

# The Interaction of Aspect and the Height of Affixation

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- The present talk focuses on the interaction between aspectual values of deverbal nouns and the height of affixation in Serbian Argument Supporting Nominals (ASNs).
- ASNs are deverbal nouns which have an ability to express events and inherit the argument structure of the respective verb (Grimshaw 1990grimshaw1990argument, Alexiadou 2001[1], Borer 2003[15]).
- Serbian provides an interesting ground for the investigation of the interaction between overt morphological realization of AspP and the exact height of the overtly realized nominalizer, as the distinction between imperfective and perfective aspect found in the verbal domain is preserved in ASNs (Alexiadou 2001[1]).

- Cross-linguistically, languages show differences in the formation of process and result nominals with respect to the particular class of the verb that serves as the input for the nominalizing process, as unaccusatives in English (Grimshaw 1990[23]) and unergatives in Greek (Alexiadou 2001[1]) cannot nominalize.
- On the other hand, Serbian does not show such restriction, i.e., transitive, unaccusative, unergative, causative, and anticausative verbs can serve as inputs for the nominalization process. However, distinct verb classes and their sub-classes show differences in the nominalization process when it comes to aspectual values of underlying verbs.

- Grammatical or outer aspect, distinct from the lexical aspect or Aktionsart (Bloch-Trojnar & Malicka-Kleparska 2017[14]) is one of the paramount categories in Slavic languages.
- The distinction between the imperfective and perfective aspect of the verb is morphologically encoded in Slavic languages, and preserved in process nominals in other Slavic languages as well (Alexiadou 2001[1]).

- (1) a. pisanie pisem dva časa<sup>1</sup>  
writing.IMPF letters.GEN two hours  
'writing (all the) letters for two hours'
- b. **na**-pisanie pisem za dva časa  
writing.PF letters.GEN PREP two hours  
'writing all the letters in two hours' *Russian*
- (2) a. czytanie książki przez dwa dni/\*w dwa dni  
read.IMPF.NMLZ book.GEN.SG for two days/\*in two days  
'reading of the book for two days/\*in two days'
- b. **prze**-czytanie książki w dwa dni/\*przez dwa dni  
read.PF.NMLZ book.GEN.SG in two days/\*for two days  
'having read the book in two days/\*for two days' *Polish*
- (3) a. čtení knih-y hodin-u  
reading.IMPF.NOM.SG book-ACC.SG hour-ACC.SG  
'the reading of a book for an hour'
- b. **pře**-čtení knih-y za hodin-u  
PF-reading.NOM.SG book-ACC.SG in hour-ACC.SG  
'the reading through a book in an hour' *Czech*

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<sup>1</sup>Examples adapted from Tatevosov (2011)[39] for Russian, Bloch-Trojnar (2017) for Polish[13], Procházková (2006) for Czech[31]

- Deverbal nominals can be derived both from imperfective and perfective verbs. In Czech, it would be very difficult to find a verb that cannot undergo nominalization process (Procházková 2006[31]).
- However, in Serbian, there are some restrictions when it comes to the nominalization of perfective verbs.
- Arsenijević & Simonović (2018)[9] argue that “all and only imperfective verbs in S-C productively derive deverbal nominalizations” (Arsenijević & Simonović 2018: 422[9]), allowing for a small group of perfective verbs that build nominalizations followed by an unattested prosodical pattern or idiosyncratic meaning.
- Šarić (2018)[35] claims that both perfective and imperfective verbs can serve as inputs for nominalizations, “except in certain cases where the perfective verb simply does not allow for the formation of the nominalizations” (Šarić 2018: 133)[35]
- In the present talk, I aim to offer a solution to a long-standing puzzle of why Serbian perfective verbs show limitations in their nominalizing potential.

