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English meets Strict CV Phonology

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•Aims:

• introduce Strict CV Phonology (aka CVCV Phonology)
• provide a brief historical sketch of its development from Government Phonology
• present the major arguments which are usually put forward to support it
• with examples from English – to show that English meets Strict CV Phonology

• But: it is impossible to restrict the discussion to English since the basic idea behind Strict CV phonology is universality

• versions (the skeleton: CVCV – e.g., Tobias Scheer, VC Phonology – e.g., Péter Szigetvári, Loose CV – (e.g.,) Krisztina Polgárdi; directionality of government: strictly R-to-L – e.g., Tobias Scheer, bidirectional – e.g., Csaba Csides; the representation and typology of consonant clusters; etc.)

• major theoretical advantages:

- universality of supramelodic structure
- theory of parametric variation
- explanatory power of representation
- structure preservation

(esp. rejection of resyllabification: ”Resyllabification […] subverts the result of core syllabification, thereby representing a serious challenge to phonological parsing: if in a framework it is allowed that the syllabic status of elements be freely changed during the derivation, the possibility of tracing back the derivation, getting from the surface signal to the underlying representation, reduces radically.” -- Szigetvári 2001: 160)

- the idea that phonologically relevant morpho-syntactic information should be represented in phonology, in a way which *explains* the effects that such information has

• most of these ideas have been around for more than 10 years...

Government Phonology (GP -- KLV 1985, KLV 1990, Charette 1991, Harris 1994, etc.):

- aims to provide a description of phonology that is modelled after GB syntax: phonology and syntax are but two manifestations of the same cognitive faculty, and thus it is desirable that their theoretical models utilize the same set of descriptive tools (Principles and Parameters, Projection Principle/Structure Preservation, government, Proper Government, Empty Category Principle, etc.)

- non-derivational in essence: processes are triggered by local sources available in the representation, and they take place freely whenever the conditions on their application are met, i.e., in response to parameterised conditions which are locally present in the environment (the principle of Non-arbitrariness): no (extrinsic) rule ordering

- representational and input-oriented (vs. OT): the way phonological objects (both prosodic and melodic) are represented crucially circumscribes what is and is not a possible phonological phenomenon
(→ constrained)

- Projection Principle → empty categories (hiatus-filling, vowel ~ zero alternation)

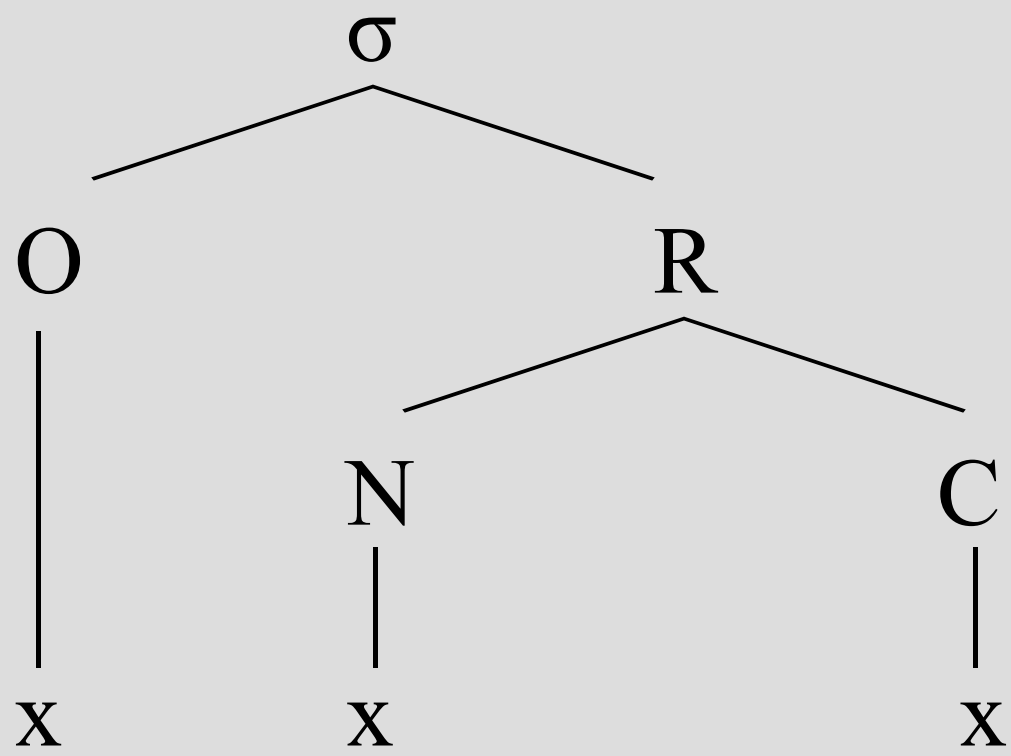
- empty categories → syllable boundaries do NOT necessarily coincide with word boundaries

