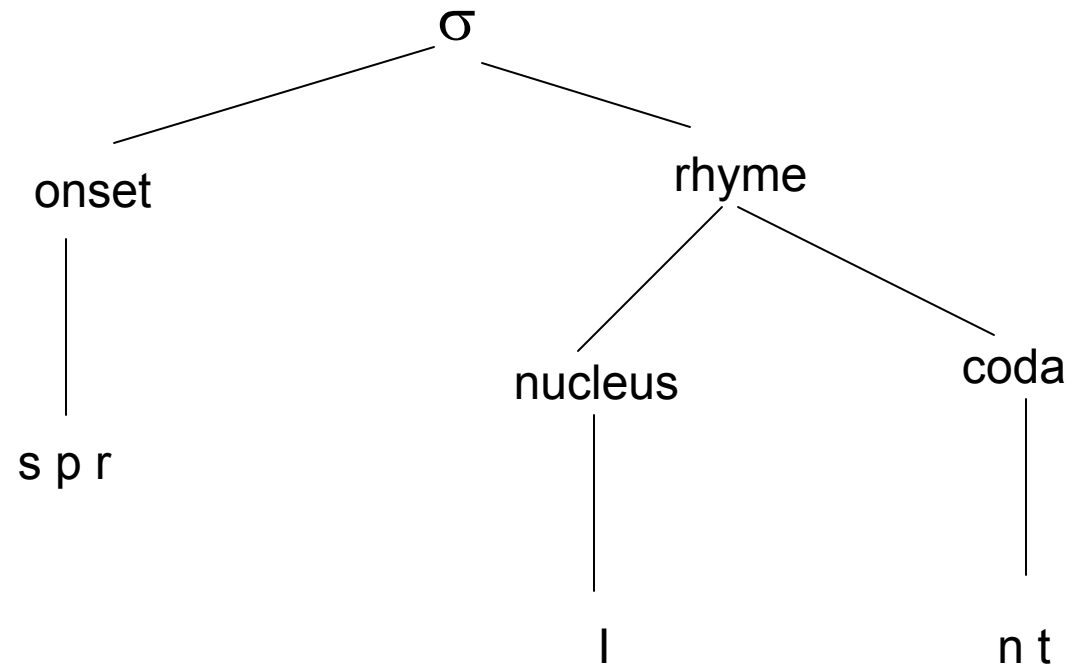


Syllables and rule interaction

- The longest tradition has seen syllables as being *waves* of energy (“sonority”, in current parlance).
- In the late 1940s, some students of Leonard Bloomfield tried out the idea of imposing *syntactic* structure on the syllable. The idea stuck.



Syllables

- Onset, rhyme
- Rhyme: nucleus (coda)
- Onsets are strongly preferred over codas
- Consonants in codas are *weakened*: think of what happens to *r* in many English dialects (*car* [kaa] versus *red*). Coda consonants are much *longer*. They affect stress patterns.

Constraints

- Languages put heavy constraints on what sequences of sounds can appear in the subparts of the syllable –

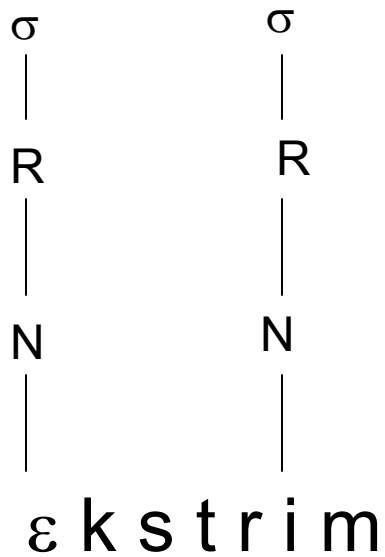
English Onset

s {p t k} {l r w j}

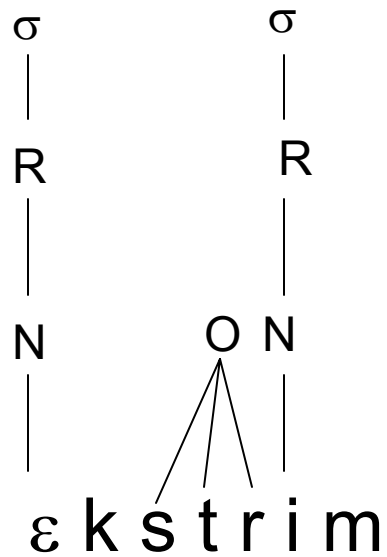
What combinations do we *not* find word-initially?

