

Monopositional syllabic consonants: Evidence from Slovene and English

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Intro

- syllabic consonants: "phonological hermaphrodites" (Scheer 2004): mixtures of vocalic and consonantal characteristics (phonetic consonants in a vocalic phon. function)
- (synchronically or diachronically) arise from the deletion of a vowel (schwa, yer) and the subsequent spreading of the melody of the following consonant (typically, a sonorant)
- native intuition/versification: syllable peaks



Roadmap

- theoretical frameworks considered: (standard) Government Phonology (GP) and Strict CV (or CVCV) Phonology – representation-based phon.
- previous proposals for the representation of syllabic cons's: "hermaphrodites" bec. *both* C and V
- present proposals: (i) syllabic cons's may not have a uniform structure within a phonological system; and (ii) certain syllabic cons's are in fact monopositional



Theoretical framework

- GP/CVCV Phon.: input-oriented non-derivational representation-based framework
- phon. structure: CVCV tier + melodic tier (unary elements)
- surface clusters of consonants/vowels sandwich empty prosodic slots, whose licensing/silencing is a function of the phonological ECP + parameters



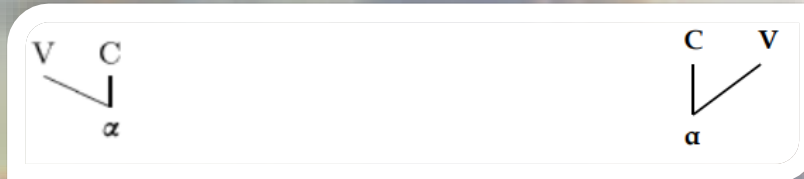
Previous proposals: two major solutions

left-branching VC structure

- Szigetvári 1999, Scheer 2004, Garami 2019, etc.
- a consonantal head spreads onto a vocalic position on its left

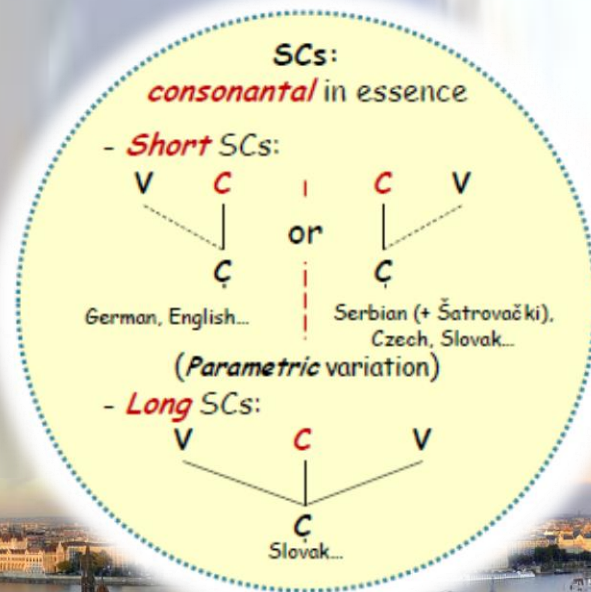
right-branching CV structure

- Rowicka 1999, Blaho 2004, etc.
- a consonantal head spreads onto a vocalic target in a CV string



Previous proposals: two major solutions

- plus: independently of each other, Caratini et al. 2011 and Polgárdi 2015 suggest that the choice between VC and CV is subject to parameter setting:



Previous proposals: two major solutions

- plus: independently of each other, Caratini et al. 2011 and Polgárdi 2015 suggest that the choice between VC and CV is subject to parameter setting
- at the same time, both studies explicitly argue against the monopositional representation, when the syllabic consonant solely occupies a V position



Previous proposals: two major solutions

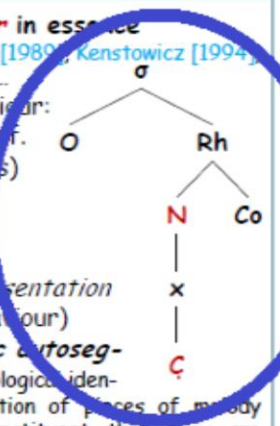
- plus: independently of each other, Caratini et al.

