*, \**jesmb že*). This indirectly indicates that the auxiliary cannot bear an emphatic stress. The lack of a focal stress is a characteristic

of Cetnarowska's strong unstressed pronouns.

#### 2.2 WEAK PRONOUNS IN MODERN SLAVIC

This section provides support for the non-uniform status of pronominal forms in terms of their strength coming from contemporary Slavic languages. In general, South and West Slavic languages have two types of deficient pronouns: verb-adjacent and second position clitics. Verb-adjacent cliticization is illustrated in (14) for Bulgarian and Macedonian.

(14) 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: 63)

Second position clitics, attested in Serbo-Croatian, Slovene, and Czech, do not need to be adjacent to an element of a specific category. They must occur after the clause-initial constituent, such as the subject in (15).

(15) Mi (\*juče) *smo mu je* predstavili juče. we yesterday are.AUX him.DAT her.ACC introduce.PART.M.PL yesterday 'We introduced her to him yesterday.' (SC Bošković 2001: 8)

Serbo-Croatian seems to currently be the only Slavic language with second position cliticization observed in all contexts (Bošković 2001: 7), whereas in the other languages pronominal clitics gravitate toward weak pronouns (Jung & Migdalski 2015, 2021, Migdalski 2016). We argue that they start to display properties of weak pronominal elements in Polish, outlined in the subsequent section. This development challenges the Minimize Structure principle, postulated by Cardinaletti & Starke (1999).

In comparison to pronominal clitics in South Slavic languages, weak pronouns in Polish are prosodically more independent, while syntactically, they display the flexibility characteristic of XP-nominals rather than of heads. For example, whereas pronominal clitics in South Slavic follow the strict dative-accusative order (though see a discussion of Slovenian in section 3.2), Polish permits both dative-accusative and accusative-dative orders of weak pronouns. The dative-accusative order is more frequent and semantically neutral (see Witkoś 1998), yet the reverse order is also possible, and the actual order realization is contingent on information structure requirements, as shown in (16), following Cetnarowska's (2003) observations.

- (16) a. Czy Maria pożyczyła Barbarze swój rower? if Maria lend.part.f.sg Barbara.dat her bicycle.acc 'Did Maria lend her bicycle to Barbara?'
  - b. Tak, w końcu *jej go* pożyczyła, mimo że Markowi pożyczyć yes, in end her.dat it.acc lend.part.f.sg although Marek.top.dat lend.inf *go* nie chciała.

it.acc neg want.part.f.sg

'Yes, she eventually lent it to her, although she didn't want to lend it to Marek.'

c. Tak, w końcu *go jej* pożyczyła, mimo że motoru pożyczyć yes, in end it.acc her.dat lend.part.m.sg although moped.top.gen lend.inf *jej* nie chciała.

her.dat neg want.part.f.sg

'Yes, eventually she lent it to her, although she didn't want to lend her a moped.'

(Pl)

The two sentences given in (16-b)-(16-c) are potential replies to the question in (16-a). They differ with respect to information structure, which is reflected in the distribution of pronouns. The answer in (16-b) concerns Barbara, who is interpreted as the topic and contrasted with Marek. The dative pronoun jej, which refers to Barbara, precedes the other pronoun. In answer (16-c), the dative

pronoun is the topic, and it precedes the accusative pronoun. As observed by Cetnarowska (2003), the weak pronoun interpreted as the topic normally precedes the other pronoun.

Another special property of weak pronouns in Polish is that they do not need to be adjacent to any element of a specific lexical category, such as the verb in languages like Bulgarian, or to other pronominal elements, as shown in (17), see also Rappaport (1988).

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(17) Jan mu wczoraj chciał go wynająć.
Jan him.dat yesterday wanted it.acc rent.inf
'Jan wanted to rent it to him yesterday.' (Pl)
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Admittedly, Bošković (2001: 60) observes that pronominal clitics in Serbo-Croatian also do not need to be adjacent to each other as long as each of them occurs as second within their own intonational phrase. However, this property is more readily attested in Polish because of the lack of the second position requirement on pronominal forms.

Furthermore, weak pronouns may scramble across the clause in Polish, largely following the distribution of non-pronominal nominals. Spencer (1991: 367–368) points out that their only syntactic restriction is failure to occur in clause-initial position; moreover, they are also avoided clause-finally or in front of a prosodic boundary. They occur clause-finally only in structures that consist of just one other lexical item, as shown in (16-b).