(- melodic representation: Element Theory)

(- phonology-morphology relationship: analytic vs. non-analytic domains)

- the only source of phonological knowledge is phonological behaviour (Phonological epistemological principle): structural elements need phonological motivation → rejection of unmotivated syllabic constituents

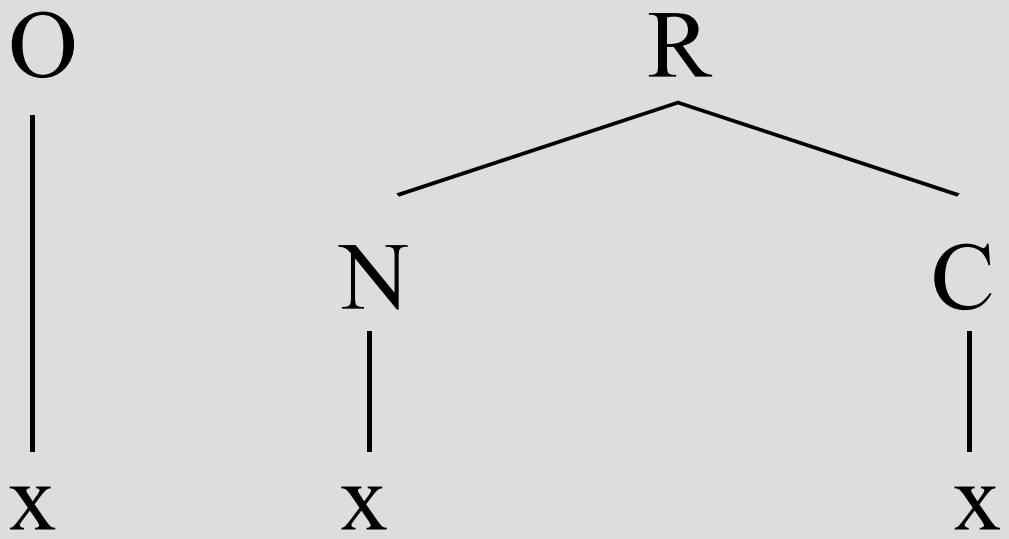
Traditional representation of syllable structure:



O = onset; R = rhyme; N = nucleus; C = coda; x x x = skeletal tier

Classical GP (GP1.0):