Issue: Syllabic consonants (SCs) (Dobson & Li 2015)

- SCs are 'phonological hermaphrodites':
- SCs are 'consonants which behave like vowels'
- Anchoring of SCs:
 - in the **nucleus** - Option 1
 - vs. in a **consonantal** position - Option 2
- Structure of SCs:
 - right-** - Option 2a
 - vs. **left-** - Option 2b
 - vs. **right-** and **left-**branching - Option 2c

Argument:
 Two distinct empirical situations regarding SCs:
 - effects to their **left** (the **nucleus to their left** is active)
 - effects to their **right** (the **nucleus to their right** is active)
 → **Option 1** cannot express this variation

Option 1. SCs are nuclear in essence
 Literature: Carr [1993], Hayes [1989], Kenstowicz [1994], Rubach [1977], Spencer [1996]...
 SCs show vowel-like behaviour:
 - SCs are **syllable peaks** (cf. poetry; counted by natives)
 - SCs may bear **stress** (at least in certain languages)
BUT:
 - **Confusion** between **representation** (shape) and **function** (behaviour)
 - **Strong violation of basic autosegmental principles:** the phonological identity as well as the pronunciation of SCs depends on the type of constituent that they are attached to.



(A)

	æC	Ç	Glosses
G.	dunkel [ˈdʊŋkəl]	[ˈdʊŋk]	"dark"
	Boden [ˈboːdən]	[ˈboːdɪŋ]	"floor"
	Leben [ˈleːbən]	[ˈleːbɪŋ]	"life"
	Degen [ˈdeːgən]	[ˈdeːgɪŋ]	"sword"
	Hafen [ˈhaːfən]	[ˈhaːfɪŋ]	"harbour"
	einem [ˈʔaɪnəm]	[ˈʔaɪnɪŋ]	"a, one"
E	bottle [ˈbɒtəl]	[ˈbɒt]	"bottle"
	button [ˈbʌtən]	[ˈdʊŋk]	"button"
	rhythm [ˈrɪðəm]	[ˈrɪðɪŋ]	"rhythm"

→ Ç = æC, in English and German

Conclusion:
 - SCs sit in onsets and branch either on a preceding or a following nucleus
 - **Parametric variation:** left- vs. right-branchingness
 - **Long SCs** (like long vowels) branch on 2 nuclei (**left AND right**, cf. Slovak)
 → Can **left-** AND **right-**branchingness coexist within a single language?

OSL in (Standard) German:

	MHG	NHG	Glosses
- CV	berē [ˈbɛrɛ]	[ˈbɛrɛ]	"berry"
- Cæ	zūel [ˈzʊɛ]	[ˈzʊɛ]	"train"

SCs:
consonantal in essence
 - **Short SCs:**
 V C | C V

	Serbian	Šat
C...r#	smor stvar	
C...C#	cvet vic grad	

→ Ç = Co, i

	Forms
	dr̩čēt vl̩hky̯ br̩nknot
Cz	natr̩pkly̯
	bl̩bec



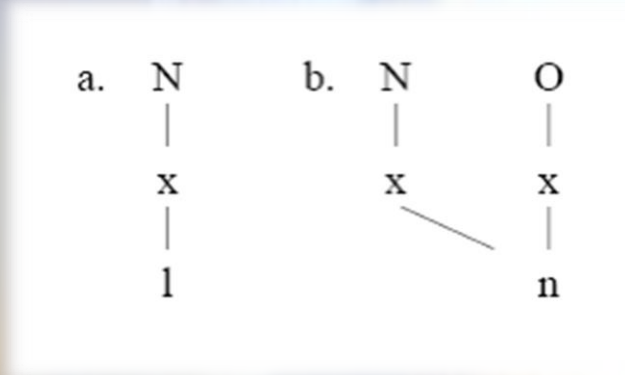
Previous proposals: Toft 2002

- the syllabic consonants of (Southern British) English
- difference between syllabic /l/ and /n/:
 - /l/ is syllabic irrespective of context, whilst the distribution of syllabic /n/ is context-dependent, after both singletons (e.g. *bottle* and *button*) and clusters (in words like *dwindle* and *London*)
 - wrt duration, syllabic /l/ patterns like onset /l/, not like coda /l/, nor as a distinct category; whereas syllabic /n/ patterns like coda /n/, and not like onset /n/, nor as a distinct category



Previous proposals: Toft 2002

- Toft's conclusion: the representations of the two syllabic sonorants differ:



- i.e., syllabic /l/ exclusively sits in a V position, while syllabic /n/ is a complex structure filling a VC string

Evidence from tapping accents

- mentioned in Toft 2002 and analysed in detail in Balogné Bércecs 2005:
- tapping more readily takes place before a syllabic /l/ <- it occupies a V position, the situation simply reduces to the intervocalic case
- a word like *battle* is expected to exhibit the same behaviour (tapped /t/ plus syllabic /l/) as a word like *Betty* does (tapped /t/ plus vowel)