- For the purposes of this study, verb lemmas were selected from the Dictionary of Serbian Language and checked on their ability to nominalize, resulting in 16120 verbs and 8144 respective deverbal nouns.
  - Using standardized tests verbs are classified with respect to Voice into four main groups with several sub-groups within each group.
  - The next criterion for the organization of the verbs within a database was aspect: imperfective, perfective, suffixation with secondary imperfective and semelfactive -nu-, prefixation with lexical and superlexical prefixes
  - Diagnostics on the verbal and the nominal scale (table below) applied to the nominals within each group.
- (4) Verbal and nominal scale (Alexiadou, Iordăchioaia, Schäfer 2011[5]; Alexiadou 2020 [4])

### **The verbal scale**

- ✓ Presence of a complementizer
- ✓ Subject with nominative case
- ✓ Occurrence of modal or auxiliary verbs
- ✓ Accusative case on objects
- ✓ Projection of outer Aspect
- ✓ Implicit external argument

### **The nominal scale**

- ✓ Genitive/PP-subject
- ✓ Genitive/PP-object
- ✓ Gender features
- ✓ Availability of plural
- ✓ Availability of determiners
- ✓ Adjectival modification

- Closer morphological examination of the striking result that roughly half of the verbs do not nominalize provides evidence for a three-way blocking of the nominalization process in Serbian. In the most frequent case (6b), the verb is prefixed with the perfectivizing lexical prefix.

- (5) a. Teniser je trča-o po terenu.  
tennis.player AUX run.IMPV-FUT.PTCP.3SG.MSC PREP court  
'The tennis player run across the court.'
- b. trčanje teniser-a  
running tennis.player-GEN  
'running of a tennis player'
- (6) a. Teniser je is-trča-o na teren.  
tennis.player AUX run.PF-PST.PTCP.3SG.MSC PREP court  
'The tennis player ran onto the court.'
- b. \*is-trčanje teniser-a  
out-running tennis.player-GEN  
'running of a tennis player'



- Superlexical perfectivizing prefix hosted in the higher aspectual projection that scopes over the secondary imperfective morpheme in the lower Asp head can completely block the nominalizing process:

- (7) a. is-pre-crt-ava-ti  
CMPL-*across*-draw-2IMPF-INF  
'redraw one by one'
- b. \*is-pre-crt-ava-n-j-e  
CMPL-*across*-draw-2IMPF-PASS-N-NEUT  
Intended: 'redrawing one by one'

- Finally, in a small group of verbs where the perfective and imperfective version of the verb differ only in the choice of the thematic vowel (lupati 'hit.IMPF'- lupiti 'hit.PF'), perfective version of the verb cannot build a noun.

- (8)
- a. lup-a-ti  
hit-TH-INF  
'hit.IMPF'
  - b. lup-a-n-j-e  
hit-TH-PASS-N-NEUT  
'hitting'
  - c. lup-i-ti  
hit-TH-INF  
'hit.PF'
  - d. \*lup-i-n-j-e  
hit-TH-PASS-N-NEUT  
Intended: 'hitting'

## Serbian verbal complex

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- Serbian has rich verbal morphology with a wide range of prefixes and suffixes that can co-occur or mutually exclude each other.
- The simplest form of the verb consists of three slots: an acategorical root, a theme vowel acting as a piece of functional morphology (Oltra-Massuet 1999[30]; Embick 2010[19]), infinitive suffix or fused inflection suffix that contains information about tense, person, and number appears in the final slot.

- (9)
- a. crt-a-ti  
draw-TH-INF  
'draw'
  - b. **1**[is]-**1**[pre]-**2**[crt]-**3**[ava]-**4**[ti]  
SP-LP-root-2IMPF-INF  
'redraw one by one'
  - c. **1**[is]-**1**[pre]-**2**[crt]-**3**[ava]-**4**[m]  
SP-LP-root-2IMPF-PRS.1SG  
'(I) redraw one by one'

- Consensus in the literature about the battery of morphological, syntactic, and semantic diagnostics for identifying LPs (Babko-Malaya 1999[10], 2003[11]; Svenonius 2004[37]; Romanova 2004[34]; Tatevosov 2007[39]; Gribanova 2013[22]; Kalin 2014[28]).
- With respect to the morphological make-up of the verb, they attach as adjuncts and are closer to the root than superlexical prefixes when they co-occur.

(10) **1**[is]-**1**[pre]-**2**[crt]-**3**[ava]-**4**[ti]  
SP-LP-root-2IMPF-INF  
'redraw one by one'

- Syntactically, LPs can affect argument structure and add a new argument to the verb.