the syllable is not a constituent



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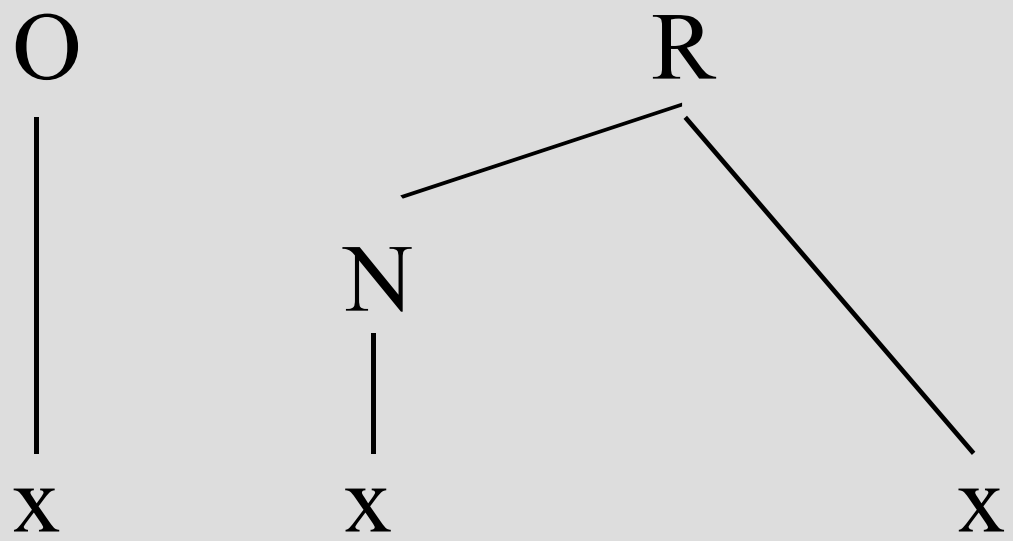
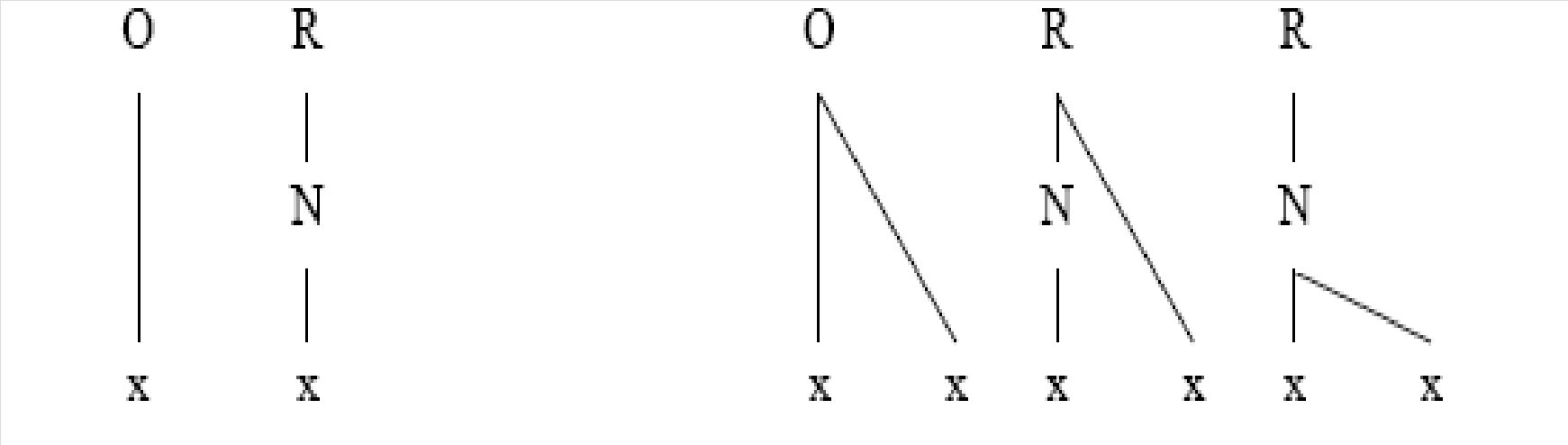
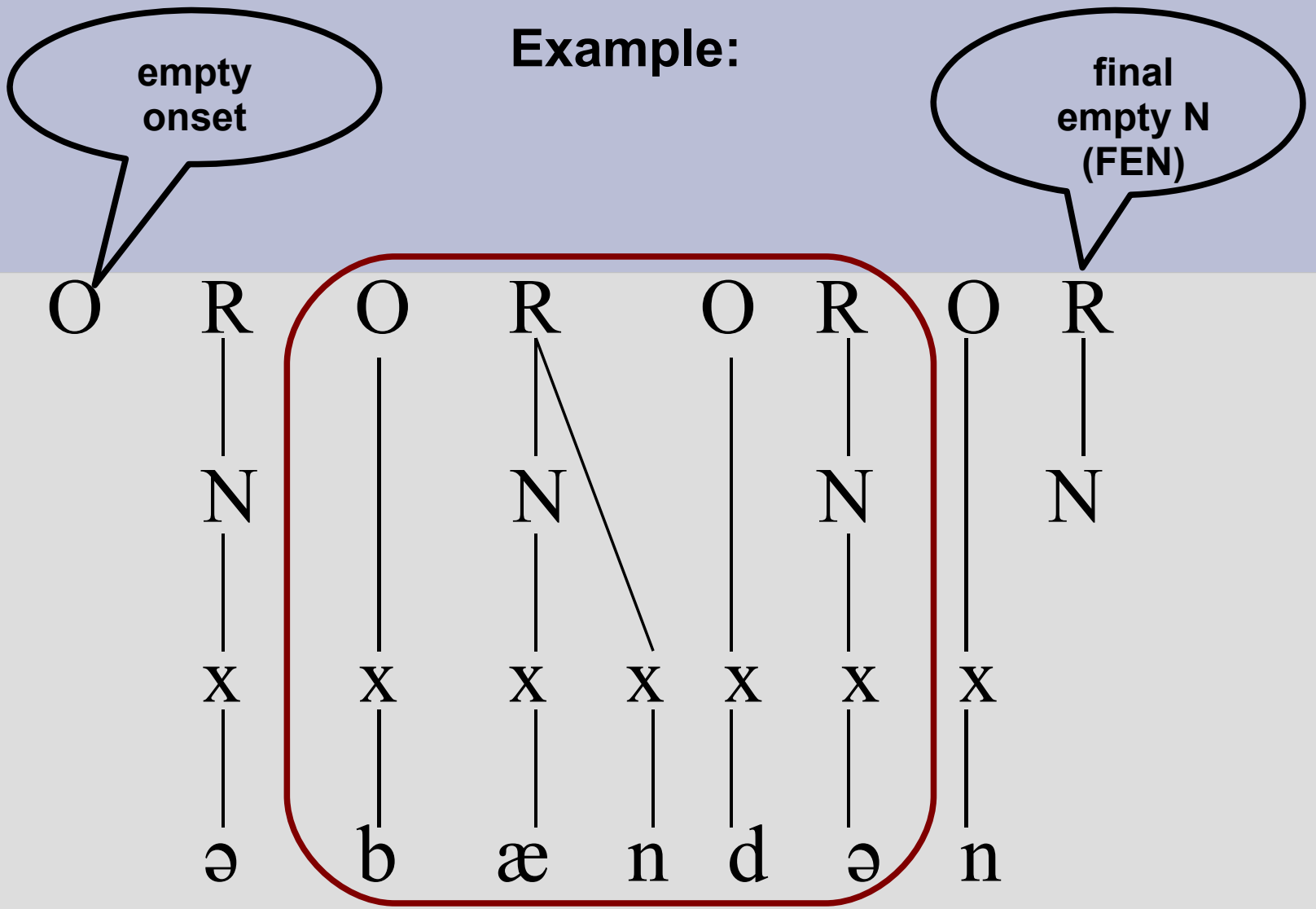