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a. *battle*

C	V	C	←	V
b	æ	t	←	l

b. *button*

C	V	C	v	C	^{ms} v
			\		
b	ʌ	t		n	

Evidence from tapping accents

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- syllabic /n/ is indeed a left-branching structure including the historical consonantal position

a. *battle*

C	V	C	←	V
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b. *button*

C	V	C	v	C	^{ms} v
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b	ʌ	t		n	

Evidence from tapping accents

- mentioned in Toft 2002 and analysed in detail in Balogné Bércecs 2005:
- syllabic /n/ is indeed a left-branching structure including the historical consonantal position
- it produces a consonantal environment for a preceding /t/, which may undergo glottalling as a result even in a tapping accent (cf., e.g., General American *buttn* [?])

a. *battle*

C	V	C	←	V
b	æ	t	←	l

b. *button*

C	V	C	v	C	v
			\		
b	ʌ	t		n	v

Present proposals: syllabic /r/ in E

- extend the monopositional analysis to syllabic /r/ in rhotic accents of English
- it behaves as a short, zero-stressed vowel (schwa) when unstressed (cf. *better* [r])
- (a related proposal is made in Szigetvári (2011: 72f): English syllabic /r/ (or an r-coloured schwa) is singly linked to a V position, while other syllabic consonants are VC sequences)



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Syllabic and nonsyllabic 'glides'

a. [i]	b. [j]	c. [u]	d. [w]	e. [ɚ]	f. [r]
V	C	V	C	V	C
i	i	u	u	r	r

Present proposals: syllabic /r/ in E

- stressed syllabic /r/ patterns with long/“tense”/ “bimoraic” vowels:
 - it triggers no tapping (cf. words like *taciturn*)
 - + distributional evidence (Hammond 1999: 143–147) -> stressed syllabic /r/ behaves as a complex “bimoraic” sequence



Cooccurrence of [r] with various coda clusters

	Tense	Lax	ay	aw	r
sp	–	hasp [hæsp]	–	–	–
st	beast [bɪst]	last [læst]	heist [haɪst]	roust [raʊst]	burst [bɜːst]
sk	–	ask [æsk]	–	–	–
lp	–	help [hɛlp]	–	–	–
lt	bolt [bɔlt]	belt [bɛlt]	–	–	–
lk	–	milk [mɪlk]	–	–	–
mp	–	ramp [ræmp]	–	–	–
nt	faint [fɛnt]	rant [rænt]	pint [p ^h ɪnt]	count [kaʊnt]	(burnt [bɜːnt])
ŋk	–	rank [ræŋk]	–	–	–
ps	–	lapse [læps]	–	–	–
ts	–	blitz [blɪts]	–	–	–
ks	–	fix [fɪks]	–	–	–

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- in CVCV phonological terms: a VCV sequence
- cf. Caratini et al. 2011

