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Theme-vowel minimal pairs show argument-structure alternations

This paper investigates the correlations between theme vowel selection and argument structure in Bosnian/Croatian/Serbian (BCS). Specifically, we focus on two different theme vowels (-*i*- and -*ova*-). Since theme vowels in BCS potentially correlate with numerous factors (Arsenijević 2020), we isolate ‘minimal pairs’, i.e. cases where the same base can combine with the two theme vowels to derive different verbs (1). Our comparison shows that -*i*- derives causative transitives, unaccusatives or anticausatives, while -*ova*- productively derives unergatives as well as a restricted set of typically lexicalized transitives. We interpret these results as evidence in favor of the idea that theme vowels are associated with semantic and syntactic properties instead of being merely markers of conjugation class membership. Our findings are compatible with the default meanings for these theme vowels described for other Slavic languages in Jabłonska (2007), Taraldsen Medová & Wiland (2018) and Biskup (2019).

The existence of minimal pairs as in (1), where two verbs differ only in their theme vowel, but have the same base which is not accompanied by any other potentially confounding morphemes, allows for a natural experiment with the hypothesis that theme vowels are associated with argument structure properties. To test this hypothesis, we conducted a corpus study in which we extracted all pairs of verbs involving -*i*- and -*ova*- theme vowels preceded by the same base from the srwac corpus (Ljubešić & Klubička 2014) and supplemented that list with pairs we were able to obtain and attest independently on the web. In total, we collected 64 pairs (128 verbs). Next, we coded each of these verbs for the following properties: 1) the obligatory presence of an accusative case-marked internal argument, 2) the possibility of having an accusative case-marked internal argument. 3) the ability to derive a verbal passive, and 4) the ability to derive a passive participle form. We then examined whether these properties correlate with theme vowel selection.

The results show that verbs that involve the theme vowel -*i*- are significantly more likely than their *ova*- counterparts to require an obligatory accusative case-marked internal argument (see contrast in (2)) and to allow such an argument optionally (3). The -*i*- members of each pair are also far more likely to allow a strict verbal passive. However, verbs that have -*ova*- as their theme vowel are more likely to produce passive participles overall (see (4) for a comparison in the context of impersonal passives, the most permissive context for passive participles in BCS). Table 1 summarizes the results.

Table 1: the availability of accusative case-marked internal arguments and passive forms

	Acc_obligatory	Acc_possible	Verbal_passive	Any_n/t_form
i, i	40/64 (62.5%)	55/64 (85.94%)	44/64 (68.75%)	54/64 (84.38%)
ova, uje	3/64 (4.69%)	7/64 (10.94%)	5/64 (7.81%)	63/64 (98.44%)

We interpret these findings by suggesting that -*ova*- typically derives unergatives while -*i*- introduces the basic unaccusative structure with an internal argument (theme), which can then be further developed to include the external argument as well, thus giving rise to transitive structures. These assumptions explain why -*i*- verbs are far more likely to be transitive and derive verbal passives. The reason why -*ova*- verbs are more likely to derive passive participles lies in the fact that they are unergative. Unergatives (as well as transitives) productively derive passive participles in BCS. On the other hand, -*i*- verbs can be unaccusative, and unaccusatives cannot produce passive participles. Crucially, we restrict our claims to simple derivations involving only the base and one of these two theme vowels since other elements (e.g. prefixes) can further alter the argument structure of a verb.

The broader significance of these results and the analysis we offer concerns the role of theme vowels in VP structure. It speaks strongly in favor of the view that theme vowels do have a syntactic and/or semantic contribution instead of being pure markers of conjugation-class membership. Moreover, assuming that the analysis presented here is correct, it will be easier to understand and decompose the syntactic and semantic contributions of other elements of verbal derivations that appear together with these theme vowels. In the talk we will discuss some of these other factors, e.g., the category of the base.

(1)

- (a) mir - **i** - ti
 peace-**i**-inf
 ‘reconcile / appease’
- (b) mir - **ova** - ti
 peace-**ova**-inf
 ‘rest (e.g. in order to recover from an illness)’

(2)

- (a) Petar je mir-i-o *(braću).
 Petar AUX peace-i-PAST brothers.ACC
 ‘Petar reconciled his brothers’
- (b) Petar je mir-ova-o (*braću).
 Petar AUX peace-ova-PAST brothers.ACC
 ‘Petar rested’

(3)

- (a) Petar je sud-i-o (utakmicu).
 Petar AUX judge-i-PAST match.ACC
 ‘Petar refereed (the match)’
- (b) Petar je sud-ova-o (*parnične postupke).
 Petar AUX peace-ova-PAST litigation procedures.ACC
 ‘Petar worked as a judge’

(4)

- (a) *Tamo je puno (štet-i-en-o →) štećeno.
 There AUX a lot damage-i-PASS.PTC-Neuter
 Intended: ‘There was a lot of damaging there’
- (b) Tamo je puno štet-ova-n-o.
 There AUX a lot damage-ova-PASS.PTC-Neuter
 ‘One has suffered a lot of damage there.’

References

Arsenijević, Boban. 2020. How arbitrary/deterministic is theme vowel assignment? Quantitative insights from Serbo-Croatian. Talk delivered at SlavLingColl (HU Berlin), 25.11.2020. **Biskup, Petr. (2019).** *Prepositions, case and verbal prefixes: The case of Slavic*. John Benjamins Publishing Company. **Jablonska, Patrycja. (2007).** *Radical decomposition and argument structure* (Doctoral dissertation, University of Tromsø). **Ljubešić, Nikola & Klubička, Filip. (2014).** {bs,hr,sr}WaC - Web corpora of Bosnian, Croatian and Serbian. *Proceedings of the 9th Web as Corpus Workshop (WaC-9)*. **Medová, Lucie & Wiland, Bartosz. (2019).** Semelfactives are bigger than degree achievements. *Natural Language & Linguistic Theory*, 37(4), 1463-1513.