Syllabic constituents in GP1.0:

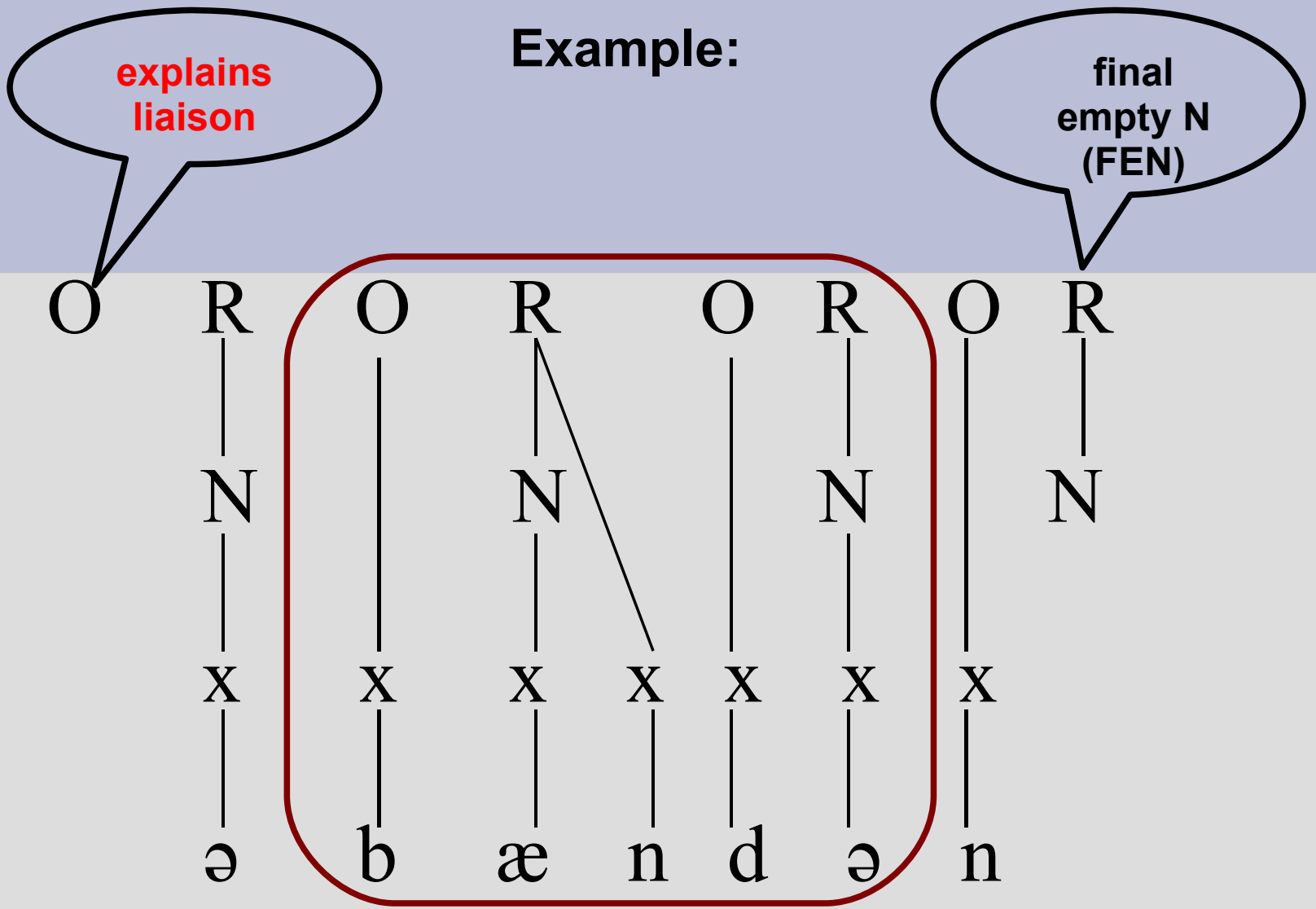


- **maximally binary (governing domains) (no *n*-ary branching)**
- **may even be null**
