

Gradients of pronominal and verbal deficiency

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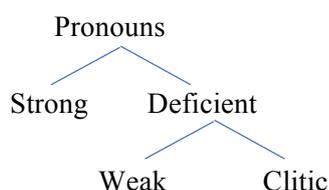
1. Goals

- To address Cardinaletti and Starke’s tripartite classification of pronouns and show that it is insufficient.
- To demonstrate that C&S’ “Minimise Structure” principle is not supported by diachronic data from Slavic.

2. C&S’s three-way-hierarchy of pronoun

- Cardinaletti and Starke’s (C&S, 1999) seminal work on the hierarchy of grammatical categories classifies pronouns into strong pronouns, weak pronouns, and clitics, depending on their syntactic strength, as illustrated in (1).

(1) Deficiency hierarchy in C&S 1999



- C&S argue for an exclusively tripartite system, which consists of just one strong and two deficient forms, on the basis of their distinct distributions and syntactic behaviors. The deficient variants are argued to be the default options, following C&S’s “Minimise Structure” principle.
- Cetnarowska (2003, 2004) departs from C&S’s tripartite system and proposes a quadripartite pronoun scale, with an additional class of strong unstressed pronouns (2).

(2) strong (stressed) pronouns > unstressed pron > weak pron > clitic pron *WAS* [+stress] ‘you_{GEN.PL}’ *was* [-stress] *go* ‘him’ *się* ‘refl.cl.’ (Cetnarowska 2004:14)

- Her main motivation comes from the availability of pronominal elements in Polish, which are unstressed but can be topicalized (3a) and coordinated with NPs (3b), contrary to C&S’s predictions.

- (3) a. *Was* NIE da się zapomnieć
you_{GEN.PL} NEG manage REFL forget_{INF}
‘One cannot forget you.’
- b. Widziałem *was* i mamę w kinie
see_{PART.M.SG} you_{ACC} and mom in cinema
‘I saw you and mom in the cinema.’

(Pl, Cetnarowska 2004: 46)

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

3. A Quadripartite Pronoun Hierarchy

3.1. Old Russian.

- The Old Russian data indicate that there can be a clearly distinct, non-reduced class that is inherently unstressed but syntactically free in the pronominal system. This system is not based on the strong-weak dichotomy as in C&S's and Cetnarowska's proposals, but it rather consists of multiple grades with different degrees of syntactic deficiency.
- In contrast to Modern Russian, which lacks pronominal or auxiliary clitics, Old Russian (11th-15th cc.) featured reduced dative and accusative pronouns, as well as 1st and 2nd person forms of the auxiliary *be*, traditionally analyzed as second position enclitics (Zaliznjak 2004, 2008). A more detailed analysis of these forms, however, provides support for more nuanced distinctions with respect to morphosyntactic strength than the clitic/non-clitic division.
- First, non-reduced, orthotonic pronominal forms such as *ję/ty*, *mъně/tobě*, and *mene/tobe* are clearly strong pronouns, occurring with emphatic stress, as illustrated in (4a), and appearing in a coordinate structure along with a full DP, as shown in (4b).

- (4) a. a kodъ ti mně xľbbъ tu i tobě
and where CONTR me_{DAT.1SG} bread_{NOM.M.SG} there also you_{DAT.2SG}
'And where there is bread for me, there is also one for you.'
(OR. *BBL* 731. Zaliznjak 2004: 392)
- b. volno bū i tob[i]
freely God_{DAT.M.SG} and you_{DAT.2SG}
'As God and you like.'
(OR. *BBL* 757. Zaliznjak 2004: 636)

- Second, reduced dative and accusative pronouns such as *mi* and *mę*, traditionally analyzed as clitics, are in fact weak pronouns, given that while they cannot be coordinated or topicalized, they can appear after prepositions, as shown in (5).

- (5) postъčъť užь na mę i na moe deti.
provoke_{3SG} already against me_{ACC} and against my children
'(He) then provokes against me and against my children.'
(OR. *BBL* 831. Zaliznjak 2004: 302)

- Third, the reduced reflexive pronoun *sę* should be classified as a full-fledged clitic. It undergoes gradual grammaticalization into a suffix, which is evidenced by its occasional appearance in a post-verbal position, as compared in (6a and b).

