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## **On two types of deadjectival nominals in Serbian**

The paper presents data from Serbian, involving deadjectival nominalizations. The data suggests a particular correlation between the stress pattern of the nominalization and the interpretations that it can be assigned. Taking the stress-pattern as an indication of the morpho-syntactic structure of the nominalization, an analysis is offered at the syntax-semantics interface. The productive nominalizing derivation is argued to involve PredPs with the adjective in the predicate position, and a nominal suffix. In certain cases, this structure is truncated in the lexicon, giving rise to a nominalization with fewer interpretive restrictions. This process is reflected in the stress pattern of the nominalization. Empirically observed interpretive differences between the two types of derived nominals are shown to be predicted by the proposed analysis.

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### **1. Introduction**

Serbian language is a language with a tonal pitch-accent stress system, and traditional grammars describe the position of its stress as not fully inferable from any set of rules, but rather memorized for each particular (primitive) lexical item. Formal descriptions at least partially agree; Inkelas and Zec (1988) for instance argue that (minimally) the position of the high tone must be specified in the lexicon. Regularities in the distribution of tone, and hence also stress, in Serbian have been observed and described since the earliest descriptive and normative grammars of this language. These regularities are all purely phonological: insensitive to any semantic or syntactic issues. It is no wonder then that a set of curious regularities in the relation of the placement of stress and the semantic aspects of a set of deadjectival (and deverbal) nominalizations has escaped the attention of linguists until recently.

Tatjana Marvin, in her (2002) dissertation, discusses a whole range of such regularities related to Slovenian deverbal nominalizations expressing

event participants, especially agents. In this paper, I present data illustrating a similar type of regularities, but rather related to the nominalizations denoting the actual properties (for deadjectival nouns) and (semantic components of) eventualities (for deverbal ones) denoted by the original adjective or verb, respectively. These nominalizations follow two different patterns of stress placement, one in which the stress underlyingly lies on the suffix (I refer to it as Post–stem–Stressed Nominalizations, PSN), and one in which the stress comes from the stem (Stem–Stressed Nominalizations). The two types of nominalizations differ in a number of semantic properties, which open the question of the mechanisms responsible for this correlation between phonological and semantic features of deadjectival nominalizations in Serbian.<sup>1</sup> I propose an analysis in which the latter type involves a rich syntactic structure, while the former is built through a truncation of the syntactically derived structure in the lexicon. This analysis offers explanations for the empirically observed semantic asymmetries between the two types of nominalizations.

The paper is organized in the following way. Section 2 brings an overview of the core empirical facts, from the stress patterns of the two types of nominalizations, to their semantic asymmetries. The analysis, placed at the syntax–phonology and syntax–semantics interface, is presented in section 3. In section 4, I sketch a truncation analysis of the derivation of PSNs, and in section 5, I discuss SSNs derived from participle forms. Section 6 shows how the analysis proposed accounts for the empirical asymmetries presented in section 2. A possible extension of the account to deverbal nominalizations, and the explanation it provides for their behavior, come in section 7. Section 8 concludes.

## 2. Two types of deadjectival nominalizations in Serbian

Derived nominals in Serbian cluster into two groups with respect to the stress pattern: one in which the stress falls on the nominalizing suffix or on the last syllable before the suffix (in further text: Post–stem Stressed Nominals, PSN), and the other in which the stress is the same as in the motive word (Stem Stressed Nominals, SSN).

(1) a.	opá:s–n–ost,	solidá:r–n–ost,	ljubá:z–n–ost,	praz–n–ína
	danger–Adj–ost	solidar–Adj–ost	kind–Adj–ost	empty–Adj–ost
	'danger'	'solidarity'	'kindness'	'emptiness'
b.	òpas–n–o:st	ùče–n–o:st	ljúbaz–n–o:st	práz–n–ost <sup>2</sup>
	danger–Adj–ost	learned–Adj–ost	kind–Adj–ost	empty–Adj–ost
	'dangerousness'	'educatedness'	'kindness'	'emptiness'

1 The empirical base of this research is sampled from all the ekavian groups of dialects spoken in Serbia. I used a questionnaire which included grammaticality judgments, semantic judgments and (recorded) reading out loud deadjectival nouns which appear in doublets in contexts which strongly suggest one interpretation. I interviewed 31 subject, only two of which had any linguistic background. I attested a degree of (micro-)variation in some of the phenomena under investigation (e.g. some speakers have no doublets, but always either a PSN or a SSN), as well as rather idiosyncratic 'irregularities', such as not judging ungrammatical one form of only one deadjectival noun, but accepting all the others (e.g. two speakers did not have *ljùbazno:st*, but only *ljubá:zno:st*).

