What's up with 'verbal' morphology in BCS agent nominals?

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Introduction

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https://www.masabeslin.com/assets/pdf/beslin_fdsl_nominals.pdf

Introduction

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MAIN CLAIM:

 $\hbox{`Verbal' morphology in Bosnian/Croatian/Serbian agentive nouns is not verbal.}$



References

Introduction 00000000

> • I'll be looking at a sample of BCS agentive nominals, which contain what is traditionally analyzed as verbal morphology

- (1)a. pozn-av-á-teli b. prouč-av-á-teli c. reš-av-á-teli know-AV-TH-N study-AV-TH-N solve-AV-TH-N 'researcher' 'expert' 'solver'
- (2)a. predsed-av-a-áč b. pred-av-a-áč c. ugnjet-av-a-áč chair-AV-TH-N lecture-AV-TH-N oppress-AV-TH-N 'chair' 'lecturer' 'oppressor'
- (3)a. prod-av-a-ác b. dar-o-d-av-a-ác c. posl-o-d-av-a-ác sell-AV-TH-N gift-L-give-AV-TH-N job-L-give-AV-TH-N 'giftgiver' 'seller' 'employer'
- A noun like proučavatelj is often segmented as pro-uč-a-va-telj 'LP-learn-V-SI-N', because of the similar verbs proučavati 'be researching', proučiti, and učiti

Introduction

Deadjectival Ns

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- A noun like *proučavatelj* is often segmented as *pro-uč-a-va-telj* 'LP-learn-V-SI-N', because of the similar verbs *proučavati* 'be researching', *proučiti*, and *učiti*
- * We'll see reasons to doubt that these nouns have verbal structure



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Appendix

Introduction

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- I'll show BCS root-conditioned allomorphy and accent placement are limited to the first spellout domain, including only one categorizing morpheme
- * Then, the 'verbal' morphology in these agent nominals may not be verbal after all

Appendix

§1 Some background on Distributed Morphology (DM), cyclic domains, the role of categorizers, and allomorphy

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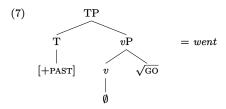
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Introduction

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- Words are built up syntactically out of (discrete) abstract morphemes which receive form (and meaning) at the interfaces
- Morphemes: roots and functional heads (including categorizers)
- The form (and meaning) of a morpheme may be contextually determined, (7)
- Allomorphs are in competition with each other ('Elsewhere principle')



- Transfer to the interfaces happens cyclically, at certain points of the derivation
- Categorizers (v, n, a) are the relevant cyclic heads
 - (8)Schematization of cyclic domains (Embick 2014):
 - a. Cyclic y merged in $[y \mid X \mid Y \mid x \sqrt{ROOT} \dots]]$
 - b. Cyclic domain centered on $x = [X [Y [x \sqrt{ROOT}]]]$ sent to interfaces

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 - b. Cyclic domain centered on $x = [X [Y [x \sqrt{ROOT}]]]$ sent to interfaces
- \rightarrow Intended outcome: The root is accessible to the first cyclic head x and any intervening non-cyclic heads (X, Y) (think go-went)
- $\rightarrow \sqrt{\text{ROOT}}$ and y cannot interact for the purposes of allomorph selection because they are in separate spell-out domains

 Cyclic spellout is thought to explain many patterns of (im)possible morphophonological interactions, including (im)possible allomorphy



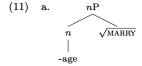
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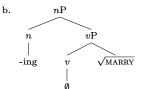
Introduction

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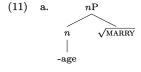
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 - (9)marri-age, grow-th, remov-al, free-dom, divers-ity, strateg-y, ...
 - (10)marry-ing, grow-ing, remov-ing, free-ing, divers-ify-ing, strateg-iz-ing,...