- (6) a. poklanęju ti sę.
bow_{1SG} you_{DAT} REFL_{ACC}
'I bow to you.'
(OR. *BBL* 605. Zaliznjak 2004: 271)
- b. zando gne ne možemъ nicimъ jemu udobriti sę.
because lord NEG can_{1PL} by nothing him_{DAT} satisfy_{INF} REFL_{ACC}
'because, oh lord, we can let him be satisfied by no means.'
(OR. *BBL* 94. Zaliznjak 2004: 592)

- Finally, the present tense forms of the auxiliary *byti* ‘to be’ (1st/2nd p.) correspond to Cetnarowska’s (2004: 39) “strong unstressed pronouns,” as they are morphologically non-reduced but appear in unstressed positions.
- These auxiliary forms appear as a kind of subject pronouns, when compared to weak subject pronominals in the Fiorentino dialect of Italian and Modern Standard French. As illustrated in (7), in Fiorentino a weak subject pronoun is obligatory regardless of the presence/absence of a strong subject in the sentence.

(7) Fiorentino
 *(*Gli*) è venuto delle ragazze.
 SCL is come_{PART.M.SG} some girls
 ‘Some girls came.’ (Brandi and Cordin 1989: 121)

- This pattern supports the analysis of *gli* as an agreement marker, not as a weak subject pronoun (Brandi and Cordin 1989). The obligatoriness of weak subject pronouns (or subject clitics, depending on researchers) in Fiorentino appears in a contrast with the distributional patterns of weak subject pronouns in Modern Standard French, as shown in (8a-c).

(8) Modern Standard French

a.	Quel livre a-t-il lu?	WSP – participle
	which book has-EPEN-WSP.3SG read _{PART}	
	‘Which book did he read?’	
b.	Qu-a mange lui?	participle – SSP
	what-has eaten _{PART} he	
	‘What did he eat?’	
c.	Quand lui a-t-il téléphoné?	SSP – WSP – participle
	when he has-EPEN-WSP.3SG telephoned _{PART}	
	‘When did he telephone?’	

- In Modern Standard French, weak subject pronominals are optional in the presence of strong subjects, which indicates that these forms are weak subjects, and not agreement markers, unlike in the case of *gli* in Fiorentino.
- As illustrated in (9a-c), Old Russian auxiliary shows the same distributional patterns as Modern Standard French weak subject pronouns.

(9)

a.	dalъ jesmь	participle – AUX
	given _{PART} AUX _{1SG}	
b.	azъ dalъ	SSP – participle
	I _{NOM.1SG} given _{PART}	
c.	azъ jesmь dalъ	SSP – AUX – participle

- Thus, it is concluded that Old Russian auxiliary is in fact a weak subject, and not an agreement marker. Data such as in (10a, b) even more clearly show that the auxiliary in Old Russian functions as a subject pronoun of a finite verb, on a par with strong subject pronouns such as *azъ* ‘I’ and *ty* ‘you,’ just like accusative and dative clitics are paired with their strong counterparts (see Zaliznjak 2004: 179, Kwon 2009: 161).

- (10) a. a togo **žb** **jesmi** ne znaju, u kogo kupilъ.
 and that CONTR AUX_{1SG} NEG know_{1SG} from whom buy_{PART.M.SG}
 ‘And I don’t know from whom I bought.’ (OR. Zaliznjak 2004: 179)
- b. a ženy ne vidělъ **jesi** budešъ vъ sně.
 and woman_{GEN} NEG see_{PART.M.SG} AUX_{2SG} be_{FUT.2SG} in dream
 ‘And you will not have seen a woman in a dream.’ (OR. Zaliznjak 2004: 179)

- In (10a), the second position clitic *žb* is a contrastive topic/focus marker (McCoy 2003), which occupies C⁰. Given the position of *jesmi* between C⁰ 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*.
- Like strong pronouns, an auxiliary-as-subject assumes full morphology and is not tied to second position or verb-adjacent position, as illustrated in (11a, b).

- (11) a. a cto povelilo **jesi**...
 and what_{ACC} ordered_{PART.M.SG} AUX_{2SG}
 ‘and what you ordered...’ (OR. *BBL* 754. Zaliznjak 2004: 580)
- b. čto **jeste** mně velěli ou putila konī vzeți
 that AUX_{2PL} me_{DAT.1SG} ordered_{PART.PL} from Putil horse_{ACC} take_{INF}
 ‘that you ordered me to take a horse from Putil.’ (OR. *BBL* 697. Zaliznjak 2004: 576)

- There is no instance of the auxiliary in coordination with other tonic nouns, but the corpus also lacks whatsoever instances of strong subject pronouns that coordinate with full nominals.
- In sentence (12), *jeste* appears as a continuing topic, which is distinguished from the stressed contrastive topics *vy* and *my*.