In the history of Serbian stress system, there was a period during which stress in each word where it was possible moved one place to the left, developing thereby a rising tone in place of the earlier falling tone, (hence falling tones survived only in words where the stress was on the initial syllable).<sup>3</sup> The nominalizing suffix *-ost* is older than the shift of stress, which implies that the penultimate rising stress of PSNs must be analyzed as coming from the ultimate syllable, and hence being contributed by the suffix.

While PSNs normally have a broader range of interpretations, and SSNs are more restricted (as shown starting from example (3)), there are uses in which for certain pairs of a deadjectival SSN and a deadjectival PSN, only the SSN is acceptable.

- (2) Njegova òpasno:st/\*opá:snost    ne dovodi se u pitanje.  
 his            dangerousness.SSN/ PSN    not lead Refl    in question  
 'His            dangerousness does            not come            into question.'

It is a general fact that when used for properties of particular persons and objects, SSNs are more suitable, and PSNs are sometimes out. For all other meanings, some of which are discussed in what follows, PSNs, when available, are the better, and often actually the only way of expressing them.

Semantically, there are important differences between the two classes (and here I focus on the cases where both an SSN and a PSN built around the same adjectival stem and the same suffix *-ost*, are available). The differences can be formulated in terms of the availability of two types of readings for the two classes of nominalizations: the trope and the event reading. Tropes have been a topic of philosophical literature since its early days, defined as instances of properties or relations, and they are introduced to linguistic semantics in the work of Moltmann (2004a, 2004b), who shows their relevance in the semantic analysis of particular types of linguistic expressions. I take the term *trope* in a slightly narrower sense than that of Moltmann, the sense that Villalba (2009) assigns to the notion of a *property*. He describes a property, i.e. a trope in the present paper, as 'a condition an object is in', i.e. as a type of predicates that are well paraphrased in English by the construction [*being* + adjective]. I need to note here that I assume a further restriction to Villalba's definition, in taking tropes to be individual level properties, at least to the extent that their temporal interval exceeds, on both sides, the interval taken as the reference time. It could as well be that tropes simply have no temporal specification (but can be assigned one by other linguistic expressions), and hence receive

2 I use two different diacritics in marking the stress, to also mark the tone of the stressed syllable, as tone in Serbian indicates whether the stress was originally on the respective syllable (the falling tone, e.g. è) or it moved there from the next syllable to the right (rising tone, e.g. é). I mark the length with a colon after the respective vowel (e.g. a:). Note that when the stressed syllable is on the stem, and long, the length of the suffix disappears, although it is lexically specified.

3 Inkelas and Zec (1988) have an account of the Serbian stress system without falling and rising tones, but with high and low ones instead. While their account is more formally elaborated, and probably more empirically accurate as well – for reasons of simplicity, I decide to use the more traditional views wherever possible. This simplification does not bear on the analysis, as it is used for descriptive purposes only.

an unbounded interpretation in the relevant (temporal) discourse domain. In order to avoid a potential confusion from the many different uses of the term *property*, I still refer to these readings as *tropes*. As for the notion of an event, I take it as a non-homogeneous predicate assigned a temporal interval, in the sense of Borer (2005).

Only PSNs, and not their SSN counterparts, can denote eventualities instantiating the property that forms the core of the adjectival meaning. SSNs rather denote tropes (manifestations of properties, properties instantiated in particular individuals). While some PSNs can also have the interpretation typical of their SSN counterparts (i.e. the trope-interpretation), vice versa is not the case: whenever an SSN has a PSN counterpart, it cannot denote an eventuality in which a property is instantiated. Here are some data illustrating this behavior.

PSNs can be modified by adverbials that select for quantized eventualities, while their SSN counterparts cannot (when an SSN has no PSN counterpart, everything changes, especially if derived from a verb, as discussed in section 14).

- (3) a. česta opá:snost, nekadašnja rudarska solidá:rnost  
 frequent danger.PSN earlier.Adj miners' solidarity.PSN  
 'frequent danger' 'miners' solidarity from the older times'
- b. \*česta òpasno:st, \*nekadašnja rudarska sòlidarno:st  
 frequent dangerousness.SSN earlier.Adj miners' solidarity.SSN
- c. \*Jovanov-a/-e povremen-a/-e ljubazno:st(-i)  
 J.Poss.Sg/Pl occasional.Sg/Pl kindness(es)
- d. Jovanov-a/-e povremen-a/-e ljubá:znost(-i)  
 J.Poss.Sg/Pl occasional.Sg/Pl kindness(es)  
 'an occasional kindness from/by Jovan' / 'occasional kindnesses by/  
 from Jovan'

PSNs go well with count quantifiers and modifiers, receiving the eventive interpretation (quantification is over events in which the property denoted by the adjective is instantiated), while with SSNs these constructions are ungrammatical.

