

Hidden deficiency: On the structure of Slovenian clitic, strong, and prepositional pronouns

Slovenian personal pronouns fall in two groups regarding the availability of sloppy identity readings and inanimate referents: clitic pronouns allow them and their strong counterparts do not. This split is observed in Slovenian also in another case: pronouns that are objects of prepositions. Crucially, clitics and preposition pronouns form a natural class only in prosodic terms: they cannot be stressed. I propose that this apparent modularity violation (PF factors influencing LF behavior) can actually be resolved entirely in the syntax under a fine-grained approach to the internal structure of pronouns that allows some structurally deficient pronouns to nonetheless appear superficially strong.

Problem. In Slovenian, clitic pronouns (①) allow strict and sloppy identity readings, while strong pronouns (②) retain the familiar ban on sloppy readings (1a) (see Runić 2014, Bošković 2018 also regarding other Slavic languages). However, another split in the interpretation possibilities runs parallel to this: only clitic pronouns can have inanimate referents (1b).

- (1) a. Marko ceni svojega očeta, in Maja { **ga** ① | **njega** ② } tudi ceni
 Marko values self's.M.ACC father.M.ACC and Maja { 3.M.ACC | him.ACC } also values
 'Marko_i values his_i father and Maja_k values { **his_i father** ①,② | **her_k father** ① } too.'
- b. Marko pospravlja svojo sobo, in Maja { **jo** ① | **#njo** ② } tudi pospravlja
 Marko tidy.up self's.F.ACC room.F.ACC and Maja { 3.F.ACC | her.ACC } also tidy.up
 'Marko is tidying up his room and Maja is tidying **it/#her** up too.' (① inan. vs. ② #inan.)

Interestingly, strong pronouns that lack clitic counterparts, such as locative and instrumental pronouns, pattern with clitics. Namely, they allow sloppy readings and inanimate referents:

- (2) Marko se igra s svojimi Lego kockami in Maja se tudi igra z **njimi** ②
 Marko SE play with self's.PL.INST Lego bricks.INST and Maja SE also play with them.INST
 'Marko_i is playing with his_i Legos and Maja_k is playing with { **his_i Legos** | **her_k Legos** } too.'

Although locative and instrumental pronouns only occur in prepositional phrases in Slovenian, it is not the case that only strong pronouns can be objects of prepositions. Some pronouns have reduced counterparts in prepositional phrases (henceforth *P-pronouns*), with a paradigm distinct from clitic pronouns, but the same readings in the relevant contexts, as shown in (3) (① = P-pronoun).

- (3) a. Marko misli na brata, in Maja tudi misli { **nánj** ① | na **njéga** ② }
 Marko think on brother.ACC and Maja also think { on.him.ACC | on him.ACC }
 'Marko_i is thinking of his_i brother ...
 ... and Maja_k is also thinking of { **his_i brother** ①,② | **her_k brother** ① }
- b. Marko je padel na rit, in Maja je tudi padla { **nánjo** ① | na **#njó** ② }
 Marko is fell on butt.F.ACC and Maja is also fell.F { on.her.ACC | on her.ACC }
 'Marko fell on his butt and Maja also fell on **it/#her**.' (① inan. vs. ② #inan.)

Crucially, the availability of specific readings cannot be localized to a single morphological property. This is shown in (4) by comparing three pronoun counterparts for different inflectional values.

PATTERN 1	3.M	STRONG njé-ga	CLITIC ga	P-PRON. ná-nj	PATTERN 3	3.PL	STRONG n-jih	CLITIC jih	P-PRON. ná-nj-e
(4)									
PATTERN 2	1.SG	m-en-e	m-e	ná-m-e	PATTERN 4	3.F	n-jó	jo	ná-n-jo
	2.SG	t-eb-e	t-e	ná-t-e		3.DU	n-jú	ju	ná-n-ju
	REFL	s-eb-e	s-e	ná-s-e					

The only morphological constant across P-pronouns is that the preposition (P) always bears stress. With PATTERN 1 the clitic and P-pronoun have no morphemes in common, with PATTERN 2 the

clitic and P-pronoun are identical, apart from the P part, with PATTERN 3 the inflection on the P-pronoun differs from that on clitic/strong forms, and finally with PATTERN 4 the strong and P-pronoun counterparts are identical apart from stress. There is no single morpheme we can blame for the split in interpretation options. The only way we get natural classes is along the lines of:

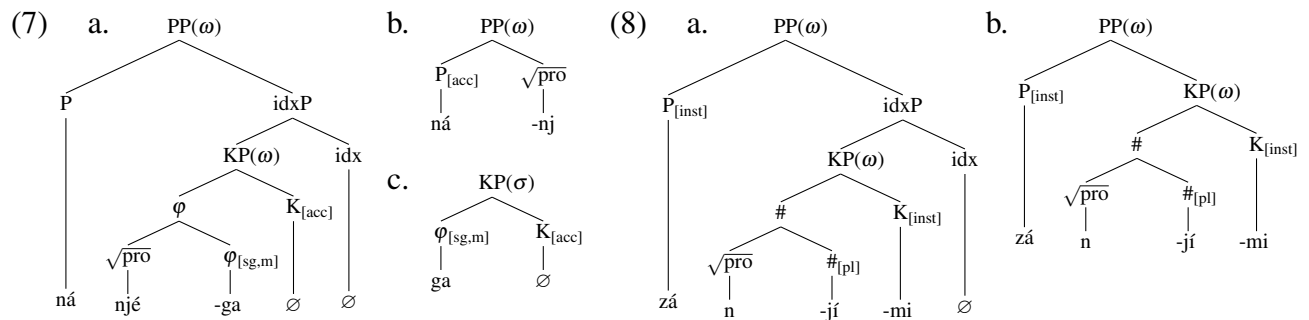
- (5) *Descriptive generalization:* Only pronouns that **(a)** cannot be stressed (clitic and P-pronouns) or **(b)** do not have an unstressed counterpart in the relevant context (strong-only pronouns) license sloppy readings and inanimate referents.

This pattern is unexpected from the perspective of the Y-model of grammar (Chomsky 1995), where the sound and meaning interfaces of syntax cannot “talk to each other”. However, I will show that this kind of radical conclusion is not necessary, as long as we seriously consider: (i) the role syntactic structure plays in prosodic considerations, and (ii) the existence of empty categories.

Proposal. In order to account for the possibility of sloppy identity pronouns, I adopt a Tomioka (2003)/Runić (2014)-style analysis, where such pronouns are property anaphors of type $\langle e, t \rangle$ (details in the talk). What differentiates the *non-flexible* (strict identity and animate only) pronouns from the rest, is the presence of a null syntactic head encoding an *anaphoric index* (*idx*; based on the analyses of weak/strong definite articles in German by Schwarz 2009 and Hanink 2017, 2018), which restricts the reference of the pronoun to a given animate entity:

- (6) $[[idx_k]]^g = \lambda x. [\text{animate}(x) \ \& \ x = g(k)]$

The basic idea is that *idx* is the outermost head in the extended projection of pronouns and only present in the structurally most articulated pronouns. Thus, in the case of PATTERN 1, the three pronouns correspond to the structures in (7), where only the strong pronoun (7a) contains *idx* as well as projects its own prosodic word (ω)—in the case of the P-pronoun (7b), only the whole PP is an ω , and the clitic (7c) also does not contain enough structure to be an ω . The key idea is that only in the case of instrumental and locative pronouns, structural deficiency is only partial: they may at most lack *idx* in their deficient pronoun version (8). Therefore, they appear to be semantically flexible because the structural alternation yields no difference in their phonological form.



What I will further show in the talk is that the reason instrumental and locative pronouns cannot be reduced further lies in: (i) the lexical nature of their case—removal of the structure associated with the case would be semantically unrecoverable—and (ii) the inability to dispense of the pronominal root $\sqrt{\text{pro}}$ bearing lexical accent (cf. the clitic in (7c)), which creates an issue for determining the size of the prosodic word (details to be given in the talk).

What appears to be prosodically driven interpretation is thus always structure driven. The reason why the two groups of pronouns appear to be prosodically determined is because syntactic structure constrains the options available on the prosodic as well as on the semantic side. However, given the possibility of phonologically/prosodically inert heads, the variation in syntax and thus semantics can occur independently of any changes in the prosody, as with instrumental and locative pronouns.