- (11) a. Devožčica je čita-la.  
girl AUX.3SG read-PST.PTCP.3SG.FEM  
'The girl was reading.'
- b. Devožčica je pro-čita-la knjigu-u.  
girl AUX.3SG *through*-read-PST.PTCP.3SG.FEM book-ACC  
'The girl read the book.'
- c. \*Devožčica je pro-čita-la.  
girl AUX.3SG *through*-read-PST.PTCP.3SG.FEM book-ACC  
Intended: 'The girl read the book.'

- Semantic contribution of LPs has been usually tied with the notions boundedness, telicity, result augmentation, and perfectivity (Ramchand 2004[32]).
- In Serbian, prefixed verbs are telic and tolerate solely *in*-modifier, while unprefixed version of the verb exhibits atelic interpretation accepting *for*-modifier and rejecting *in*-modifier:

- (12) Marija je po-jela tortu za petnaest minuta/\*petnaest minuta.  
Maria aux.3sg along-eat cake in fifteen minutes/fifteen minutes  
'Maria ate up the cake in fifteen minutes.'
- (13) Marija je jela tortu \*za petnaest minuta/petnaest minuta.  
Maria aux.3sg along-eat cake in fifteen minutes/fifteen minutes  
'Maria was eating the cake for fifteen minutes.'

- A lexical prefix can ban the nominalization process:

- (14) a. crt-a-ti  
draw-TH-INF  
'draw.IMPf'
- b. crt-a-n-j-e  
draw-TH-PASS-N-NEUT  
'drawing'
- (15) a. pre-crt-a-ti  
*across*-draw-TH-INF  
'redraw.PF'
- b. \*pre-crt-a-n-j-e  
*across*-draw-TH-PASS-N-NEUT  
Intended: 'redrawing'



## Superlexical Prefixes (SPs)

- Lexical and superlexical prefixes tolerate each other and can appear together in the verbal complex. From the morphological point of view, in the case of their co-occurrence, SPs are outside of LPs, i.e., they are farther away from the root in comparison to LPs.

(16) po-za-ključ-ava-ti  
DSTR-*up*-key-2IMPF-INF  
'lock one by one'

- One of the main diagnostics of SPs is that they may stack, i.e., their co-occurrence is allowed:

(17) is-po-raz-bolj-eva-ti                      se  
CMPL-DSTR-*around*-sick-2IMPF-INF RFL  
'get sick one by one'

- Syntactically, SPs cannot affect the argument structure of the verb, in contrast to LPs.
- The fact that they cannot add an argument to the verb and do not change the participant relations to an original object, has been taken to suggest that there is no evidence to represent them as the complements of a result projection (Ramchand 2004[32]).
- While LPs pattern with Germanic verbal particles to some extent, SPs exhibit the syntactic behavior of adverbs and auxiliary verbs, and bring aspectual and quantificational meanings (Svenonius 2004[37]):

(18) Ricardo nervno za-brosal mjač.  
Ricardo nervously INCP-threw ball  
'Ricardo began to nervously throw the ball.' *Russian* (Svenonius 2004:206[37])

## Superlexical Prefixes block Nominalization

- There is a significant evidence cumulated from several languages that verbs containing SPs systematically resist to nominalize. Svenonius (2004:37)[37] argues that the absence of superlexical prefixes from nominalization is quite striking.
- In Serbian, they fully block nominalization process:

- (19) a. is-pre-sav-ija-ti  
CMPL-*across*-fold-2IMPF-INF  
'fold completely'
- b. \*is-pre-sav-ija-n-j-e  
CMPL-*across*-fold-2IMPF-PASS-N-NEUT  
Intended: 'folding completely'
- (20) a. po-za-palj-iva-ti  
DSTR-*up*-fire-2IMPF-INF  
'fire one by one'
- b. \*po-za-palj-iva-n-j-e  
DSTR-*up*-fire-2IMPF-PASS-N-NEUT  
Intended: 'firing one by one'

## Secondary Imperfective (2IMPF)

- The counterpart of lexical prefixes in Slavic languages is 2IMPF (Romanova 2004)[34], a morpheme shared across all Slavic languages.
- In the data below adapted from Svenonius (2004)[37], prefixes are omitted:

(21) Secondary Imperfective across Slavic Languages (Svenonius 2004)[37]<sup>2</sup>

