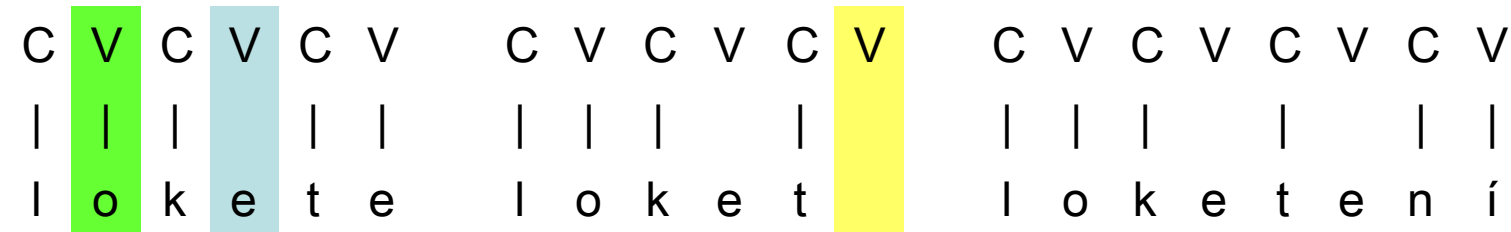


2 regular vowel-zero alternations in CVCV

- regular vowel-zero alternations in CVCV

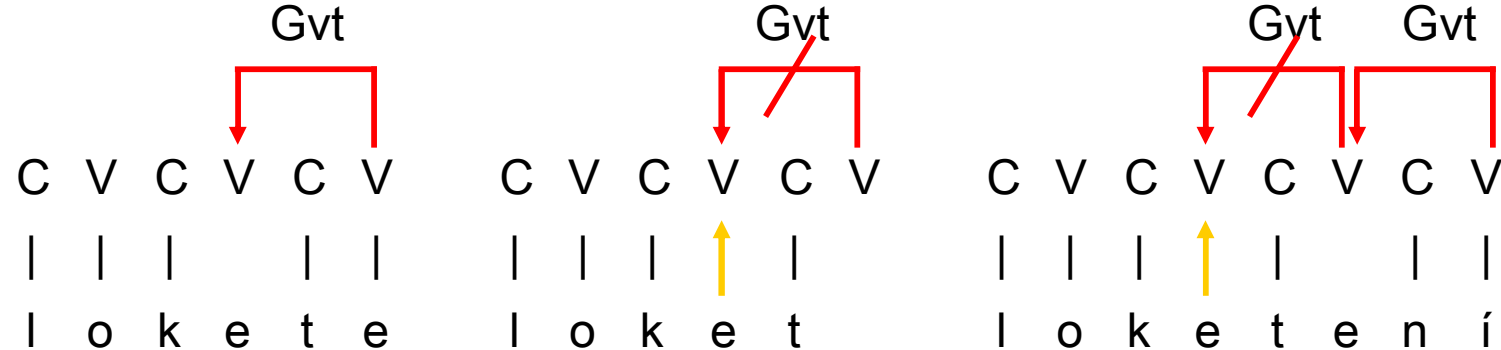
- lexical ingredients** Czech "elbow"
- a. lokt-e GENsg b. loket NOMsg c. loket-ní adjective



(6) implementation of Havlík vs. Lower

-
- Havlík**
- Old Cz dom-*oč*-ek
- C V C V C V
- | | | | |
- d o m e č e k
- Gvt Gvt
- Lower**
- Mod Cz dom-eč-ek
- C V C V C V
- | | | | |
- d o m e č e k
- Gvt Gvt

- a. lokt-e GENsg b. loket NOMsg c. loket-ní adjective



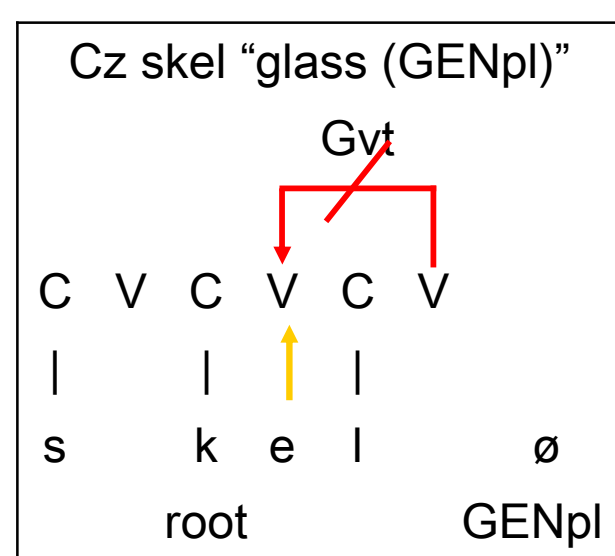
suffixal-initial vowels must float

Cz *skel-o "glass(NOMsg)"