- (4) a. nekoliko Jovanovih ljubá:znosti/\*ljubazno:sti  
 several Jovan's kindnesses.PSN/kindnesses.SSN  
 'several events instantiating Jovan's kindness'
- b. razne opá:snosti/\*òpasno:sti  
 diverse dangers/'dangerousnesses'  
 'diverse dangers'

Another asymmetry relates to a subtle intuition: while PSNs can have a generic meaning, referring to a concept, an intensional property, SSNs always seem to imply a bearer of a property, property as instantiated in a particular referent. This asymmetry is similar to the one between unaccusatives on the one hand, and transitive verbs that allow for a zero object on the other, where the former (e.g. *sink*, *float*, *break*) do not imply the existence of an agent, and the latter (e.g. *eat*, *read*, *wash*) do imply the existence of an affected participant.

- (5) a. ta mala ljubá:znost, koju niko nije pokazao...  
 that little kindness.PSN which nobody Neg.Aux shown  
 'that little kindness, which nobody manifested'
- b. #ta mala ljubazno:st, koju niko nije pokazao...  
 that little kindness.SSN which nobody Neg.Aux shown  
 'that little kindness, which nobody manifested'

Talking about the denotation of a SSN always means talking about the holding of the property it denotes for a referent. Talking about the denotation of a PSN may get the interpretation above, but is more naturally interpreted as talking about a generic notion, intensional or extensional.

- (6) a. Književno:st \*(ovog teksta) je upitna.  
 literariness.SSN this.Gen text.gen is questionable  
 'the literariness of this text is questionable'
- b. Književno:st \*(#ovog autora) je upitna.  
 literariness.SSN this.Gen author.gen is questionable  
 '#the literariness of this author is questionable'  
 (unless the context makes literariness a natural property of an author)
- c. Knjižé:vnost (ovog autora) je upitna.  
 literature.PSN this.Gen author.Gen is questionable  
 'the literature (by this author) is questionable'<sup>4</sup>
- d. #Knjižé:vnost ovog teksta je upitna.  
 literariness.SSN this.Gen text.gen is questionable  
 '#the literature of/by this text is questionable'  
 (unless a context is made where certain literature belongs to a certain text)

Finally, while PSNs belong to a large class of derived nominals, involving many different (stem-specific) suffixes, all deadjectival SSNs are built by the suffix *-ost*, added to an adjectival form, with the derived nominal denoting a property as holding for a particular referent.<sup>5</sup>

- (7) a. knjižé:vn-ost, dobró-ta, slàv-a, ùmor-Ø, bel-ína...  
 litera-N good-N glor-N tire-N white-N  
 'literature' 'good(ness)' 'glory' 'tiredness' 'whiteness'
- b. glèdan-o:st, zaóstal-o:st, sàdašnj-o:st, ljubazn-o:st...  
 watched-ost retired-ost now.Adj-ost kind-ost  
 'watchedness' 'retiredness' 'present' 'kindness'  
 (for how many people are watching a movie or a tv-show)

There are (at least) two types of adjectival stems which only derive SSNs: those of adjectival (usually result-oriented) passive participles, and those of adjectival active participle forms.

4 For reasons of space, I do not discuss the issue of thematic roles assigned to PPs coming with a derived nominal, as it is a complicated issue, to a large extent orthogonal to the problems under discussion.

5 There are also deverbal SSNs, similarly derived only by one suffix: *-je*.

- (8) a. *úvreděn-o:st* vs. *\*úvredé:n-ost*, *óču:van-ost* vs. *\*očuvá:n-ost*  
 offended-*ost*.SSN offended-*ost*.PSN preserved-*ost*.SSN preserved-*ost*.PSN  
 'offendedness' 'preservedness'
- b. *pósustal-o:st* vs. *\*posustá:l-ost*, *ùtihl-o:st* vs. *\*utí:hl-ost*  
 go\_away-*ost*.SSN go\_away-*ost*.PSN go\_silent-*ost*.SSN go\_silent-*ost*.PSN  
 'awriness' 'silence(dness)'

Several generalizations can be made in this domain. First, derived nominals of these two kinds, although SSNs in terms of prosodic and morphological features, are more likely to receive also the interpretations typical of PSNs (hence the semantic contrast is only observable in cases where there are two different forms, one PSN and one SSN).

- (9) a. (?)*ta mala úvredeno:st*, *koju niko nije pokazao...*  
 that little offendedness.PSN which nobody Neg.Aux manifested/shown  
 'that little offendedness, which nobody expressed/showed'
- b. (?)*ta (krajnja) posústalo:st*, *koju niko nije pokazao...*  
 that utter lassitude.PSN which nobody Neg.Aux manifested/shown  
 'that little lassitude, which nobody manifested'
- c. *ta vrhunska knjižé:vnost*, *koju danas niko ne piše...*  
 that sophisticated literature which today nobody not writes  
 'that sophisticated literature, which today nobody writes...'
- d. *ta apsolutna belína*, *koju nigde ne možemo videti...*  
 that absolute whiteness which nowhere not can.1Pl see  
 'that absolute whiteness, which can't be found anywhere...'