<b>Russian</b>	<b>Polish</b>	<b>Czech</b>	<b>Serbian</b>	<b>Bulgarian</b>
pis-a-tj	pis-a-ć	ps-á-t	pis-a-ti	pis-a
write-v-INF	write-v-INF	write-v-INF	write-v-INF	write-v
'write.IMPF'	'write.IMPF'	'write.IMPF'	'write.IMPF'	'write.IMPF'
pis-yva-tj	pis-ywa-ć	pis-ova-t	pis-iva-ti	pis-va-m
write-IMPF-INF	write-IMPF-INF	write-IMPF-INF	write-IMPF-INF	write-IMPF-1SG
'write.IMPF'	'write.IMPF'	'write.IMPF'	'write.IMPF'	'write.IMPF'

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<sup>2</sup>For ease of exposition, prefixes are omitted.

## Secondary Imperfective and Nominalization

- 2IMPF can merge and facilitate the formation of the nominal (23) whenever a LP blocks the nominalization process (22), but not when a SP is merged and froze the nominal (24)

- (22) a. pre-crt-a-ti  
*across-draw-TH-INF*  
'redraw.PF'
- b. \*pre-crt-a-n-j-e  
*across-draw-TH-PASS-N-NEUT*  
Intended: 'redrawing'
- (23) a. pre-crt-ava-ti  
*across-draw-2IMPF-INF*  
'redraw.IMPF'
- b. pre-crt-ava-n-j-e  
*across-draw-2IMPF-PASS-N-NEUT*  
'redrawing'
- (24) a. is-pre-crt-ava-ti  
CMPL-*across-draw-2IMPF-INF*  
'redraw one by one'
- b. \*is-pre-crt-ava-n-j-e  
CMPL-*across-draw-2IMPF-PASS-N-NEUT*  
Intended: 'redrawing one by one'

- The place of Slavic semelfactive *-nu-* has been a controversial question. Svenonius (2004)[37] claims that this morpheme is a theme vowel since the two do not tolerate each other within a single word. This view has been accepted in Bašić (2010)[12], Caha & Ziková (2016)[17], Šarić (2018)[35]. However, Gribanova (2013)[22] challenges this claim providing several examples of their co-occurrence in Russian.

- (25) a. *pre-ki-nu-ti*  
*across-tear-SMLF-INF*  
*'cease.PF'*
- b. *po-kre-nu-ti*  
*along-move-SMLF-INF*  
*'move.PF'*

- Semelfactive *-nu-* is to some extent counterpart of secondary imperfective, as its merging leads to blocking of the nominalization process (26b), which brings them closer to perfectivizing prefixes. However, the formation of nominals is not completely banned, as was the case with superlexical prefixes, since we find nominalizations involving this morpheme (27b).

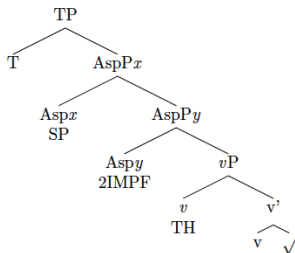
- (26) a. *drem-nu-ti*  
*nap-SMLF-INF*  
'take a little nap'
- b. \**drem-nu-t-j-e*  
*nap-SMLF-PASS-N-NEUT*  
Intended: 'taking a little nap'

- (27) a. *iš-čez-nu-ti*  
*out-yearn-SMLF-INF*  
'disappear'
- b. *iš-čez-nu-t-j-e*  
*out-yearn-SMLF-PASS-N-NEUT*  
'disappearance'

- Gribanova (2013)[22] argues for the potential of the Verb-Stranding Verb Phrase Ellipsis to serve as a diagnostic for determining the exact position and independence of individual pieces of Russian morphosyntactically complex verbs.

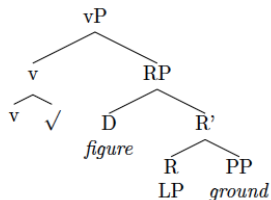
On the basis of the Russian data, Gribanova (2013)[22] shows that:

- SPs, 2IMPF, and the semelfactive morpheme are above the ellipsis domain (outside vP) as they are not subject to the matching requirement on the stranded verb, while LPs are below it (for the results of VVPE in Serbian, see Appendix).