- (18) a. Często (go) spotykam (go) na ulicy.
  often him.ACC meet.PRES.1SG him.ACC on street
  'I often meet him on the street.'
  - b. Spotykam go. meet.PRES.1SG him.ACC 'I meet him.'

(Pl, Spencer 1991: 367–368)

However, the restriction on clause-initial placement is becoming relaxed, as some speakers allow weak pronouns clause-initially, as in the case of the dative form *mi* in (19).

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(19) %Mi się wydaje, że...

me.DAT REFL seems that

'It seems to me that...'

(Pl, Migdalski 2016: 298)
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In his analysis of pronominal elements in Polish, Witkoś (1998) shows that deficient pronouns in Polish display properties which may indicate that they are weak pronouns, in the sense of Cardinaletti & Starke (1999). First, in contrast to strong pronouns such as *ciebie*, they cannot be topicalized.

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(20) Ciebie/*cię spotkaliśmy w kinie.
you.ACC meet.PART.M.PL+.AUX.1PL in cinema
'We met you in the cinema.' (Pl, Witkoś 1998)
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Second, they cannot coordinate with lexical NPs, such as Anne in (21).

(21) Wczoraj \*cię/ciebie i Annę spotkaliśmy w kinie.
yesterday you.ACC and Anna.ACC met in cinema
'We met you and Anna in the cinema yesterday.' (Pl, Witkoś 1998)

Moreover, weak pronouns cannot undergo constituent negation.

(22) Spotkaliśmy w kinie nie \*cię/ciebie ale Annę.
met in cinema not you.ACC but Anna.ACC
'We met not you but Anna yesterday.' (Pl, Witkoś 1998)

However, recall Cetnarowska's (2004: 45) observation from section 1; she shows that strong unstressed object pronouns in Polish allow topicalization and coordination with lexical noun phrases, which indicates they form an independent class distinct from weak pronouns.

Furthermore, from a diachronic perspective, the availability of weak pronouns in Polish is unexpected in view of Cardinaletti & Starke's "Minimize Structure" principle, which stipulates that weaker variants are the default, unmarked option. In Old Polish pronominal clitics were placed in second position or they were verb-adjacent, as illustrated in (23-b) with data from Holy Cross Sermons (Kazania Świętokrzyskie), the oldest Polish prose text from the late 13th/early 14th century.

- (23)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...'
  - Naleźli prawi, pieluszkami ogarnienego... b. find.PART.M.PL him.ACC say.3SG nappies.INST wrapped 'He/it says that they found him wrapped in nappies...'

(OP, Sermon for Christmas Day, Migdalski 2016: 303)

In subsequent texts, the clitics show greater freedom of their position in the structure and start to resemble the contemporary distribution. This indicates an unexpected diachronic development: the pronominal forms become stronger. As will be shown in the next section, this is the development we observe also in other Slavic languages.

## 3 "MINIMIZE STRUCTURE" PRINCIPLE VIOLATIONS IN SLAVIC

This section shows that apart from Polish, pronominal clitics are being reanalyzed as weak pronouns in some other Slavic languages. Section 3.1 addresses Macedonian, while section 3.2 presents Slovenian data.

## 3.1 MACEDONIAN

Macedonian, like Bulgarian, has verb-adjacent clitics. However, in non-verbal predicates, such as adjective phrases, noun phrases, and passive participles, clitics seem to be located in second position, as in (24). In nominal predicates, the clitics may not be preceded by more than one constituent, see (24-b) and are precluded in the clause-initial position, see (24-c), though this requirement, as will be shown, is becoming relaxed.

- (24)Petko mi e tatko. Petko me.DAT is father 'Petko is my father.'
  - b. \*Petko tatko mi Petko father me.DAT is
  - c. \*Mi e tatko. me.DAT is father

(Mac, Tomić 2000: 295)

Korubin (1974), Tomić (1997, 2000), and Baerman & Billings (1998) point out that recently some speakers of Macedonian have started to allow clause-initial placement of clitics when they occur in adjectival predicates and passive participles, see (25-a) and (26-a). Furthermore, they also permit non-second position occurrence, with the clitics appearing lower in the structure, as indicated in (25-c) and (26-c).

- (25)mu si a. dear.M.SG are.2SG him.DAT 'He likes you.'
  - b. %*Si* ти mil. are.2sg him.DAT dear.м.sg
  - Petko sekogaš mi e mil. Petko always me.dat is dear.m.sg 'Petko is always dear to me.'