Second, passive participles can derive a particular type of nominals with a process-oriented denotation (close to the English *-ing* nominals), using the suffix *-je*; SSNs of this type, as mentioned, denote that the result of an event holds of the modifiee. Moreover, *-je* nominals can be regularly derived only from imperfective verbs, but then irrespective of the argument structure (hence also from intransitives, for which the passive participle form lacks interpretation). SSNs are only derived from transitive verbs, i.e. from those which also can have semantically and pragmatically salient passive participles, and they are only very rarely derived from participles of imperfective verbs, in which case by a rule they involve the secondarily imperfectivized interpretations (because this is a structure which embeds a perfective meaning).

- (10) a. *lepljen-je*, *\*za-lepljen-je*; *\*otvoren-je*, *otvaran-je*.  
 glued<sup>IMPF</sup>-*je* to-glued<sup>PF</sup>-*je* opened<sup>PF</sup>-*je* opened<sup>IMPF</sup>-*je*  
 'gluing' 'opening'
- b. *\*lepljen-ost*, *za-lepljen-ost*; *otvoren-ost*, *otvaran-ost*.  
 glued<sup>IMPF</sup>-*ost* to-glued<sup>PF</sup>-*ost* opened<sup>PF</sup>-*je* opened<sup>IMPF</sup>-*je*  
 'gluedness' 'open(ed)ness' 'having been opened'

This is why the imperfective verb *lep-* 'glue/stick', which is not secondarily imperfectivized, cannot build a SSN, while the secondary imperfective *otvara-IMPF-* (imperfectivized *otvor<sup>PF</sup>-*) 'open' can. Further discussion of *-je* nominals in respect of the topic of the paper is provided in section 19.

Even smaller a class of active participles derive SSNs: only those built from unaccusative or middle VPs, which have in addition received an adjectival (rather than eventive) interpretation.<sup>6</sup>

- (11)a. u-trnul-ost,                    oba-mrl-ost  
           in-thorn.ActPcl-ost,        round -die.ActPcl-ost  
           'numbness'                    'fatigue', 'being asleep', 'numbness'  
 b. \*u-daril-ost,                    \*ot-peval-ost  
           in-hit.ActPcl-ost,            of-sing.ActPcl-ost

An explanation is due in respect of what is traditionally referred to as the active participle in Serbian. This form is rather a subject-oriented participle, which assigns a process or result interpretation of the respective verb to the subject if the verb is transitive or unergative (which means, to the agent of the verb), and only a result interpretation to the subject of the verb if it is unaccusative. Only the latter nominalize, and hence only result interpretations are attested on nominalizations of the active participle.

The restrictions on participles in deriving SSNs can be formulated in a simpler way: only those participles which can also be used with a copula, with an internal argument as the subject, and receive an adjectival interpretation, can derive SSNs with the ending *-ost* (see footnote 3).

- (12)a. Ruka je                    u-trnula/oba-mrla.  
       arm is                    in-thorn.ActPcl/round-died.ActPcl  
       'an/the arm is numb'  
 b. Jovan je                    pevao                    (pesmu)  
       J Aux                    sing.ActPcl            song  
       'Jovan sang a/the song.'  
       vs.  
       \*pesma je                    pevala                    (the song being the theme)  
       song Aux                    sing.ActPcl  
       int. 'The song went on.'  
       hence:  
       \*peval-ost  
       sing.ActPcl-ost  
       int. 'the property of having sung' or 'the property of having been sung'

This, together with the fact that the typical interpretation for an SSN is that of a property as holding for a particular referent, suggests that a predication actually underlies each SSN, or in syntactic terms, that SSNs derive from PredPs.

Before skipping to presenting the analysis, I need to point out that a detailed analysis of a closely related phenomenon in Slovenian can be found in Marvin (2002). The data discussed here are different from those in Marvin in three important ways: 1) while she discusses participant-denoting nominalizations, I concentrate on those standing for the property, state or eventuality

6 Transitive and unergative verbs make *-ost* nominals from the passive participle, and with unaccusative and middle interpretations build them from the active participle.



denoted by the predicate, 2) Marvin only considers nominalizations deriving from participles, while I take a broader look – at nominalizations deriving from all types of adjectival forms and 3) different generalizations relating to the interaction of stress and syntax and semantics of the derived nominals can be observed in Serbian and in Slovene. On the theoretical side, the present paper devotes more attention to the semantic asymmetries between the nominalizations of the two stress-patterns, while Marvin is primarily interested in the syntactic, phase-theoretic aspects of the problem.