- Compelling evidence that Slavic prefixes bring resultativity has been proposed in the Small Clause approach (Svenonius 1994[38], 2004[37]), First-Phase Syntax (Ramchand 2004[32]), and Concatenation theory (Arsenijevic 2007[7]).
- The unifying view in these different approaches is that the exact place of the lexical prefix is within the Result Phrase below vP, tantamount to the place of verb particles in Germanic languages (Ramchand & Svenonius 2002[33]).
- The same idea of low attachment holds for prefixes situated in pP within the Greek verbal complex (Alexiadou 2020[3]) and particles in PrtP in English verb particle constructions (Harley 2009)[24]



- Having established the structure of the Slavic verb, the question emerges:
- (28) How much of the verbal complex can enter the nominalization process?
- I will demonstrate that the nominalizer can attach as high as the AspP hosting 2IMPF and as low as RootP.
  - However, the higher AspP hosting SPs can be embedded only under TP, while the nominalizer cannot embed it.

## n-based Nominalizations

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- Alexiadou et al. (2011)[5] and Alexiadou (2020)[4] propose a distinction between n-based and D-based nominalizations.

(29)	a.	[DP [verbal FP [vP ...]]]	<i>verbal internal structure</i>
	b.	[DP [nominal FP [nP [(verbal FP) [vP...]]]]]	<i>mixed internal structure</i>

- D-based nominalizations such as English verbal gerund, German and Spanish verbal infinitives, and Greek nominalized clauses consistently surface with the diagnostics on the verbal scale including the licensing of accusative objects, modal and auxiliary verbs, and adverbial modification.
- n-based nominalizations, such as English nominal gerunds and derived nominals, and Spanish and German nominal infinitives, surface more often with the diagnostics on the nominal scale (genitive objects, availability of plural, adjectival modification).

(30) **n-driven ergativity generalization (Alexiadou 2017[2])**

n-based nominalizations make room for one structural Case within the nP phase, and require a deficient VoiceP/vP complement, i.e., a Voice/vP projection that does not project an external/agent argument.

- Ergative case pattern is attested in Serbian nominalizations, providing evidence for the n layer. The agent argument is realized as adjunct in the form of the by-phrase, while the theme argument surfaces with the genitive case.

(31) branje jagod-a                      od strane moje bake  
 picking strawberries-GEN by side    my    grandma  
 'picking strawberries by my grandma'

- n is a phase head - any potential layer above it has to be nominal and agree with n in morphosyntactic features, while verbal layers are ruled out.
- Serbian deverbal nominals show gender and number agreement, license plurality and adjectival modification.

(32) Tvoja stalna ulazenj-a u sobu me ometaju.  
your.PL constant.PL entering-PL PREP room 1SG.ACC distract  
'Your constant entering the room distracts me.'

- The proposal I want to put forth here is that the nominalizer *n* triggers imperfectivity of the AspP.
- Furthermore, when embedded under TP, AspP can have both perfective and imperfective values. By contrast, when embedded under nP, it can only have imperfective value.
- Evidence for this comes from nominalizations of perfective verbs.

[DP [nominal FP [nP [AspP [VoiceP [vP [RootP]]]]]]]]

- **Morphology:** preserve overt aspectual morphology
  - **Aspectual value:** these nominals are derived out of perfective verbs, being thus compatible with the *in*-adverbials licensed by the AspP.
  - **Argument structure:** genitive internal argument, Agent in the form of the *by*-phrase
- (33) *iz-rad-a* ogrlice za šest meseci od strane tima juvelira  
*out-work-FEM necklace.GEN PREP six months by side team jewelers*  
'Making of the necklace in six months by the team of jewelers'



## Diagnostic #1: Co-occurrence with phasal verbs

- (34) Završena je iz-rad-a ogrlice.  
finished AUX *out-work-FEM* necklace.GEN  
'The making of the necklace is finished.'

## Diagnostic #2: Interval properties

- (35) Stigli smo u vreme iz-rad-e ogrlice.  
arrived AUX in time *out-work-GEN* necklace.GEN  
'We arrived at the time of the making of the necklace.'

## Diagnostic #3: Coordination (✓ two distinct events, ✓ a single continuous event)

- (36) Iz-rad-a ogrlice u ponedeljak i utorak.  
*out-work-GEN* necklace.GEN on Monday and Tuesday  
'The making of the necklace on Monday and Tuesday.'