- (12) a **jeste** poslušali Polovъčbъ,
 and AUX_{2PL} listened_{PART.PL} Polovecs_{ACC.PL}
 a posly naša **jeste** izbili,
 and messengers our AUX_{2PL} beaten_{PART.PL}
 tъ **vy** poidite; a **my** vašъ ne zajali.
 thus you_{NOM.2PL} go_{IMV} and we_{NOM.2PL} you_{ACC.PL} NEG taken_{PART.PL}
 ‘And you listened to Polovcy, beat our messengers.... then, you go, and we didn’t take you.’
 (OR. *Novgorodian Chronicle*, 1224, 98-99)

- The auxiliary-as-subject is unstressed:
- While a strong subject pronoun such as (*j*)*azъ* and *ty* always appears as a contrastive topic or focus, as demonstrated by the contrast marker *že* or *ti* (13), an auxiliary-as-subject never appears with these markers (e.g. **jesmъ ti*, **jesmъ že*), which indirectly shows that this category cannot bear an emphatic stress. The lack of a contrastive, emphatic stress is a characteristic of Cetnarowska’s strong unstressed pronouns.

- (13) **jazŭ** ti jesmŭ sde Ljubecŭ požeglŭ.
 I_{NOM.1SG} CONTR AUX_{1SG} here Ljubec burn_{PART}
 ‘As for me, I burned Ljubec here.’ (OR. *Hypatian Chronicle*, 1147, 130)

- Sentence (14) contains a fused form of the auxiliary form *jesmъ* and the participle *iměla*, hence *jesměla*. While it is possible to view this form as a scribal error, this form may indicate that the auxiliary form and the participle constitute a single phonological unit, with the auxiliary form being unstressed.

- (14) a jęzъ tę **jesměla** aky bratъ sobě.
 and I_{NOM.1SG} you_{ACC.2SG} be_{1SG-taken}_{PART} as brother REFL_{DAT}
 ‘And I have taken you as my own brother.’ (OR. *BBL* 752. Zaliznjak 2004: 249)

3.2. Polish

- o South and West Slavic languages have two types of deficient pronouns: verb-adjacent and second position clitics. Modern Polish has a different type of deficient pronouns. They are usually referred to as weak pronouns, and they have different properties than clitics.
- o In contrast to pronominal clitics found in South Slavic, which follow the strict dative–accusative order (except for Slovenian, see below), both dative–accusative and accusative–dative orderings of weak pronouns are possible in Polish. The dative–accusative pattern is more common and semantically neutral (see Witkoś 1998), but the choice of the respective position of the pronouns is determined by information structure requirements, see Cetnarowska (2003).

- (15) a. Czy Maria pożyczyła Barbarze swój rower?
 if Maria lend_{PART.F.SG} Barbara_{DAT} her-own 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, even though she didn’t want to lend it to Marek.’
- b’’. 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, even though she didn’t want to lend her a moped.’ (Pl)

- o Stegovec (2000) shows that Slovenian also permits dative–accusative and accusative–dative orderings, and like 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. Stegovec concludes that Slovenian clitics are internally more complex than clitics in other South Slavic languages.

- (16) a. Mama *mu ga* je opisala. IO»DO
 mom him_{DAT} him_{ACC} is_{AUX} describe_{PART.F.SG}
 ‘Mom described him to him.’
- b. Mama *ga mu* je opisala DO»IO (Slovenian, Stegovec 2020)

- o Weak pronouns in Polish are not required to be adjacent to an element of a specific lexical category, such as the verb as in languages with verb-adjacent clitics, or to other pronominal elements, and they do not need to form clusters.

- (17) Jan *mu* wczoraj chciał *go* wynająć a nie sprzedać.
 Jan him_{DAT} yesterday wanted it_{ACC} rent_{INF} but not sell_{INF}
 ‘Jan wanted to rent it to him rather than sell it yesterday.’ (Pl)

- o Weak pronouns may be unaccented coordinating conjunctions *i* and *a* (see 18). In South Slavic languages, this pattern is found only in Bulgarian. It indicates that it is sufficient for weak pronouns to be supported by any phonologically overt material, regardless of its grammatical category or feature specification.