### 3. Analysis

Serbian has a stress system in which there is at most one stressed syllable per word, and each stressed syllable bears a rising or falling tone. Stressed syllables, as well as those to their right, may be short or long. The stress in a word is not bound to any particular position in the word, although phonological regularities, as well as those depending on the morphological structure, can be observed. The last syllable in the word cannot bear stress. At least in the traditional view, the surface position of the stress is one syllable to the left from its underlying position, except in cases where the underlying position is on the first syllable and cannot move to the left. In this paper, I mark the surface position of the stress, in order to avoid going into a deeper phonological analysis.

Zec & Inkelas (1988) argue that in suffixal derivation in Serbian, the stress is assigned to the first syllable of the suffix, and attribute this to a lexical rule that they refer to as the Post-Stem stress assignment rule. Their rule assumes that suffixes do not bear stress, and that a rule is required for assigning them one.<sup>7</sup> In compounds, however, they assume that both elements undergoing composition bear stress, and postulate a Compound Rule, which preserves the stress of the second element of the compound. If we dispense with the assumption that suffixes bear no stress, and rather relate the issue of stress to the hierarchical structure, we can simplify their approach, and define only one lexical rule: all the rest being equal, the lexicon assigns stress to the second member of a combination of two morphemes. Where possible, the stress subsequently moves one syllable to the left, following a general rule in Serbian.

- (13) 1. [ljúbazn-ò:st<sub>N</sub>] → (the second member preserves stress) ljubazn-ò:st<sub>N</sub>  
     kind.Adj-*ost*  
     'kindness'  
     2. ljubazn-ò:st<sub>N</sub> → (the stress moves one place to the left) ljubá:znost

7 Inkelas & Zec actually do not talk about the stress, but about the tone, making at the same time the position of stress dependent of that of the tone. For reasons of simplicity, I talk about the stress only, assuming a leftward shift of the stress instead of their tone-stress correspondence rules. While Inkelas and Zec' account is certainly more elaborated and more empirically adequate, the present simplification is sufficient for the purposes of the paper.

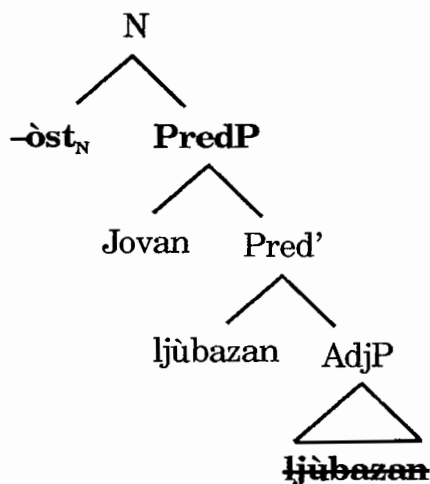


This is a lexical rule; it applies in the lexicon, in cases where the derivation of a word does not involve a hierarchical syntactic structure in which certain elements stand in an asymmetric relation with respect to the others. I argue that this is the case with all PSNs.

Depending on the higher functional structure, the noun derived in (13) may end up in an expression with a generic meaning (naming the property) or in a referential one. In both cases, the noun projects a DP, but with a different structure between the noun and the DP, according to one’s favorite theory of genericity and referentiality (e.g. Borer 2005, Chierchia 1998, Zamparelli 1995). When taking a referential interpretation, its reference is only restricted by the noun, a potential restrictive modifier, and the semantic contribution of the functional projections between the noun and the DP. In the latter case, it involves no type restrictions, and may refer to a particular instantiation of the property, to an object, or to an event, the only restriction being that the definite description of the referent involves the respective property (kindness in the particular case). It can also get a predicative interpretation, when realized as an NP in a predicate position. This fully matches the semantics of PSNs.

As already indicated at the end of section 2, I propose to analyze SSNs as deriving from full-fledged predications. The head of PredP is filled by the adjective, which moves there from its base-generated position within AdjP.

- (14) a. [-*ost* [<sub>PredP</sub> [<sub>DP</sub> Jovan] *ljùbazan* [<sub>AdjP</sub> *ljùbazan*]]]  
           -*ost*                    J                   kind.Adj                   kind.Adj



- b. Jovanova *ljùbazn-o:st*  
       Jovan’s   kind-*ost*  
       ’Jovan’s   kindness’

As the noun is not capable of assigning Nominative, the subject either has to be assigned genitive, or to be realized as a possessor.

- (15) a. *ljùbazno:st*   (mog                   prijatelja)    Jovana  
           kindness    my.Gen            friend.Gen    J.Gen  
       b. Jovanova                    *ljùbazno:st*  
           J.Poss                        kindness  
           ’(my friend) Jovan’s kindness’

The interpretation is straightforward. The noun derived in this structure is bound to refer to the property denoted by the adjective, as instantiated in the particular predication. The bare predication, unspecified for aspect, tense, or any other temporal information, allows only for an individual level interpretation (I assume with e.g. Rothstein 1999 that adjectives denote properties without any temporal structure).