Setting up syllables (textbook)

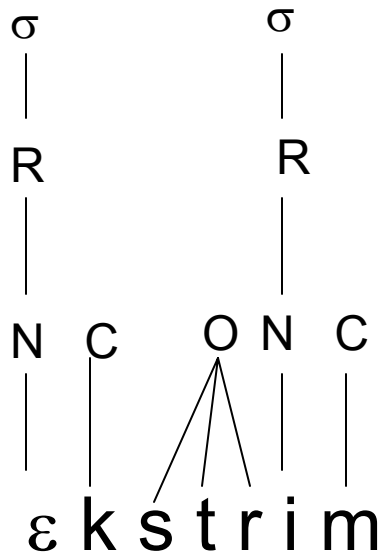
- Identify nuclei



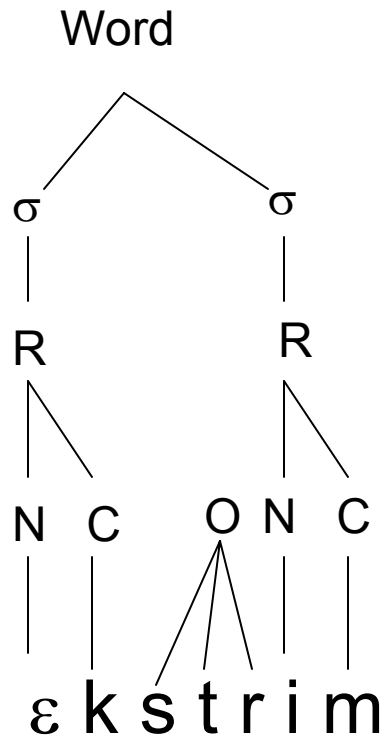
Form maximal onsets



Form codas

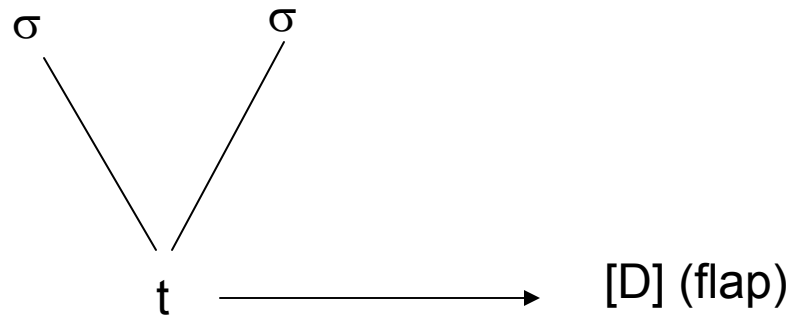


Word-level construction



Beyond the text: English

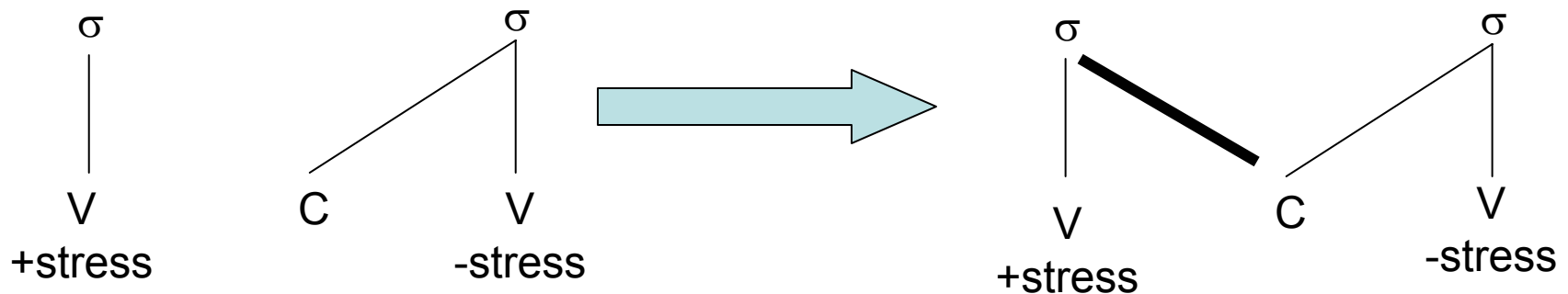
- Understanding the flap formation context using syllables



A tautosyllabic t becomes a flap

How does a *t* get to be tautosyllabic?

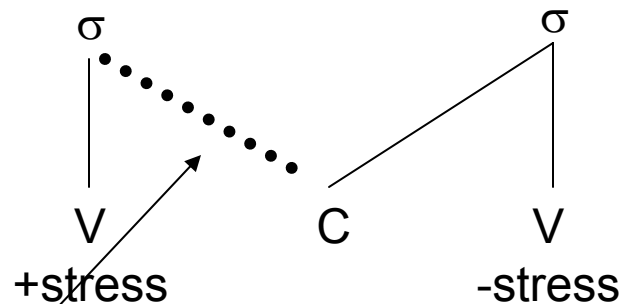
- Inside words, it happens obligatorily to a single consonant between a stressed and an unstressed syllable:



We can simplify this notation a bit --

How does a *t* get to be tautosyllabic?