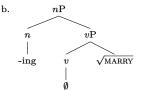
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→ Categorization has the same effect on allomorphy and accent placement in BCS

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- ullet In §3, we'll see that 'deverbal' agentive nouns pattern with root-derived nouns

- Looking again at agent nominals, the broadly agentive n-suffixes in BCS are at least -ar, $-a\check{s}$, -er, -(a)c, $-a\check{c}$, -ic(a), -ik, and $-d\check{z}ij(a)$
- Root-derived nouns (ROOT-n) may take any of the n-allomorphs on offer; the choice of n is determined by the root ('lexically-conditioned allomorphy')

(12)	a.	$\operatorname{kormil}\text{-}ar$	'helmsman'	e.	$\text{voz-}a\check{c}$	'driver'
	b.	$\mathrm{batin}\text{-}a\check{s}$	'beater'	f.	$\mathrm{izdaj}\text{-}\mathit{ica}$	'traitor'
	c.	poz- er	'poser'	g.	proza- <i>ik</i>	'prose writer'
	d.	pis-ac	'writer'	h.	bureg- <i>džija</i>	'börek maker'

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• **NB:** I clearly do not subscribe to the view that all agentive nouns contain verbal structure, even if they seem to correspond to the external argument of a verb

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 - b. mrš-av-ac 'skinny one'
 - c. mut-av-ac 'mute one'

- d. peg-av-ac 'freckled one'
- e. prg-av-ac 'grumpy one'
- hvalis-av-ac 'boastful one'

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 - c. mut-av-ac 'mute one'
 - (14) a. plaš-ljiv-ac 'scared one'
 - b. smrd-ljiv-ac 'stinky one'
 - c. grab-ljiv-ac 'predatory one'

- d. peg-av-ac 'freckled one'
- e. prg-av-ac 'grumpy one'
- f. hvalis-av-ac 'boastful one'
- d. povod-*ljiv-ac* 'gullible one'
- e. var-*ljiv-ac* 'cheating one'
- f. vaš-*ljiv-ac* 'lousy one'

- (15) a. hajduk-ov-ac 'H. supporter'
 - b. dinam-ov-ac 'D. supporter'
 - c. isus-ov-ac 'Jesuit'

- d. maček-ov-ac 'Maček follower'
- e. nobel-ov-ac 'Nobel winner'
- f. oskar-ov-ac 'Oscar winner'

- (16) a. smrt-n-ik 'mortal one'
 - b. put-n-ik 'traveler'
 - c. boles-n-ik 'sick one'

- d. bestid-n-ik 'shameless one'
- e. $du\check{z}$ -n-ik 'debtor'
- f. gubit-n-ik 'loser'
- Only a can now influence the form of n, which is uniform regardless of the root in question (either due to a-conditioned allomorphy or elsewhere)

- The locality effect is best observed when the same root can produce both a root-nominal and a deadjectival nominal (cf. *gubit-n-aš, *gubit-ik)
- Same root, same meaning, different nominalizer due to the presence of a
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- \rightarrow In a **ROOT-***a-n* configuration, the root is spelled out when n is merged, hence the root (qua morpheme) can no longer be identified when n undergoes VI

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- The nominalizer $-(\acute{a})c$ is underlyingly accent-marked, but only realizes that accent if it is in ROOT-n, not in e.g., ROOT-a-n

(18) a. pis
$$\rightarrow$$
 pis-ác \sqrt{write} 'writer

b. alžír
$$\rightarrow$$
 alžir-ác $\sqrt{\text{algeria}}$ 'Algerian(N)'

(19) a.
$$pflj-av \rightarrow pflj-av-ac$$
 'dirty' 'dirty one'

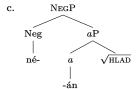
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$$smrd-ljív \rightarrow smrd-ljív-ac$$

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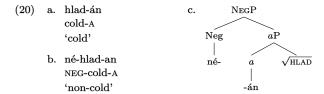
• If the extended projection of the first categorizer contains non-cyclic heads (e.g., DEG, NEG, DIM) and their exponents are accented, the accent surfaces on them

(20)a. hlad-án cold-A 'cold'

> b. né-hlad-an NEG-cold-A 'non-cold'



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- Accent placement is determined within the first spellout domain, as in (8)/(21)
 - (21) Schematization of cyclic domains (Embick 2014):
 - a. Cyclic y merged in [y [X [Y [x $\sqrt{\mbox{\scriptsize ROOT}}$...]]]
 - b. Cyclic domain centered on $x = [X [Y [x \sqrt{ROOT}]]]$ sent to interfaces

• Root-root compounds behave as expected; the accent placement is still 'frozen' in the spellout domain of the first **categorizer**

(22) a. dub-o-rez-ác deep-L-cut-N 'woodcarver' b. pad-o-bran-ác fall-L-defend-N 'parachuter'

c. led-o-lom-ác ice-L-break-N 'ice-breaker'

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Appendix

INTERIM SUMMARY I:

Root-conditioned allomorphy and accent placement in BCS are limited to the first spellout domain, including one categorizer



'Deverbal' nouns

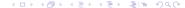
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- For starters, there are syntactic operations that only have an effect on one interface (Quantifier Raising, Agreement)
- We also don't think that phonological phenomena exist *because* of syntax, though they can be constrained by it
- So why should we think that meaning differences necessarily arise from differences in syntactic structure?