The phonological realization, more precisely, the stress pattern, is now different because there is an asymmetric structural relation between the suffix and the stem. The stem is much more deeply embedded, and in Kayne's sense to the right of the suffix. While the phonological and lexical properties of the suffix and the stem get them eventually in a different order (i.e. the suffix following the stem), their syntax determines that the stem is to the right and the stem preserves its stress.

- (16) 1. [-òst [PredP [DP Jovan] ljubazan [AdjP ljubazan]]] → [-ost ljubazan]  
           -ost           J           kind           kind  
       2. [-o:st ljubazan] → [ljubazan-o:st]

In the particular nominal *ljubaznost*, the stress on the first syllable comes with a rising tone, which indicates it has moved here from the second syllable, but this is orthogonal for the present discussion.

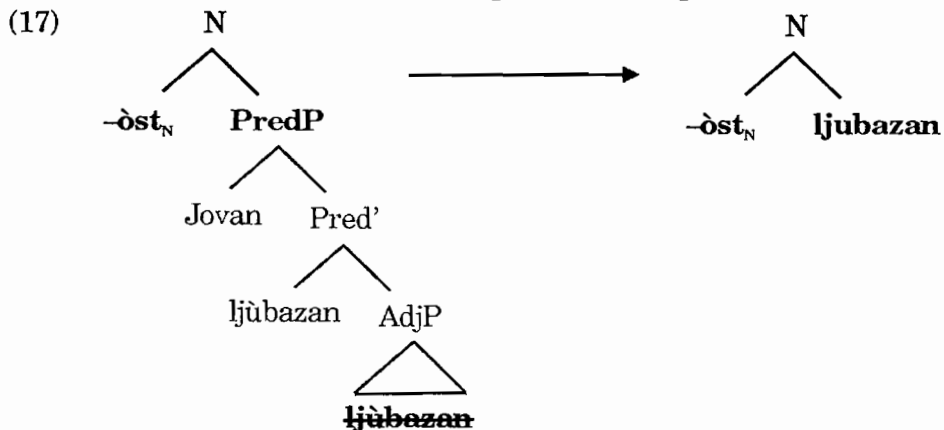
The analysis as presented captures the empirical generalization that only SSNs are really productive: they can be build from any PredP. PSNs are rather idiosyncratic: only certain adjectival stems build such nominals, while others, together with participles, have only one option: that of appearing in a PredP, which subsequently nominalizes. In this respect, the present analysis reaches similar conclusions as Roy (2010), who argues that in French too, adjectives can appear in 'bare' APs, or in PredPs embedding APs, but that in French, only those in PredPs may undergo nominalization. The difference is that in Serbian, 'bare' Adj(P)s also appear with the nominalizing suffix *-ost*, although not productively.

#### 4. PSNs as truncated structures

The difference between the generalization Roy (2010) makes based on the French data and those made in the present paper for Serbian deadjectival nominalizations calls for an explanation. Roy argues that adjectives nominalize only via PredPs, and I argue in the present paper that a certain type of deadjectival nominals in Serbian involves a nominalized AdjP, without any additional projections. However, although manifested in a significant number of cases, this type of nominalization is not productive in Serbian. In all the cases where nominalization is a clear case of a productive process, such as the nominalization of the passive and the active (i.e. subject-oriented) participle, only SSNs can be derived, i.e. only PredPs nominalize. PSNs, i.e. nominals in which AdjPs combine with the suffix *-ost*, usually have a lexical meaning, shifted with respect to the compositional interpretation, often idiosyncratic.

One possible explanation is that PSNs are derived by a truncation of the functional structure of SSNs. More precisely, the PredP projection is trunca-

ted. Only the adjectival stem remains, making asymmetric small-clause-like structure with the suffix, where only the suffix projects. Truncation is triggered by a shift in the lexical meaning of the noun, towards one with a more frequent use. The technical side of this process is represented in (17).

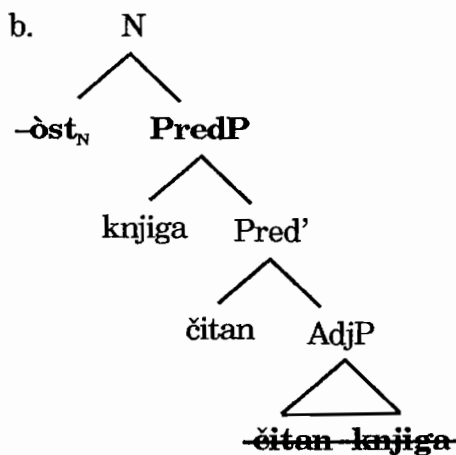


The process of lexicalization affects the entire structural sequence between the nominal head (the suffix) and the adjectival complement. The adjectival element is no more a projecting head, and there is no PredP to trigger its movement. It figures either as an item marked for its adjectival nature, or as a non-categorized root. Although it would make sense that the process of lexicalization neutralizes the adjectival nature of the lexical item – at this point I would rather not commit to either answer, and leave it for further investigation.