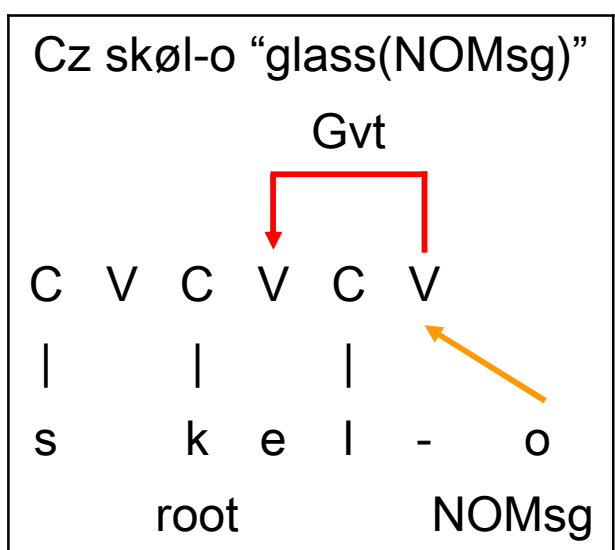
Gvt

C	V	C	V	C	V	-	C	V
			↑					
s		k	e	l				o

root NOMsg

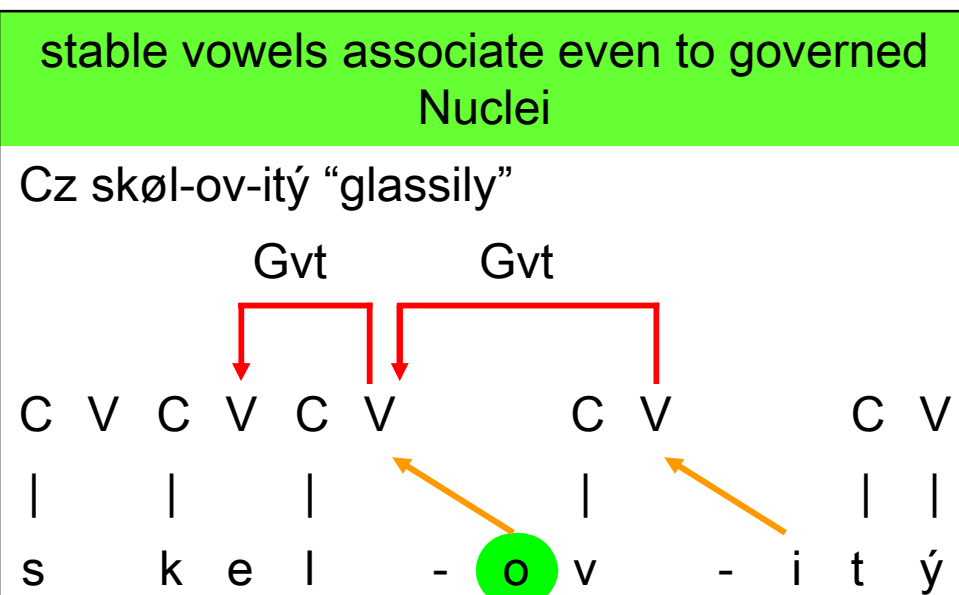
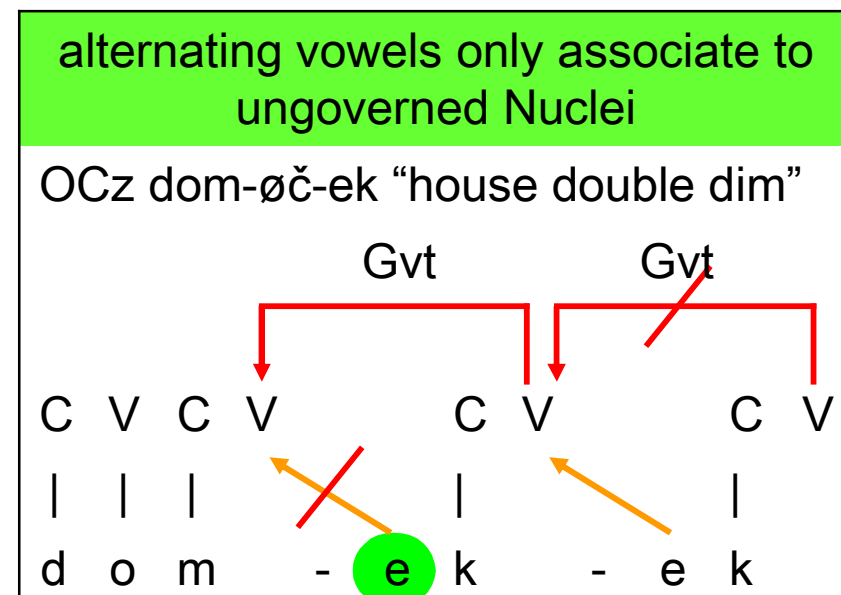


