There are *two* kinds of syllabic consonants: (Germanic) *left-branchers* and (Slavic) *right-branchers*

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0. The Issue: Syllabic Consonants (SCs)

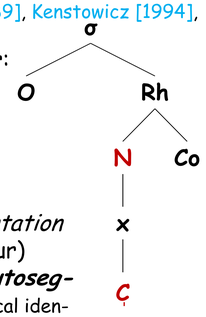
SCs are 'phonological hermaphrodites':
SCs are 'consonants which behave like vowels'

- 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**

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 pieces of melody depends on the type of constituent that they are attached to.

That is, [j] and [i] for example have the same melodic identity, the difference being one of association: [j] is produced if the melody is dominated by an onset, [i] in case it depends on a nucleus. Therefore something that is associated to a nucleus (and to nothing else) cannot be pronounced as a consonant.

-> ***No symmetry*** between consonants standing in nuclear position (SCs) and vowels standing in consonantal position (glides): a vowel (e.g. [i]) sitting in a consonantal position is pronounced as a consonant (e.g. [j]) but a consonant which sits in a nucleus is **NOT** pronounced as a vowel

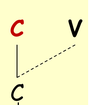
-***Alternations*** between *Ç* and *əC*

Option 2. SCs are *consonantal* in essence...

... because they ***sit in onsets***. Vocalic behaviour of SCs: SCs branch on a neighbouring nucleus.

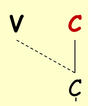
Option 2a. SCs are *right*-branching

Literature: Blaho [2001], Rennison [1999:333ff], Rowicka [2001], Scheer [2009], Ziková [2007]...



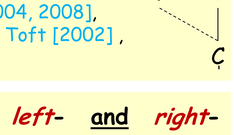
Option 2b. SCs are *left*-branching

Literature: Hall [1992:35ff], Harris [1994:224f], Scheer [1998, 2004, 2008], Szigetvári [1999:117ff, 2001], Toft [2002] , Wiese [1996:246]...



Option 2c. SCs are *left-* and *right*-branching

Problem:
2 nuclei filled with a piece of melody ➔ equivalent of a ***long vowel*** *Ç*



Literature: Blaho [2001:23ff, 2004:46]...

Argument:

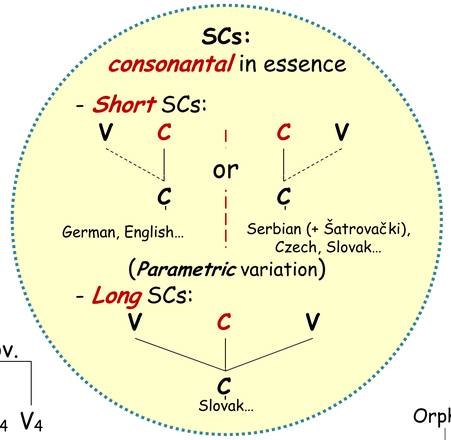
Two distinct empirical situations regarding **SCs**:
- effects to their *left* (the ***nucleus to their left*** is active)
- effects to their *right* (the ***nucleus to their right*** is active)

➔ **Option 1** cannot express this variation

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?



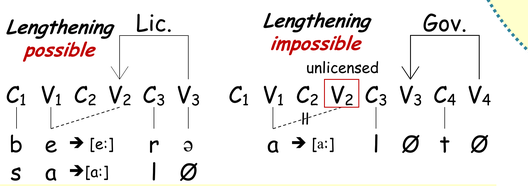
(A)

		əC	Ç	Glosses
G.	*dunkel*	[ˈdʊŋkəl]	[ˈdʊŋkl̩]	"dark"
	Boden	[ˈboːdən]	[ˈboːdn̩]	"floor"
	Leben	[ˈleːbən]	[ˈleːbm̩]	"life"
	Degen	[ˈdeːgən]	[ˈdeːgŋ̩]	"sword"
	Hafen	[ˈhaːfən]	[ˈhaːfm̩]	"harbour"
	einem	[ˈʔa͡inəm]	[ˈʔa͡inm̩]	"a, one"
E.	*bottle*	[ˈbɒtəl]	[ˈbɒtl̩]	"bottle"
	button	[ˈbʌtən]	[ˈdʊŋkl̩]	"button"
	rhythm	[ˈɹɪðəm]	[ˈɹɪðm̩]	"rhythm"

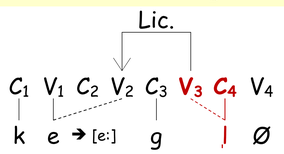
➔ *Ç* = *əC*, in English and German

OSL in (Standard) German:

	MHG	NHG	Glosses
_ C V	*bere*	[ˈbeːɪə]	"berry"
_ C Ø	*zu/g/*	[ˈt͡suːk]	"train"
_ C Ç	*kegel*	[ˈkeːgl̩]	"cone"
	Boden	[ˈboːdn̩]	"floor"
_ CC V	*hahse*	[ˈhaksə]	"knuckle"
_ CC Ø	*alt*	[ˈalt]	"old"
_ CC Ç	*insel*	[ˈʔɪnzl̩]	"island"
	hinten	[ˈhɪntn̩]	"behind"



➔ **SCs** are *left*-branching in German

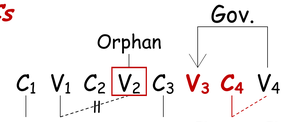


(C) Eastern Middle German

Literature: Paul, Wiehl & Grosse [1998 (1881)], Schirmunski [1962 (1956)]...