- Originally, eventive (episodic) interpretation = complement structure = verbal syntax (23a) (e.g., Alexiadou 2001), but cf. (23b-c)
 - a. a frequent consumer *(of tobacco) (23)
 - b. a frequent visitor
 - c. a frequent subject *(of Monet's paintings)

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- But we know agent entailments \neq Voice, cf. hastily in (24)
 - (24)The rock rolled down the hill quickly/#hastily.



 $\bullet\,$ Moreover, if painter needs Voice, does thief too?



Appendix

- Moreover, if *painter* needs Voice, does *thief* too?
- Event entailments also don't implicate the presence of v; cf. (25a)/(25b-c), (26)
 - (25)a. a beautiful dancer
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- At the broadest level, entailments \neq the presence of hidden structure
 - a. an illegitimate blond child (27)

'Deverbal' nouns: Allomorphy

Introduction

'Deverbal' nouns: ALLOMORPHY

• As we saw in the beginning, there are different n-allomorphs in 'deverbal' nouns

- (28)a. pozn-av-a-telj know-AV-TH-N 'expert'
- b. prouč-av-a-**teli** study-AV-TH-N
- c. reš-av-a-teli solve-AV-TH-N

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Appendix

'researcher' 'solver'

- (29)a. predsed-av-a-ač b. pred-av-a-ač chair-AV-TH-N 'chair'
- lecture-AV-TH-N 'lecturer'
- c. ugnjet-av-a-ač oppress-AV-TH-N
 - 'oppressor'

- (30)a. prod-av-a-ac sell-AV-TH-N 'seller'
- b. dar-o-d-av-a-ac c. posl-o-d-av-a-ac gift-L-give-AV-TH-N 'giftgiver'
 - job-L-give-AV-TH-N 'employer'

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- \rightarrow The material in intervening between the root and n is the same

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Deadjectival Ns

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- \rightarrow The material in intervening between the root and n is the same
- \rightarrow No syntactic difference correlates with different ns (e.g., argument structure)
- → No semantic or phonological factors that condition the allomorphy
 - \star Allomorphy of n in (28)-(30) is lexically conditioned by the root

Introduction

'Deverbal' nouns: Accent

 As we also saw in the beginning, accent in our 'deverbal' nouns can surface on n-exponents that underlyingly have it (-áč and -ác):

- (31) a. pozn-av-á-telj know-AV-TH-N 'expert'
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- Recall, accent can only surface in the first spellout domain (one categorizer)

'Deverbal' nouns

INTERIM SUMMARY II:

Allomorphy and accent placement patterns suggest that the n in BCS 'deverbal' agentive nouns is the first-merged categorizer.

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COROLLARY:

'Verbal' morphology inside these agentive nouns is not verbal.

- The morphemes exponed by -av and -iv appear in so-called secondary imperfective verbs and signal a shift in aspect (34)-(35)
 - (34) a. prouč-i-ti study-th-inf 'research'
 - (35) a. zatašk-a-ti coverup-TH-INF 'cover up'

- b. prouč-av-a-ti study-AV-TH-INF 'be researching'
- b. zatašk-iv-a-ti coverup-IV-TH-INF 'be covering up'

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- b. prouč-av-a-ti study-AV-TH-INF 'be researching'
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- They also appear in *some* agent nominals; same meaning in (36a-b) vs. (36c-d)
 - (36) a. prouč-av-a-telj study-AV-TH-N 'researcher'
 - b. zatašk-iv-a-ač coverup-IV-TH-N 'cover up agent'

- c. uruč-i-telj serve-TH-N 'process server'
- d. istovar-a-ač unload-TH-N 'unloader'

- They can appear in the context of so-called verbs of creation (cf. Kratzer 2000, Embick 2004)
 - (37)3Dštampač ie pokvaren ie maketa izašla pa 3D printer broken model is SO is came out iz-u-ništ-av-a-n-a is-pre-sav-ij-a-n-a. SP-LP-destroy-AV-TH-PTCP-F.SG SP-LP-bend-IJ-TH-PTCP-F.SG 'The 3D printer is broken so the model came out destroyed/crumpled.'