### 5. SSNs built from participles

So far, I treated all SSNs as derived from PredPs in which the meaning of an adjective is predicated of the subject of predication (SpecPredP). I propose the same analysis for SSNs derived from participles with one small modification. Instead of a lexical adjective, there is a VP (more precisely AspP) structure of a participle.

- (18) a. čitan-ost                      knjige  
 read.PassPcl-*ost*                  book.Gen  
 'the popularity of a/the book among readers (the extent to which it is the one people read)'



What distinguishes SSNs build from participle forms from those involving adjectival stems is the presence of the AspP projection, and possibly a layer contributing specification of the mood. The availability of these projections means a possibility to specify different quantificational and modal components for the meaning derived, or in other words a range of different interpretations instead of only one, available for SSNs with a PSN counterpart.

In fact, probably exactly the restricted meaning of adjectival SSNs is the reason for the emergence of PSNs in the lexicon. Participial SSNs have a broader range of meanings and no additional form need be derived to express the entire inventory of meanings. This is because in participial SSNs, the nominalized structure involves an event argument and a specification of the aspectual properties, and hence licenses that the entire structure finally refers to entities of these types. In adjectival SSNs, the nominalized structure is far simpler: it is a bare predication. This restricts the denotation of an adjectival SSN to a trope, and excludes all other readings. In order to enable the noun to be part of a predicate describing an event, the nominalized structure must be neutralized, and this effect is achieved by truncation. In section 19, I discuss a case in which for another class of nominals derived from participles such a motivation is present, and PSNs are derived from participles.

This renders the following picture. There are two kinds of nominals, those nominalizing syntactically primitive elements – PSNs, and those nominalizing syntactically complex elements – SSNs. The former are structurally simple, and hence unrestricted – they can have a broad range of meanings depending on the functional structure the derived noun projects. The latter are structurally complex. Among them, there are those deriving from PredPs with a simple adjectival predicate and those in which the predicate is a VP (i.e. AspP, MoodP or other projection of the VP). PSN counterparts may or may not be present, depending on the restrictions imposed by either the predicate or the nominalizing suffix, i.e. depending on whether there are meanings that cannot be expressed by the SSN form.

## 6. Explaining the asymmetries

**Non-quantizedness.** SSNs are derived from bare predications – predications unspecified for any quantitative or referential aspect. On the one hand: they restrict the meaning of the nominal derived to that of denoting a trope: a nominalized predicate from a particular predication requiring a filled subject position. These predications thus receive the interpretation of a property holding of the referent without any bounds. On the other, they do not involve any additional quantity specification that would further restrict the meaning of the noun, imposing bounds in their own right. The non-quantized predicate interpretation thus remains the only one available.

In cases when an SSN is the only available nominalization from a particular stem, as is the case with participle forms, there often is some additional aspectual (i.e. quantity-related) specification on the participle itself (see (18b)). This specification passes onto the derived nominal. This is why SSNs derived

from participles may have individual level interpretations and other meanings typical of PSNs.

**Count quantification.** As illustrated in (4), repeated as (19a–b), SSNs do not combine with count quantifiers or count–quantifying adverbs.

- (19) a. *nekoliko Jovanovih ljubá:znosti/\*ljúbazno:sti*  
 several Jovan’s kindnesses.PSN/kindnesses.SSN  
 ‘several events in which Jovan manifests kindness’
- b. *razne opá:snosti/\*òpasno:sti*  
 diverse dangers/’dangerousnesses’  
 ‘diverse dangers/events instantiating danger’

This fact is predicted by the proposed analysis. As just explained, SSNs with PSN counterparts are bound to have a non–quantized interpretation only. Non–quantized interpretation do not combine with count quantifiers or modifiers that require countability on the modifyee.

PSNs have a simpler structure, and present nominalizations of lexical items which are syntactically primitive. This makes them less restricted in respect of the structure they can project. They can derive predicates of object–and event–arguments, and combine with different quantity and reference specifications.

**Necessary instantiation.** It is shown in the examples in (5), repeated as (20a–b), that SSNs, although referring to abstract objects, must refer to abstract objects that are instantiated in the relevant domain (of world/discourse), and not just introduced as concepts, while this need not be the case for their PSN counterparts.