## Diagnostic #4: Aspectual compositional effects (✓ all necklaces, ✓ necklaces)

- (37) iz-rad-a ogrlica  
*out-work-GEN* necklace.GEN.PL  
'making of necklaces'

[DP [nominal FP [nP [RootP]]]]

- **Morphology:** preserve aspectual morphology
- **Aspectual value:** derived out of perfective verbs; incompatible with adverbial modifiers suggesting the lack of the AspP; do not accept the modifier *lasted for* suggesting the lack of procesuality
- **Argument structure:** internal argument licensed by the resultative phrase merged with the root

- (38) a. **do-kaz** postojanja    života na    Marsu  
to-say existence.GEN life    PREP Mars  
'proof of the existence of life on Mars'
- b. **iz-vešt-aj**            o    poslovanju  
out-report-MASC PREP business  
'business report'

Solving the puzzle: What blocks  
nominalization

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- We have two possibilities at our disposal: to form a *process noun* (ASN) out of an imperfective (39) or a perfective verb (40) or form a *result noun* (RN) out of a perfective verb (41).

- (39) *crt-a-n-j-e*                      automobil-a satima    od strane Jovana  
draw-TH-PASS-N-NEUT car-GEN      for.hours by side    John  
'drawing of a car by John for hours'
- (40) *iz-rad-a*                      ogrlice                      za    šest meseci od strane tima juvelira  
*out-work-FEM necklace.GEN PREP six months by side    team jewelers*  
'Making of the necklace in six months by the team of jewelers'
- (41) *do-kaz* postojanja    života na    Marsu  
*to-say existence.GEN life    PREP Mars*  
'proof of the existence of life on Mars'

Perfective verbs in Serbian can:

- give ASNs that fail perfectivity effects being embedded under n
- give RNs
- resist to nominalize

- AspP under T is distinct from AspP under n.
- ASNs are obligatorily imperfective independently of the aspectual value of the underlying verb (Grimshaw 1990[23], Engelhardt 1998[20], 2000[21])
- The operator that triggers imperfectivity is n.
- Crucially, in order to turn clausal perfective aspect into nominal imperfective, nominalizer n needs to embed enough structure, i.e., vP or AspP.
- Otherwise, RNs would also have imperfective readings.
- In RNs, the nominalizer attaches to the RootP and does not interact with any layer contributing aspect.

- Lexical prefixes originating in the resultative phrase can merge, change the argument and event structure and block nominalization.
- In the typology of prefixed verbs in Serbian proposed in Arsenijević (2011)[8], verbs showing this type of the blocking effect belong to the group of manner incorporation verbs.<sup>3</sup> This is the class of verbs that are followed by the change of the argument structure, i.e., by adding a goal-argument. Recall:

- (42)
- a. Devojčica je čita-la.  
girl AUX.3SG read-PST.PTCP.3SG.FEM  
'The girl was reading.'
- b. Devojčica je pro-čita-la knjigu-u.  
girl AUX.3SG *through*-read-PST.PTCP.3SG.FEM book-ACC  
'The girl read the book.'
- c. \*Devojčica je pro-čita-la.  
girl AUX.3SG *through*-read-PST.PTCP.3SG.FEM book-ACC  
Intended: 'The girl read the book.'

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<sup>3</sup>Arsenijević (2011)[8] differentiates between three groups of verbs. The first group consists of manner incorporation verbs, the second group incorporates the result argument, while the third group not necessarily involves a result component. Ignjatović (2016)[25] basis his argumentation on Arsenijević's (2011)[8] typology claiming that the second group of verbs gives RNs in Serbian. However, this view cannot be maintained here, as we have seen that perfective verbs containing prefixes can give rise to ASNs.

- Furthermore, the basic unprefixated verb *trčati* ('run') denotes a motion event with a particular set of manner features (Arsenijević 2011[8]).

(43) \*is-trčanje teniser-a  
*out-running tennis.player-GEN*  
Intended: 'running of a tennis player out'

- We have seen that resultativity in Slavic is realized within RP merged with the RootP. According to Arsenijević (2011)[8], the entire result predicate including the goal-argument is not incorporated in the case of manner incorporation verbs.
- I take this as evidence that formation of RNs at the root level is precluded.



