What does phonology know about theme vowels? Theme-vowel-avoiding stress in stress standard BCMS?

Simonović & Kager (2023) discuss a group of varieties of standard BCMS in which verbal prosody is predictable and stress falls on the syllable preceding the theme vowel. This is illustrated in (1) by what the authors term *transparent verbs*, i.e. verbs in which the theme vowel can be straightforwardly identified in the word, and its vocalic portion is preceded by a consonant.

(1)　Predictable verb prosody in stress standard BCMS: Transparent verbs

	INF	PRS.1PL	PAST.F.SG	PASS.PTCPL	gloss
	raˈtʃun-a-ti	raˈtʃun-a-mo	raˈtʃun-a-la	raˈtʃun-a-t	'calculate'
	ustaˈnoʋ-i-ti	ustaˈnoʋ-i-mo	ustaˈnoʋ-i-la	ustaˈnoʋ-ʎ-en	'found'
	penzijoˈnis-a-ti	penzijoˈniʃ-e-mo	penzijoˈnis-a-la	penzijoˈnis-a-n	'retire'
	zabeˈzek-nu-ti	zabeˈzek-ne-mo	zabeˈzek-nu-la	zabeˈzek-nu-t	'shock'

Although transparent verbs make up an overwhelming majority of BCMS verbs (around 80%), the remaining verbs show different complications of the system. First, there is a class of verbs analysed as denominal, in which the prosody of the noun gets preserved, as illustrated in (2). All these verbs contain the suffix oʋ/u preceding the theme vowel a/je.

(2)　Preserved nominal prosody in denominal verbs

related noun	INF	PRS.1PL	gloss
ˈtrijuɱf	ˈtrijuɱf-oʋ-a-ti	ˈtrijuɱf-u-je-mo	'triumph'
koˈmanda	koˈmand-oʋ-a-ti	koˈmand-u-je-mo	'command'

Remaining verbs have predictable prosody, but present different deviations from the pattern of the transparent verbs, thereby revealing other preferences in the system. For instance, 3 verbs allow stress on the theme vowel because their roots do not contain stressable material. However, as soon as the negation particle is used before the verb, stress ends up on the negation particle. This is illustrated in (3).

(3)　Consonantal roots allow stress on the negation particle

INF	PRS.1PL	NEG PRS.1PL	gloss
ˈzn-a-ti	ˈzn-a-mo	ˈne zn-a-mo	'know'
ˈsm-e-ti	ˈsm-e-mo	ˈne sm-e-mo	'dare'

In verbs where the theme vowel is preceded by another vowel without an intervening underlying consonant, the vowel preceding the theme vowel is also avoided by stress, as stress appears on derivational prefixes if they are available. In the examples in (4) po- and o- are derivational prefixes that carry stress in all the presented forms.

(4)　Vowels preceding theme vowels are avoided by stress if a derivational prefix is present

INF	PRS.1PL	NEG PRS.1PL	gloss
ˈpop-(î)-∅-ti	ˈpop-(î)-j-e-mo	ne ˈpop-(î)-j-e-mo	'drink up'
ˈob-(û)-∅-ti	ˈob-(û)-j-e-mo	ne ˈob-(û)-j-e-mo	'put on (shoes)'

However, stress on vowels directly preceding theme vowels is not avoided as much as stress on theme vowels is. If the verbal roots like those in (4) show up without derivational prefixes, stress does not jump to the negation particle, as illustrated in (5).

(5)   Vowels preceding theme vowels carry stress if no derivational prefix is present

	INF	PRS.1PL	NEG PRS.1PL	gloss
	ˈp-ⓘ-∅̲-ti	ˈp-ⓘ-j e̲ -mo	ne ˈp-ⓘ-j e̲ -mo	'drink'
	ˈtʃ-ⓤ-∅̲-ti	ˈtʃ-ⓤ-j e̲ -mo	ne ˈtʃ-ⓤ-j e̲ -mo	'hear'

In order to capture the different propensities of the various domains to carry stress, Simonović & Kager (2023) propose an OT grammar in which the stress assignment mechanism has direct access to fine-grained morphological structure. Specifically, phonological constraints are sensitive to incorporated nominal structure, but also to a four-way distinction within verbs. At one extreme is the absolutely unstressable inflectional material, followed by the rarely stressed theme vowels. Next in line is other non-lexical material, such as the negation particle and the vowels that precede theme vowels, which are argued to be a kind of theme vowels as well. Finally, there is truly lexical material contained in derivational prefixes, suffixes, and roots.

In this presentation, I will consider more modular alternatives to the proposal in Simonović & Kager (2023). Specifically, I will argue that theme vowels are outside the spellout domain of the verb, which is why they do not play a role in stress assignment. Verbal prosody amounts to contructing a final quantity-sensitive trochee, which can be a heavy syllable (H), two light syllables (LL), and, when there is no other available material, a single light syllable (L). This would mean that all words in (1) have stress assigned to the final heavy final syllable before the theme vowel is added to the structure. However, unlike inlectional material, which can never become part of the stress assignment domain, theme vowels can be included in this domain to satisfy prosodic constraints. This happens in rare cases where stress cannot be realised on the root material (as in the first two forms in (3)), the stress domain gets extended by the theme vowel, and stress can be assigned to a light syllable, forming a degenerate foot. As expected, as soon as a further syllable is available (e.g. through the introduction of the negation particle), stress can shift to the negation particle, and a regular LL trochee can be constructed. Crucially, the theme vowel that once got included in the domain, stays within the domain. In the forms in (5), the PRS.1PL form, upon the domain extension to the theme vowel, contains a well-formed LL trochee, and no stress shift to the negation particle is needed. Finally, in the examples in (5), an well-formed LL trochee can be constructed on the lexical material from the outset, so that no domain extension to the theme vowel is ever needed.

Regarding the denominal verbs in (2), I share the central assumptions of Simonović & Kager (2023), but I argue that oʋ/u is itself a nominal theme, which shows up in various (de)nominal contexts. This is also matched by the fact that oʋ/u are never lexically stressed, but can appear stressed in the few verbs with consonantal roots, which behave just as their counterparts in (5).

(6)   Verbs with oʋ/u and consonantal roots

	INF	PRS.1PL	NEG PRS.1PL	gloss
	ˈtr-oʋ-a̲-ti	ˈtr-ⓤ- je̲ -mo	ne ˈtr-ⓤ- je̲ -mo	'poison'
	ˈps-oʋ-a̲-ti	ˈps-ⓤ- je̲ -mo	ne ˈps-ⓤ- je̲ -mo	'swear'

References

Simonović, Marko & René Kager. 2023. Avoiding stress on non-lexical material in nouns and verbs: predictable verb prosody in Serbo-Croatian stress standard varieties. *Linguistics* 61(5). 1105–1130.