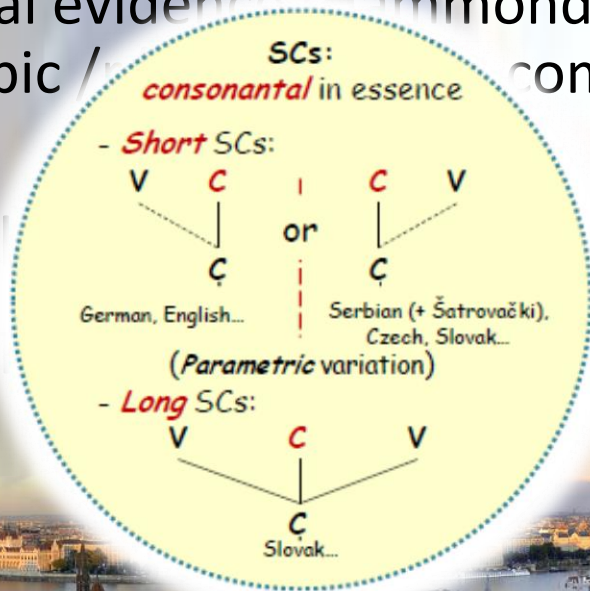


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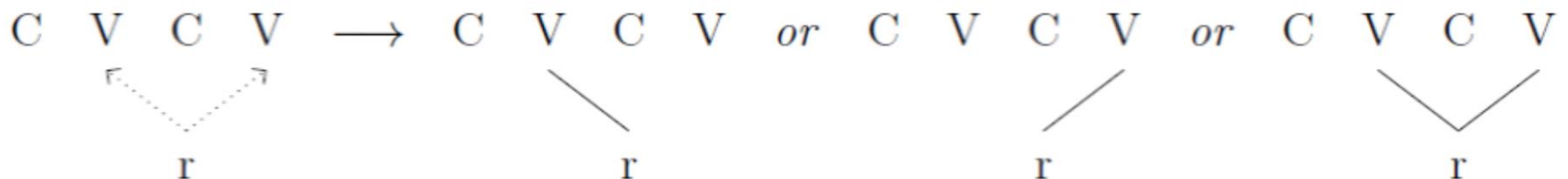


sequence

Present proposals: syllabic /r/ in E

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 - it triggers no tapping (cf. words like *taciturn*)
 - + distributional evidence (Hammond 1999: 143–147) -> stressed syllabic /r/ behaves as a complex “bimoraic” sequence
- in CVCV phonological terms: a VCV sequence
- cf. Caratini et al. 2011; cf. Savu 2019:

Slovak syllabic consonant



Interim conclusions

- syllabic cons's do not have a uniform structure – universally – parametrically – within a phonological system
 - /l/ versus /n/ in English
- certain syllabic cons's are in fact monopositional
 - /l/ and /r/ in English (at least) – the most sonorous cons's, with glide-like behaviour (vocalisation – linking – insertion/intrusion, cf. Balogné Bérce 2008)
- stressed syllabic /r/ in rhotic E is long: V(C)V



Present proposals: /r/ in Slovene

- to supplement the English (Germanic) example with illustration from a Slavic language
(we have Slovene, Polish, Czech and Slovak within the scope of our investigations)
- Slovene syllabic /r/: surprising freedom in its distribution:
 - word-finally and preconsonantly (e.g., *vrh* ‘top’)
 - plus: word-initially (e.g., *rdeč* ‘red’), where other Slavic languages treat historically yer-related sonorants as “trapped”, i.e., as non-nuclear: Czech *lhat* (‘to die’), Russian *rta* (‘mouth GenSg’), Slovak *rmut* (‘haze NomSg’)



Present proposals: /r/ in Slovene

- syllabic trill in Slovene: a ə+C sequence, inherent ə or **syllabic allophone** of r?
- in “ə+C” sequences the /ə/ is a phonetic element present in nuclear and non-nuclear trills as an essential part of trill production (Jones 2002)
- that is, what sounds like a ə+C sequence is *phonologically* a single syllabic consonant



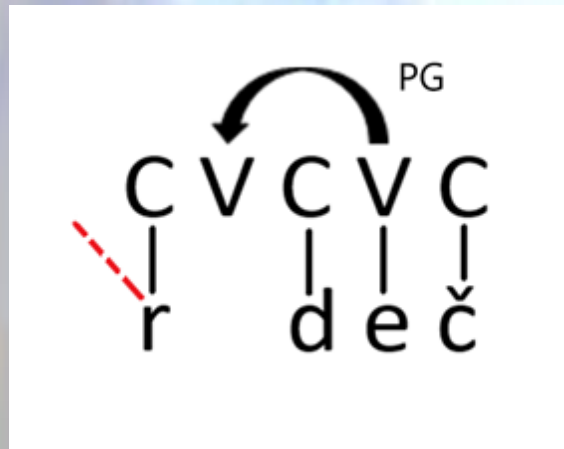
Present proposals: /r/ in Slovene

- it behaves as a vowel (hence the distributional freedom)
- it may even receive stress, in which case it behaves as a long vowel similarly to the “plain” vowels of Slovene



/r/ in Slovene – in CVCV Phonological terms

- /r/ in word-initial position



- syllabic cons's are left-branching – but where to spread word-initially?

Present proposals: /r/ in Slovene



Conclusions

- evidence for monopositional syllabic consonants
- (at least) the liquids /l/ and /r/ are capable of exhibiting glide-like behaviour: the same melodic set-up being consonantal/non-syllabic in C position and vocalic/syllabic in V position
- in *certain* phonological systems (languages/ varieties)



Conclusions

- /r/: distributional evidence in English (Hammond, Szigetvári) and Slovene + prevocalic lenition context in English
- /l/: distributional and phonetic evidence in English (Toft) + prevocalic lenition context in English
- remaining issues, e.g.:
 - parameters?
 - the function of the melody/sonority of the cons?
 - Slovene /r/ not “satisfied” with being trapped initially?



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