- Nominalizer *n* is incompatible with perfectivity in ASNs.
- In the process of repairing the structure and making it a suitable landing site for attachment, *n* changes the perfective value of the underlying verb.
- As argued before, AspP in the clausal domain is distinct from the AspP in the nominal domain.
- Under *n*, it changes its perfective value to imperfective in syntax, which is realized as 2IMPF at the level of Vocabulary Insertion, resulting in ASN (44).

(44) *is-trč-ava-n-j-e*                      *teniser-a*  
*out-run-2IMPF-PASS-N-NEUT* *tennis.player-GEN*  
'running of a tennis player out'

- The findings of VVPE have shown that SPs are situated above the highest AspP layer.
- Merging of any higher AspP is not possible, and the repairing mechanism remains inaccessible. Therefore, the nominalization process is fully blocked and a nominal layer can never attach to the highest AspP hosting SPs.

- (45)
- a. is-pre-crt-ava-ti  
CMPL-*across*-draw-2IMPF-INF  
'redraw one by one'
  - b. \*is-pre-crt-ava-n-j-e  
CMPL-*across*-draw-2IMPF-PASS-N-NEUT  
Intended: 'redrawing one by one'

## Blocking #3 Solution

- In the last group of verbs where the perfective and imperfective version of the verb differ only in the choice of the thematic vowel (lupati 'hit.IMPF'- lupiti 'hit.PF'), nominalization is blocked within the v layer.
- Since the blocking effect happens lower in the structure in comparison to the previous group, repairing mechanism is available.
- Similarly to the first class, nominalizer n requires imperfective aspect in syntax, which is morphologically realized as changing of the thematic vowel.

- (46)
- a. lup-i-ti  
hit-TH-INF  
'hit.PF'
  - b. \*lup-i-n-j-e  
hit-TH-PASS-N-NEUT  
Intended: 'hitting'
  - c. lup-a-ti  
hit-TH-INF  
'hit.IMPF'
  - d. lup-a-n-j-e  
hit-TH-PASS-N-NEUT  
'hitting'

- In contrast to other Slavic languages, Serbian is more restrictive in formation of ASNs out of perfective verbs.
- There is a blocking effect that can be divided into three types depending on the verbal layer in which the blocking emerges.
- Although resultativity is tied with perfectivity, perfective verbs can result in ASNs if the nominalizer attaches sufficiently high and changes its aspectual value.
- AspP under T is distinct from AspP under n.
- Nominalizer n is an operator that obligatorily triggers the imperfectivity of the nominal.

- Perfective verbs have the property of boundedness (Svenonius 2004:179)[36], attributed to telic and count nouns (Alexiadou et al 2010: 538[6]; Borer 2013[16]), while imperfective verbs are primarily connected to unboundedness (Svenonius 2004:179[36]), attested for atelic events and mass nouns (Alexiadou et al. 2010: 538[6]; Borer 2013[16]). Does the number interpretation and agreement follow the aspectual values?
- Tatevosov (2007)[39] demonstrates that Russian nominals derived out of perfective verbs fail perfectivity tests, a property that we also find in Serbian. Is this pattern shared by Serbian and Russian attested in other Slavic languages?
- How to explain the fact that Serbian shows stronger restrictions in its ability to build nominalizations? Is it related to the fact that it has an archaic aspectual system compared to other Slavic languages (Dickey 2015)[18] or the syntax of RPs and their interaction with the RootP and vP in individual Slavic languages?

*Thank You!*

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## Appendix

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# Verb-Stranding Verb Phrase Ellipsis (VVPE) as a diagnostic for the functional structure

- The main assumption behind this test is that individual pieces of verbal morphology are syntactically independent units and thus distributed across different syntactic domains.
- Notwithstanding the theoretical ground of a particular analysis, authors converge on the idea that LPs are low in the structure, while SPs secure a high position in the verbal complex (see Svenonius 2004[37], Ramchand 2004[32], Romanova 2004[34] for Russian, Istrateva 2004[26] for Bulgarian, Milićević 2004[29] for Serbian, Jablonska 2004[27] for Polish, among others) and must reside in the top areas of the tree (Romanova 2004[34]).
- However, this evidence is based mainly on semantic grounds or on the mixture of syntactic and semantic behaviour of these units.
- On the other hand, Gribanova (2013) provides purely syntactic evidence for the high/low dichotomy. Under this approach, LPs, SPs, and 2IMP are syntactic heads that appear in the preverbal position via head movement.