- (20) a. *ta (mala) ljubá:znost, koju niko nije pokazao...*  
 that little kindness.PSN which nobody Neg.Aux shown  
 ‘that little kindness, which nobody manifested’
- b. *#ta (mala) ljúbazno:st, koju niko nije pokazao...*  
 that little kindness.SSN which nobody Neg.Aux shown  
 ‘that little kindness, which nobody manifested’
- c. *ta (blaga) námučeno:st, koju niko nije pokazao...*  
 that mild wearyness.PSN which nobody Neg.Aux shown  
 ‘that little wearyness, which nobody manifested’

This is again predicted by the present analysis. SSNs with PSN counterparts derive from bare predications. These predicate a certain property over a respective subject. In order to be predicated, the property needs to be instantiated as well, and a negation of its instantiation in the higher structure leads to a contradiction. PSNs involve no such thing as a predication – a primitive element is nominalized, and it imposes no restrictions of the kind exemplified by SSNs. Finally, SSNs derived from participles may involve a richer structure, with possible quantifying elements, and hence they can denote kinds or properties in the scope of modal operators, which enables them to combine with a negation of any instantiation in the relevant domain, as in (20c).

**Tropes, states, events.** It follows straightforwardly from the present analysis that SSNs with PSN counterparts are restricted to denoting tro-



(23) crtan-je	gledan-je	pregovaran-je	pritrčavan-je
draw.PassPcl-je	watch.PassPcl-je	negotiate.PassPcl-je	run_closer-je
'drawing'	'watching'	'negotiating'	'running closer'

It is an old observation, stemming from early traditional grammars of Serbian, that only passive participles of imperfective verbs combine with the suffix *-je* in the described way.

(24) a. *ispijen-je	*pročitān-je	*dodan-je
drink_out <sup>PF</sup> .PassPcl-je	read_through <sup>PF</sup> .PassPcl-je	pass <sup>PF</sup> .PassPcl-je
b. ispijan-je	pročitavan-je	dodavan-je
drink_out <sup>IPF</sup> .PassPcl-je	read_through <sup>IPF</sup> .PassPcl-je	pass <sup>IPF</sup> .PassPcl-je
'drinking up'	'reading (out)'	'passing
(something)'		

However, a number of nouns involving a perfective stem and the suffix *-je* is attested in relatively frequent use in Serbian (Ignjatović 2010). It is interesting in the light of the topic of this paper that these nouns all have the prosodic pattern of PSNs.

(25) pred-skazā:n-je	vas-krsé:n-je
fore-say <sup>PF</sup> .PassPcl-je	up-cross <sup>PF</sup> .PassPcl-je
'prophecy/prediction'	'resurrection'
s-po-znā:n-je	u-stoličé:n-je
with-over-know <sup>PF</sup> .PassPcl-je	in-chair <sup>PF</sup> .PassPcl-je
'the act of learning'	'enthronement'

In addition to the prosodic pattern, these nouns share other properties of PSNs, such as not being productive but rather idiosyncratic cases and often having a shifted lexical meaning (rather than a regular compositional one).

The proposed analysis of PSNs and SSNs offers a direct explanation for this class of *-je* nouns. Suffix *-je* carries a homogenizing semantics (Arsenijević 2007). It takes a predicate and assigns its quantity property the value HOMOGENEOUS. This is possible when the predicate is a) unspecified for quantity or b) has the meaning of a bare plural (corresponding to unbounded iteration in the domain of events). Perfective Serbian verbs specify a singular quantity (Arsenijević 2006), which clashes with the value HOMOGENEOUS, and blocks perfective verbs from combining with the suffix *-je*. Just like other PSNs, *-je* PSNs are truncated structures, in which the perfective passive participle comes without its structure, as a primitive adjectival stem. Without the VP structure, the problematic semantics of the perfective stem is also lost, and the stem may combine with the suffix.

## Conclusion

The paper presents data from Serbian, showing that the stress patterns of deadjectival nouns is not a purely phonological issue, but reflects syntactic and semantic relations inside and between the morphological units entering derivation. One pattern, in which the stress appears on the same syllable as in the underlying adjective, is associated with a productive syntactic derivation, whe-



re a structurally complex predication, syntactically represented as PredP, is nominalized by the deadjectival nominalization ending *-ost*. The other pattern, which is not productive and often involves an idiosyncratic semantic shift, has the stress appearing on the penultimate syllable. It is argued to represent a simpler model of nominalization, lexical rather than syntactic, in which the nominalizing ending is attached to a lexical item which is syntactically primitive. It is suggested that nouns of the latter type are not directly productively derived by assigning the suffix to the structurally primitive adjectival stem, but rather come to exist through a truncation of the nominals of the former type, where the adjectival stem comes with its PredP structure. The analysis proposed offers explanations for the observed syntactic and semantic asymmetries between deadjectival nouns of the two types.

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