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What of the 'verbal' morphology, then? The Status of AV

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- Quaglia et al. (2022): They also appear in the derivation of (seemingly) simple nouns and adjectives—they are bound roots
 - (38)a. ruk-av-0 arm-AV-N.M.SG.NOM 'sleeve'
 - b. bles-ay-0 silly-AV-A.M.SG.NOM 'silly'

- c. maz-iv-o daub-IV-N.NEUT.SG.NOM 'grease'
- d. iez-iv-o shudder-IV-A.NEUT.SG.NOM 'creepy'

STATUS OF AV

I tentatively conclude with Quaglia et al. (2022) that av is a root.



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If all major word classes have THS, THS could then equally well be attributed to roots, as in (39) (with contextual allomorphy able to work in the familiar way)

- (39)ROOT-TH-n
 - ROOT-TH-a
 - ROOT-TH-v
 - ROOT-TH-ROOT

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- (39)a. ROOT-TH-n
 - ROOT-TH-a
 - ROOT-TH-v
 - d. ROOT-TH-ROOT
- → If this is correct, then the appearance of a TH does not necessarily indicate the presence of a verbal categorizing morpheme



• Is the decomposition always synchronic? Experimental work needed:

(40) a. d-a-ti b. **pro**-d-a-ti c. **pro**-d-a-av-ac give-TH-INF LP?-give-TH-INF LP?-give-TH-AV-N 'sell' 'seller'

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- LPs appear in all sorts of words for which a deverbal analysis is dubious (41)
 - (41) a. **na**-uč-i-ti b. **na**-uk-a c. **na**-uk-∅ LP?-study-TH-INF LP?-learn-N.NOM.SG LP?-learn-N.NOM.SG

 'learn/teach' 'science' 'lesson'
- → Also pred-stava 'play', pre-preka 'barrier', o-stava 'pantry', iz-reka 'proverb', etc.

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- I showed that 'deverbal' agentive nouns containing morphology analyzed as verbal behave for these morphophonological processes like root-derived nouns
- No syntactic evidence for verbal structure in agentive nouns; event/agent entailments do not provide evidence either
- I argued that av should be analyzed as a root, and suggested that THs and LPs may not necessarily signal the presence of verbal structure either

 I'm grateful to Masha Polinsky, Dave Embick, Tanja Milićev, Norbert Hornstein, Alex Chabot, Bill Idsardi, Heather Newell, Tobias Scheer, Hannah Sande, Jim Wood, the audience at NELS 55, & the participants of Yale's Syntax Reading Group and UMD's S-lab for valuable discussion and feedback on various aspects of this work. I'm grateful to Masha Polinsky, Dave Embick, Tanja Milićev, Norbert Hornstein, Alex Chabot, Bill Idsardi, Heather Newell, Tobias Scheer, Hannah Sande, Jim Wood, the audience at NELS 55, & the participants of Yale's Syntax Reading Group and UMD's S-lab for valuable discussion and feedback on various aspects of this work.

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Appendix A: Post-accenting elements

- There is a group of examples that form a systematic exception to the accent generalizations made here—so-called "post-accenting" elements (Halle 1997)
- Have an underlying accent, but realize it on the syllable following them
- Assuming the existence of such elements allows us to avoid having a list of pairs
 of suffixes that are segmentally identical and only differ in presence/absence of
 accent (uniform for two kinds of roots); root in (a)-(g) is post-accenting
 - (42) a. loz-á 'grape-N.NOM.SG.F'
 b. loz-é 'grape-N.GEN.SG.FEM'
 c. loz-í 'grape-N.DAT.SG.F'
 d. loz-ú 'grape-N.ACC.SG.F'
 e. loz-óm 'grape-N.INST.SG.F'
 f. loz-í.ca 'grape-N.DIM-F'
 g. loz-óv 'grape-A.POSS'

- h. dúnj-a 'quince-N.NOM.SG.F'
- i. dúnj-e 'quince-N.GEN.SG.F'
- j. dúnj-i 'quince-N.DAT.SG.F'
- k. dúnj-u 'quince-N.ACC.SG.F'
- l. dúnj-om 'quince-N.INST.SG.F'
- m. dúnj-ic-a 'quince-N.DIM-F'
- n. dúnj-ev 'quince-A.POSS