- As Gribanova (2013) demonstrates on the basis of Russian data, VVPE has three prerequisites:
  - a. It is licensed within an island
  - b. It requires an overt linguistic antecedent
  - c. It is subject to the matching requirement on the stranded verb

- In contrast to the object drop, this type of ellipsis is not licensed in the absence of the over linguistic antecedent. The stranded verb is given within a relative clause island.

[Context: A woman enters a tailor's shop with an unstitched dress in her hands.]

- (47) Sada će                      doći žena      koja će                      #(je) u-šiti.  
now 3SG.AUX.FUT come woman that 3SG.AUX.FUT #(it) in-sew  
# 'The woman who will sew (it) arrives soon'

[Context: The postman brings several packages and puts them in front of the company door.]

- (48) Sada će                      doći kolega      koji će                      #(ih) u-neti.  
now 3SG.AUX.FUT come colleague who 3SG.AUX.FUT #(them) in-bring  
# 'A colleague who will bring (them) in arrives soon.'

- In (49a) the antecedent verb *rušiti* ('demolish') is not prefixed, while the verb *srušiti* ('completely demolish') in (49b) contains the LP. When verb stems are mismatched, it is not possible to omit the direct object *je* ('it') and the VVPE is ruled out.

- (49) a. Jesi li čuo da su juče rušili zgradu?  
 did Q hear COMP AUX yesterday demolish.IMPF building  
 'Did you hear that they were demolishing the building yesterday?'
- b. Da video sam radnike koji su rušili, ali #(je) nisu  
 yes saw AUX workers that AUX *down-demolish*.IMPF but (it) not  
 s-rušili.  
 demolish.PF  
 'They were demolishing the building, but they did not demolish it.'

- When lexical prefixes are matched VPPE is licensed. This suggests that LP is subject to the matching requirement and merges inside the vP, i.e., inside the domain of VPPE.

- (50) a. *Želim da u-pakujem poklon za rođendan.*  
want.1SG.PRS *da<sub>subj</sub>* *in-pack.1.SG.PRS* present for birthday  
I want to pack a birthday present.
- b. *U knjižari prekoputa možete u-pakovati.*  
in bookstore across.the.street can.2PL *in-pack.INF*  
'You can pack (it) at the bookstore across the street.'

- SPs show significantly different behavior.
- A SP is present in the stranded verb (51b), but not in the antecedent verb (51a), and the verbs have different aspectual values.
- Crucially, omitting the object gives a grammatical sentence, which suggests that SP is not a subject to the matching requirement and do not originate inside the vP.

- (51) a. Jesi li već bra-la maline za kolač?  
be.2SG.PRS Q already pick-PST.PTCP.3SG.F raspberries.ACC PREP cake  
'Have you already picked raspberries for a cake?'
- b. Jesam, ali činjenica da nisam dovoljno na-bra-la  
be.1SG.PRS but fact that NEG enough CMLT-pick-PST.PTCP.3SG.F  
me nervira sad.  
1SG.ACC annoy now  
'Yes, but the fact that I did not pick enough annoys me now.'





- In the similar manner as LPs, theme vowels are subject to the matching requirement, as VVPE is not allowed. Moreover, theme vowels and 2IMPF are not interchangeable.

- (54) a. Jesi li čuo da su raz-ruš-i-li zgradu?  
did Q hear that AUX *around*-demolish-TH-PST.PTCP building  
'Did you hear that they were demolishing the building?'
- b. Video sam radnike koji su #(je) raz-ruš-ava-li.  
saw AUX workers that AUX (it) *around*-demolish-2IMPF-PST.PTCP  
'I saw the workers who were demolishing (it) fully.'
- (55) a. Jesi li čuo da su raz-ruš-ava-li zgradu?  
did Q hear that AUX *around*-demolish-2IMPF-PST.PTCP building  
'Did you hear that they were fully demolishing the building?'
- b. Video sam radnike koji su #(je) raz-ruš-i-li.  
saw AUX workers that AUX (it) *around*-demolish-TH-PST.PTCP  
'I saw the workers who were demolishing (it).'