(18) Janek poszedł do tego pana i *mu* wszystko powiedział
 Janek go_{PART.M.SG} to this man and him_{DAT} everything tell_{PART.M.SG}
 ‘Janek went to that man and told him everything.’ (Pl, Rappaport 1988: 321)

- Weak pronouns do not target special positions in the clause in Polish, they may scramble like non-pronominal NPs, with two restrictions: they cannot be clause-initial and are avoided clause-finally.

(19) a. Często (*go*) spotykam (*go*) na ulicy (?*go*)
 often him_{ACC} meet_{PRES.1SG} him_{ACC} on street him_{ACC}
 ‘I often meet him on the street.’
 b. Spotykam *go*
 ‘I meet him.’ (Pl, see Spencer 1991: 367–368)

- However, it seems that the restriction on the clause-initial placement is getting relaxed, as some speakers allow weak pronouns clause-initially, for instance the dative form *mi*, especially when it occurs with the reflexive pronoun *się*.

(20) %Mi się wydaje, że...
 me_{DAT} REFL seems that
 ‘It seems to me that...’ (Pl)

- Witkoś (1998) shows that deficient pronouns in Polish display the following properties, which may indicate that they are weak pronouns (in the sense of C&S 1999):

- they cannot be topicalized

(21) Ciebie/*cię spotkaliśmy w kinie.
 you_{ACC} meet_{PART.M.PL+AUX.1.PL} in cinema
 ‘We met you in the cinema.’

- they cannot be coordinated with lexical NPs

(22) Wczoraj **cię*/ciebie i Annę spotkaliśmy w kinie.
 yesterday you_{ACC} and Anna_{ACC} meet_{PART.M.PL+AUX.1.PL} in cinema
 ‘We met you and Anna in the cinema yesterday.’

- they cannot undergo constituent negation

(23) Spotkaliśmy w kinie nie **cię*/ciebie ale Annę.
 meet_{PART.M.PL+AUX.1.PL} in cinema not you_{ACC} but Anna_{ACC}
 ‘We met not you but Anna yesterday.’

- However, recall from section 2 Cetnarowska’s (2004: 39) observation that 1st and 2nd object pronouns in Polish behave in an unexpected way for C&S’s (1999) tripartite hierarchy: they are unstressed, but they allow topicalization and coordination with lexical noun phrases (see the examples in 3).

- Moreover, the distribution of weak pronouns in Polish is unexpected in view of C&S’s “Minimize Structure” principle, which stipulates that weak pronouns are the default, unmarked options. In Old Polish pronominal clitics were placed in second position or they were verb-adjacent, as illustrated in (24) with data from *Holy Cross Sermons (Kazania Świętokrzyskie)*, the oldest Polish prose text from the late 13th/early 14th century.

- (24) 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” (OP, *Sermon III, On St. Michael’s Day*)
- b. Naleźli *ji*, prawi, pieluszkami ogarnienego a w jasłkach położonego
 find_{PART.M.PL} him_{ACC} true nappies_{INST} wrapped and in cribs laid
 “They found him wrapped in nappies and laid in cribs”
 (OP, *Sermon III, On St. Michael’s 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.

3.3. 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 (25). In the case of nominal predicates, the clitics may not be preceded by more than one constituent (see 25c) and they also are precluded in the clause-initial position (see 25d), though this requirement is becoming relaxed, as will be shown.

- (25) a. Petko *mi e* tatko.
 Petko me_{DAT} is father
 ‘Petko is my father.’
- b. Tatko *mi e*.
 father me_{DAT} is
- c. *Petko tatko *mi e*.
 Petko father me_{DAT} is
- d. **Mi e* tatko.
 me_{DAT} is father (Mac, Tomić 2000: 295; Bošković 2001: 255)

- Korubin (1974), Tomić (1997; 2000), and Baerman and Billings (1998) point out that recently some speakers of Macedonian started to allow clause-initial placement of clitics when they are found in adjectival predicates and passive participles (see 26a and 27a). Furthermore, they also permit non-second position occurrence, with the clitics appearing lower in the structure, as indicated in (26c) and (27c).