- c. hence suffix-initial vowels must float, but some of them are also stable, i.e. non-yers.
- This then is in contradiction with the definition of alternating vowels as floating melodies.
- o is NOT a yer: it remains stable**
- Cz skól-ov-itý "glassily"
- Gvt Gvt
- C V C V C V C V C V
- | | | | | | |
- s k e l - o v - i t ý



5 solution 1 – alternating vs. non-alternating vowels

- (8) solution 1: only alternating vowels care for Govt
alternating vs. non-alternating vowels
 - a. the difference is the sensitivity to Government:
alternating vowels care for Government, stable
vowels do not
 - b. stable vowels:
if not floating, are lexically associated
if floating, associate to any nucleus available no
matter whether it is governed
 - c. alternating vowels:
always float lexically
can only associate to ungoverned Nuclei



7 where we stand now

- (10) summary
 - a. diachronically, thus, all that has happened between OCz and ModCz is that -ek has become cyclic.
 - b. Gussmann & Kaye (1993)
 - the solution favoured here is Gussmann & Kaye's (1993). In their vocabulary, -ek is analytic (=cyclic) in Lower systems, and alternating vowels in a row survive because of the robustness of analytic domains.
 - c. they did not oppose Lower to Havlík, though.
 - d. and they needed "reduction", i.e. to cut out empty VC units from the syllabic string. Reduction occurred only with vowel-zero alternations of the Lower type, nowhere else in the grammar.
 - e. reduction is not needed in our analysis because, unlike Gussmann & Kaye, we make a difference between floating and stable vowels: all suffix-initial vowels float (in Czech).

6 solution 2 – Havlík vs. Lower

- (9) solution 2: phase-sensitive affixes
- Havlik vs. Lower**
- a. Havlik vs. Lower has a procedural, rather than a representational encoding.
 - b. hence: a given affix has exactly the same representation in Havlik and Lower systems.
 - c. yer-initial suffixes may or may not be cyclic
Havlik: they are not = sit in the same phase as the preceding morpheme
Lower: they are = do not sit in the same phase as the preceding morpheme
 - d. suffixes with a stable vowel are always non-cyclic, i.e. sit in the same phase as the preceding morpheme.
 - e. fair question:
why is it that only suffixes with alternating vowels can be cyclic?
Why should a phonological property determine the cyclic behaviour of its host?
==> phases are phonology-driven, cf. below.

8 Phase theory

- (11) Phase theory
 - a. phase-triggering as a property of affixes (or affix-classes) is an idea first put forth by Halle & Vergnaud (1987).
 - b. hence phases are phonology-driven: there is one when we observe its phonological effects.
 - c. ideally, the phonological traces of a phase coincide with morphological and/or syntactic properties of affixes. This is the original Lexical Phonology generalisation called affix ordering.
 - d. a completely different perspective is **“node-driven phase”**: Marvin (2002) says that phases are triggered at every xP. Piggott (2006), Piggott & Newell (ms) also follow this track: he distinguishes strong (DP, CP) and weak (xP) phases.
 - e. node-driven phase is certainly a desirable thing to have, but it appears to fall foul of the most basic and best known generalisations regarding English class 1 – class 2 morphology: **origin-ality** has two suffix xPs, but not a single phase is triggered – otherwise stress would not be penultimate (cf. parén-tal vs. párent-hood).
 - f. pejs-ek vs. ps-ik “dog dim (both)”
if alternating vowels sit in a phase of their own in Lower systems, this example shows that there are phases which owe nothing to morpho-syntax at all: in absence of contrasting behaviour, -ek and -ik realize the same pieces of the morpho-syntactic structure. The only difference is phonological: the initial vowel of -ek, but not of -ik, alternates with zero.
 - g. phase theory is still at an embryotic level of development. One thing that needs to be sorted out, for instance, is the question whether there is any need for phases without traces in the interpretative modules at all.
 - h. our best guess: phases exist for reasons of interpretation (Chomsky: UG reduces to merge and phase), hence

9 conclusion

- (12) conclusion
- a prediction is made: since the existence of a phase supposes concatenation, vowel-zero alternations within morphemes must always follow Havlík. It is not so easy to find languages with more than one alternation site within a single morpheme, but all cases that we are aware of work: French (e.g. **devenir**), Moroccan Arabic (e.g. **kətib**).
 - fair question:
why is it that only suffixes with alternating vowels are cyclic (in Slavic)?
Why should a phonological property determine the cyclic behaviour of its host?
 - floating vowels rather than Reduction.
 - interpretation-driven phase theory:
 - are there really any interpretation-independent phases?
 - node-driven phase theory is blind to interpretation and faces serious trouble.

10 references