- Inside words, it happens obligatorily to a single consonant between a stressed and an unstressed syllable:

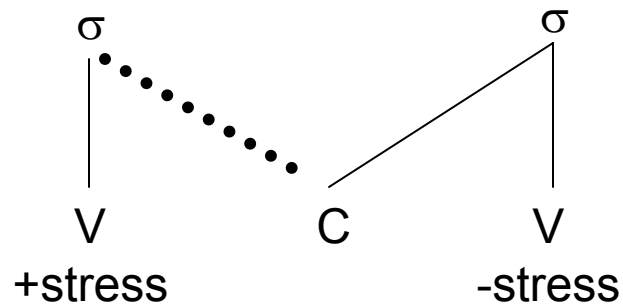


The dotted line means that this is what the rule *accomplishes*.

Why?

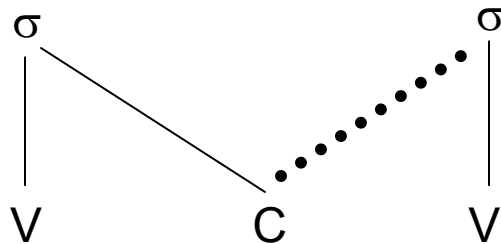
- Because a stressed syllable wants to avoid an empty rhyme. Think about short vowels in English which are not followed by a consonant.

- The rule is optional when the syllable on the left is unstressed, obligatory when it is stressed.

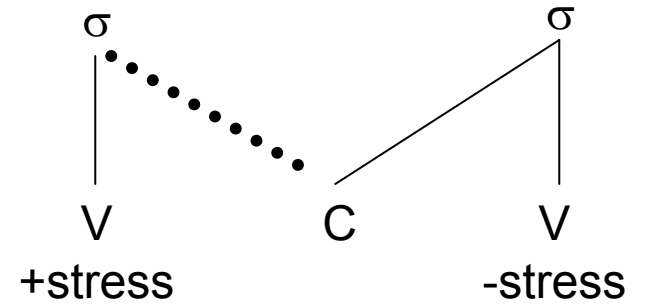


Across word boundaries...

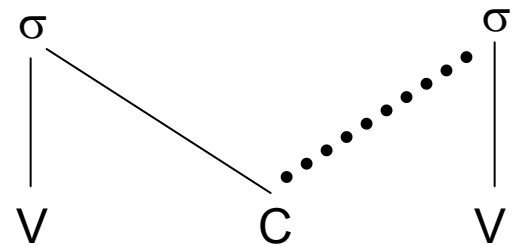
- Nothing resyllabifies a word-initial consonant (leftward...)
- So word-initial t's don't flap.
- Word-final t's resyllabify optionally to vowel-initial words, regardless of stress:



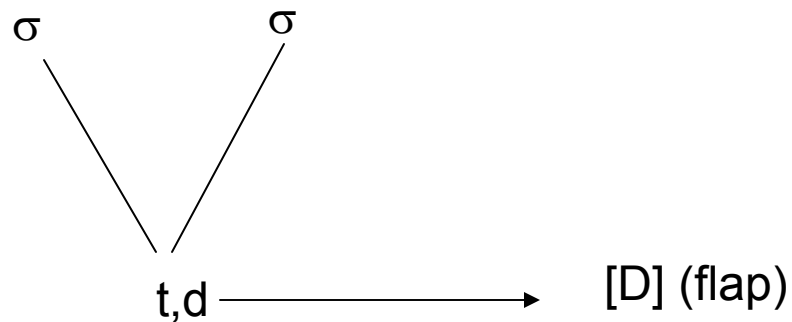
First, word-internally, obligatory
in this case (optional if syllable on
left is unstressed)



Second (across word-boundaries):



- Then flapping is condition thusly:



A tautosyllabic t or d becomes a flap

Tashlhiyt Berber

...allows *any* sequence of phonemes, and divides the sequence up into waves of 2 and 3 letters based on inherent sonority

t r g l + t = t R . g L t 'you locked'

t r g l + a s = t R g . l A s 'you locked him'

i + l d i = i l . d i 'he pulled'

t + l d i = t L . d i 'she pulled'

t l w a t = t L . w a t

- Syllable conditions are the most common conditioning factors for segmental rules – the rules of allophony we've been talking about.
- Vowels are very often affected by what follows, in their coda.

ay-raising (“Canadian raising”)

- Right, sight, bite, tight, tike, type
- Ride, hide, time, tie, pie, arrive, hind

ay → ʌy / _ [-voice]

Rule interaction: rider and writer

r áy t ə r

r ʌy t ə r ay-raising

r ʌy D ə r flapping

r áy t ə r

r áy D ə r flapping

r áy D ə r ay-raising

(nothing happens...)

“bleeding” relationship
between the rules