(Mac, Franks & King 2000: 86)

- (26) a. %*Mu e* rečeno da bide točen poveke pati. him.dat is tell.pass to be.subj punctual more times 'He was told to be punctual more than once.'
  - b. Rečeno *mu e* da bide točen poveke pati. tell.PASS him.DAT is to be.SUBJ punctual more times
  - c. Na Petreta (*mu e*) od strana na komisijata (*mu e*) poveke to Peter.DAT him.DAT is from side of commission-the him.DAT is more pati (*mu e*) rečeno da... times him.DAT is tell.PASS to

'Peter was more than once told by the commission to be punctual.'

(Mac, Tomić 2000: 296-299)

An anonymous reviewer points out that the pronominal clitics in examples (25) and (26) are verbadjacent to the copula verb, which could license their clause-initial placement. Moreover, the reviewer observes that when pronominal clitics are adjacent to a non-clitic form of the verb 'be', they are also found sentence-initially, as in example (27), provided by the reviewer.

(27) Mu bev cimer na Maradona.
me.dat was roommate of Maradona
'I had been Maradona's roommate.'

(Mac)

However, this observation does not explain why pronominal clitics which are adjacent to the auxiliary cannot be clause-initial when they occur with nominal predicates, as shown in (24-c) above. It seems that being a verb is not a sufficient condition for hosting verb-adjacent clitics in Macedonian; the required condition is the case-assigning property of a verb, as argued for in Migdalski (2006).

Bošković (2001: 254–264) suggests that the data in (24)–(26) indicate that Macedonian represents an intermediate stage between a language with second position and verb-adjacent clitics. However, as in (25-c) and (26-c) clitics do not occur in second position, we propose that a different type of change is taking place, which is not related to the switch between verb-adjacent versus second position cliticization (see Jung & Migdalski 2015, 2021). It seems more likely that the clitics in non-verbal predicates in Macedonian are being reinterpreted as weak pronouns. On a descriptive level, they undergo the process of degrammaticalization, as a result of which they become prosodically strengthened and exhibit more robust scrambling possibilities. This is another case, in our view, which violates Cardinaletti & Starke's "Minimize Structure" principle.

## 3.2 SLOVENIAN

Although Slovenian has second position clitics, it allows clause-initial clitic placement. The placement is typical of the colloquial language (see Franks & King 2000: 40), which may indicate that as in Macedonian, clause-initial occurrences are innovations, which pose a problem for Cardinaletti & Starke's "Minimize Structure" principle.

(28) Se mi je smejal.

REFL me.DAT is.AUX laugh.PART.M.SG
'He was laughing at me.'

(Slo, Franks & King 2000)

Furthermore, Stegovec (2020) shows that Slovenian permits both dative–accusative and accusative–dative clitic orders, and as in Polish, the order is sensitive to information structure, with the accusative clitic occurring first when it is a salient topic established in a previous utterance.

(29) Mama *mu* ga /%ga mu je opisala.
mom him.DAT him.ACC him.ACC him.DAT is.AUX described
'Mom described him to him.' (Slo, Stegovec 2020)<sup>2</sup>

<sup>&</sup>lt;sup>2</sup>An anonymous reviewer points out that the accusative–dative clitic order in Slovenian is subject to speaker variation and suggests marking the order with the % sign.

## 4 CONCLUSION

In this paper we have shown on the basis of data from several Slavic languages that the tripartite classification of pronouns proposed by Cardinaletti & Starke (1999) is not sufficient, instead suggesting a more fine-grained, four-way division of pronominal strength. It has been argued that the class of unstressed pronouns should be larger than was assumed in Cetnarowska's (2004) proposal, and that unstressed pronouns may display non-uniform properties crosslinguistically. We have pointed out that the economy-driven "Minimize Structure" principle, which states that given a choice, weaker variants of pronominal elements must be selected, is challenged by empirical facts from Slavic data. In many Slavic languages we observe a process of pronominal strengthening, which has either been largely completed (in Polish and especially in East Slavic) or is in progress (in Macedonian and Slovenian).

#### **ABBREVIATIONS**

ACC	accusative	OP	Old Polish
AUX	auxiliary	OR	Old Russian
Bg	Bulgarian	PART	participle
DAT	dative	PASS	passive
DU	dual	Pl	Polish
EMPH	emphatic marker	PL	plural
EPEN	epenthetic	PRES	present
F	feminine	REFL	reflexive
FUT	future	SC	Serbo-Croatian
GEN	genitive	SCL	subject clitic
INF	infinitive	SG	singular
INST	instrumental	Slo	Slovenian
M	masculine	SSP	strong subject pronoun
Mac	Macedonian	TOP	topic
NEG	negation	WSP	weak subject pronoun
NOM	nominative		

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