Standard language: OSL affected MHG short vowels followed by *full vowels*, *empty nuclei* and ***SCs***

Eastern Middle German (EMG):
OSL did **not** take place before SCs
E.g. MHG *vater* > *V*[aː]*ter* (stand.) *vs. V*[a]*ter* (EMG) "father"



SCs were **not able to license** a preceding nucleus in EMG
➔ SCs are **not** *left*-branching in EMG
➔ SCs are *right*-branching in EMG

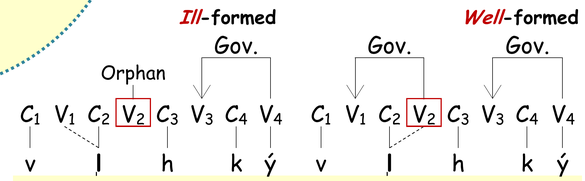
(B)

		Serbian	Šatrovački	Glosses
C…r#	*smor*	*ṛsmo*	*ṛsmo*	"boredom"
	stvar	*ṛstva*	*ṛstva*	"thing"
C…C#	*cvet*	*təcve*	*təcve*	"flower"
	vic	*cəvi*	*cəvi*	"joke"
	grad	*dəgra*	*dəgra*	"city"

➔ *Ç* = *Cə*, in Serbian

	Forms	Glosses
Cz	*dr̥nčet*	"(to) rattle"
	vl̥hký	"humid"
	br̥nknout	"(to) jingle"
	nat̥pklý	"(to) be a little bitter"
	bl̥bec, bl̥b-øc-e	"idiot (Nom. Sg., Gen. Sg.)"
Se.	*Gr̥čka*	"Greece"
	dr̥ndanje	"rubbing"
Sl.	*sr̥nka*	"roe"
	tl̥stý	"fat"
	pr̥st	"finger"
	hr̥sť	"fist"

(Blaho [2004:24])



➔ **SCs** are *right*-branching in Cz, Se. and Sl.

(D) Short vs. long SCs in Slovak

Literature: Blaho [2001, 2004]

- ***No minimal pairs*** (minimal pairs are attested for long vs. short vowels)
- Speaker intuition rather ***not reliable*** for distinguishing long and short SCs

BUT: Good ***phonological evidence*** from Rythmic Law

Case markers with underlyingly long vowels (e.g. Dat. Pl. *-ám*) shorten when the root vowel is long (prohibition of two long vowels in a row)

a. and b. ➔ reaction on short vs. long root vowels
c. and d. ➔ 2 classes of SCs: SCs under d. do, SCs under c. do not provoke shortening of *-ám*

		Nom. Sg.	Dat. Pl.	Glosses
Sl. (Blaho [2001:11])	a.	*žena*	*žen-ám*	"woman"
		ulica	*ulic-ám*	"street"
	b.	*lúka*	*lúk-am*	"meadow"
		knieža	*kniež-am*	"prince"
	c.	*sr̥na*	*sr̥n-ám*	"roe"
		vl̥na	*vl̥n-ám*	"wave"
	d.	*vŕba*	*vŕb-am*	"willow"
		hl̥bka	*hl̥bk-am*	"depth"

1. *Left-* vs. *right*-branching of SCs: diagnostics

Two kinds of **tests/diagnostics**

A. Relationship with a preceding (schwa-like) nucleus, cf. **(A)**:
- in *diachrony*

e.g.: ***əC*** > ***Ç***: NHG *dunkel* [ˈdʊŋkl̩] < OHG *tunkal*
Eng. *button* [ˈbʌtn] < Fr. *botᴐn*
- and/or in *synchrony* (free variation)

e.g.: free variation between *əC* and *Ç*
NHG *dunkel* [ˈdʊŋkl̩] or [ˈdʊŋkl̩] "dark"
Eng. bottle [ˈbɒtəl] or [ˈbɒtl̩]

B. Behaviour of SCs with regards to a following consonant cluster (CC), cf. **(B)**:
(• in *diachrony* or)
• in *synchrony*

e.g.: SCs may be followed by the same CCs as real vowels in Czech, Slovak and Serbian
SCs may never be followed by complex coda(-onset) clusters in English and German

2. Complementary distribution of diagnostics:
Language exhibit **evidence for A OR for B** – not for both at the same time

English and German: SCs alternates with *əC*
SCs are **never** followed by *CC*s
Serbian, Czech etc. : *Ç* alternates with *Cə*
SCs may be followed by *CC*s

➔ Two very different structures appear as SCs on the surface
➔ The difference between German-like and Czech-like SCs cannot be accounted for if we assume that SCs simply sit in the nucleus

3. Conclusion

Two kinds of effects observed => two situations
- **Situation 1:** Relationship with **preceding nucleus** e.g. English and Standard German (cf. **(A)**)
- **Situation 2:** Relationship with **following nucleus** e.g. Czech, Serbian, Slovak and EMG (cf. **(B)**)

➔ Two kinds of SCs – *left-* vs. *right-*branchingness of SCs is a language-specific **parameter**

Prediction: within a single language, the preceding and the following nucleus cannot be active at the same time… except in systems where SCs are contrastive for length, e.g. Slovak (cf. Blaho [2004])

4. Discussion

Can *left-*branching **and** *right-*branching SCs coexist within a single language?
If **yes:** left- vs. right-branchingness = lexical
If **no:** True, universal parameter

5. Key

CC "Consonant Cluster" // *Cz* "Czech" // *Dat.* "Dative" // *E.* "English" // *EMG* "Eastern Middle German" // *Gov.* "Government" // *Lic.* "Licensing" // *MHG* "Middle High German" (1050-1350) // *NHG* "New High German" (1650-) // *Nom.* "Nominative" // *Pl.* "Plural" // *SC* "Syllabic Consonant" // *Se.* "Serbian" // *Sg.* "Singular" // *Sl.* "Slovak"

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