- (26) a. Mil *si mu*
 dear_{M.SG} are_{2SG} him_{DAT}
 “He likes you”
- b. %*Si mu* mil
- c. Petko sekogaš *mi e* mil
 Petko always me_{DAT} is dear_{M.SG}
 “Petko is always dear to me” (Mac, cf. Franks & King 2000: 86)

- (27) a. %*Mu e* rečeno da bide točen poveќе 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 poveќе pati
- c. Na Petreta (*mu e*) od strana na komisijata (*mu e*)
 to Peter_{DAT} him_{DAT} is from side of commission-the him_{DAT} is
 poveќе pati (*mu e*) rečeno da bide točen.
 more times him_{DAT} is tell_{PASS} to be_{SUBJ.3.SG} punctual
 ‘Peter was more than once told by the commission to be punctual.’
 (Mac, Tomić 2000: 296–299)

- Bošković (2001: 254–264) suggests that these data may indicate that Macedonian represents an intermediate stage between a language with second position and verb-adjacent clitics. However, given the examples in (26c) and (27c), which feature non-second position placement of the pronouns, 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 and Migdalski 2015). As shown in (28), which is the Bulgarian variant of (26b), the clitics must be adjacent to the passive participle in such structures in Bulgarian. By contrast, Macedonian does not require the clitics to be verb-adjacent or appear in second position, as they can be scrambled to different positions within the clause.

(28) Na Petūr *mu* *e* kazvano mnogo pūti ot strana na komisijata
to Peter him_{DAT} is tell_{PASS} many times from side of commission-the
da būde točen.
that be_{SUBJ.3.SG} punctual
‘Peter was more than once told by the commission to be punctual.’
(Bg, Migdalski 2016: 300)

- Therefore, it is 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 C&S’ “Minimise Structure” principle

4. An appendix: Gradients of verbal deficiency

We argue for the following scale of deficiency among verbal elements

□ **tonic verbs >> clitics >> *e/je* >> affixes**

- There is a variation in the strength and distribution of perfect auxiliaries and past perfect auxiliaries in languages such as Bulgarian and Serbo-Croatian. The past perfect auxiliaries are tonic elements, which have the same distribution as lexical verbs, with no morpho-prosodic deficiencies or special requirements.

(29) Bjaxa čeli knjigata
be_{PAST.3PL} read_{PART.M.PL} book-the
‘They had read the book.’ (Bg)

(30) Bejaše čitao knjigu
be_{PAST.3SG} read_{PART.M.SG} book
‘He had read a book.’ (S-C)

- The perfect auxiliaries are enclitics, which precludes them from clause-initial placement; in addition, they follow the cliticization requirements in the respective languages (verb-adjacency in Bulgarian and the second position requirement in Serbo-Croatian).

(31) a. Az/čel sūm knjigata
I/read_{PART.M.SG} am_{PRES.1SG} book-the
‘I have read the book.’ (Bg)
b. *Sūm čel knjigata

- (32) a. Ja/čitao sam knjigu
 I/read_{PART.M.SG} be_{AUX.PRES.1SG} book
 b. *Sam čitao knjigu
 be_{AUX.PRES.1SG} read_{PART.M.SG} book
 ‘I have read the book.’ (S-C)

- In Polish, the perfect auxiliaries are either clitics or affixes (see Borsley & Rivero 1994, Witkoś 1998, Franks & Bański 1999).
- We argue that there is a class of more deficient clitics in Slavic, represented by the 3rd person auxiliary (*je*). This form follows pronominal clitics (see 33a), in contrast to the other auxiliaries (e.g. *sam* in 33b), which precede them.

- (33) a. On *mu ih je* dao
 he him_{DAT} them_{ACC} is_{AUX.3SG} give_{PART}
 ‘He gave them to him.’
 b. Ja *sam mu ih* dao
 I am_{AUX.1SG} him_{DAT} them_{ACC} give_{PART}
 ‘I gave them to him.’ (S-C)

- The special placement of (*je*) has been explained in different ways: (*je*) losing cliticness Bošković (2001); it the default form devoid of any *phi*-features (Franks 2017), or a spell-out of the number feature with no person features (Migdalski 2020). Talić (2018) observes that *je* (and the reflexive *se*) are the only two enclitics that never interact with the accent of the host, which indicates that it is clearly weaker than the other clitics.

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