- **universal set; cross-linguistic differences: parameter-settings, e.g.:**
- **branching rhyme? [ON/OFF]**
- **final empty nucleus? [ON/OFF]**

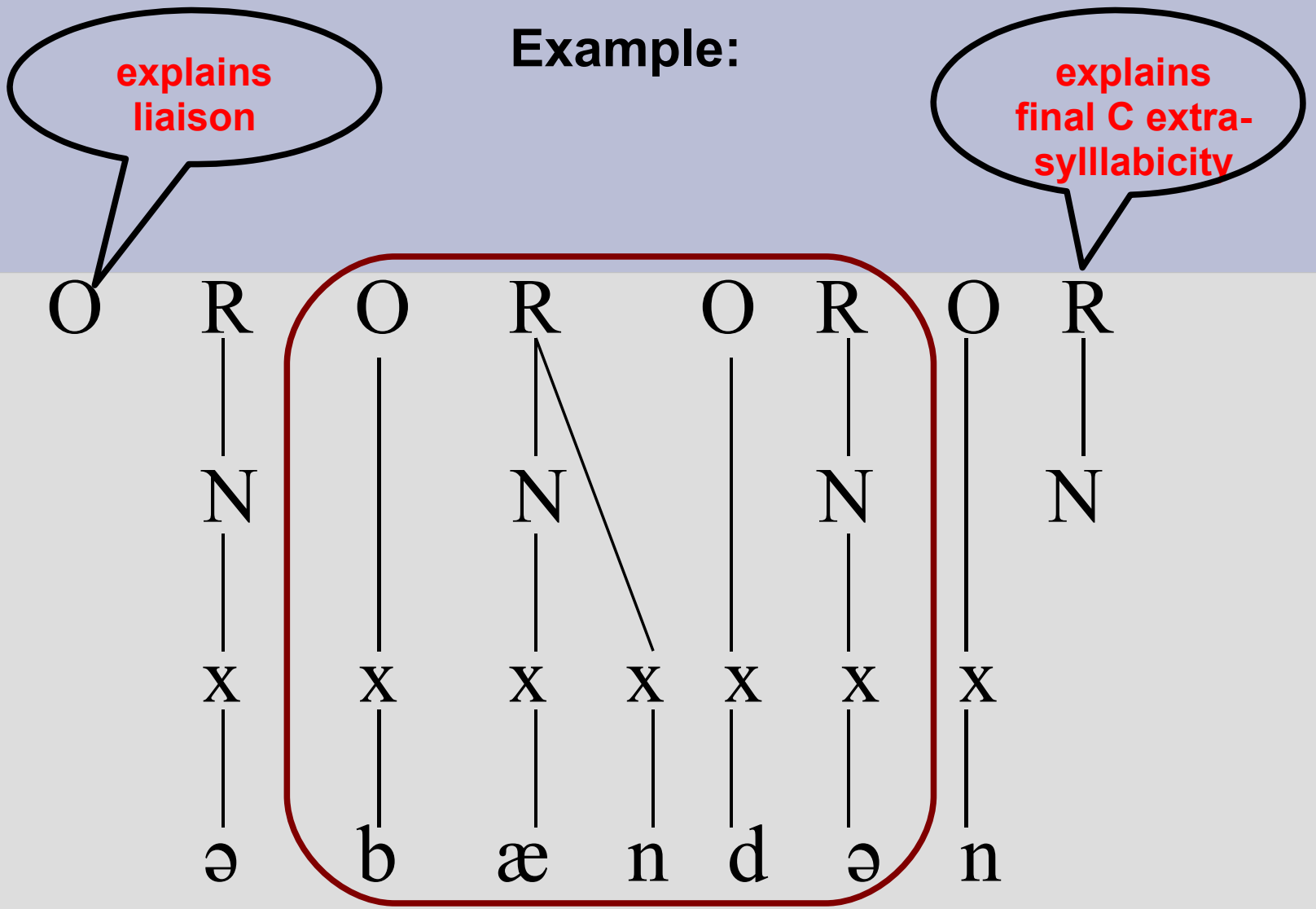
Example:


empty onset
final empty N (FEN)
O R O R O R O R
N N N N
x x x x x x x
ə b æ n d ə n

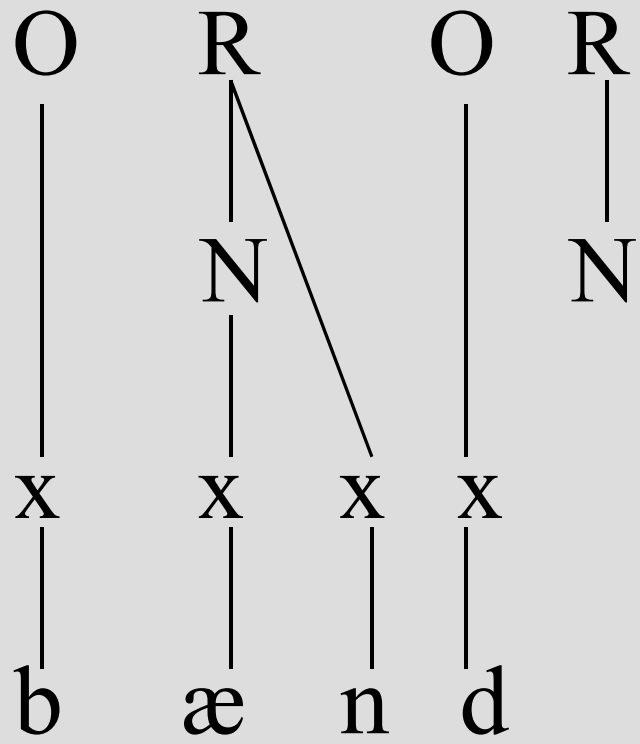
Example:


explains liaison
final empty N (FEN)
O R O R O R O R
N N N N
x x x x x x x
ə b æ n d ə n

Example:


explains liaison
explains final C extra-syllabicity
O R O R O R O R
N N N N
x x x x x x x
ə b æ n d ə n

Government: a dependency relation between two skeletal positions: one is head (governor), the other is dependent (governee), the roles being determined by the segmental content of the participants



The phonological ECP

An empty nuclear position is licensed to remain unpronounced if one of the following holds:

(a) it is properly governed;
(b) it is parametrically licensed domain-finally;
(c) it is enclosed in an onset-to-onset (interonset) governing relation;
(d) it is enclosed in an infrasegmental governing relation;
(e) it is magically licensed.

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Strict CV Phonology (CVCV/VC):

"syllable structure universally, i.e. regardless of whether the language is templatic or not, reduces to CV"
(Lowenstamm 1996: 419)

Strict CV Phonology (CVCV/VC):

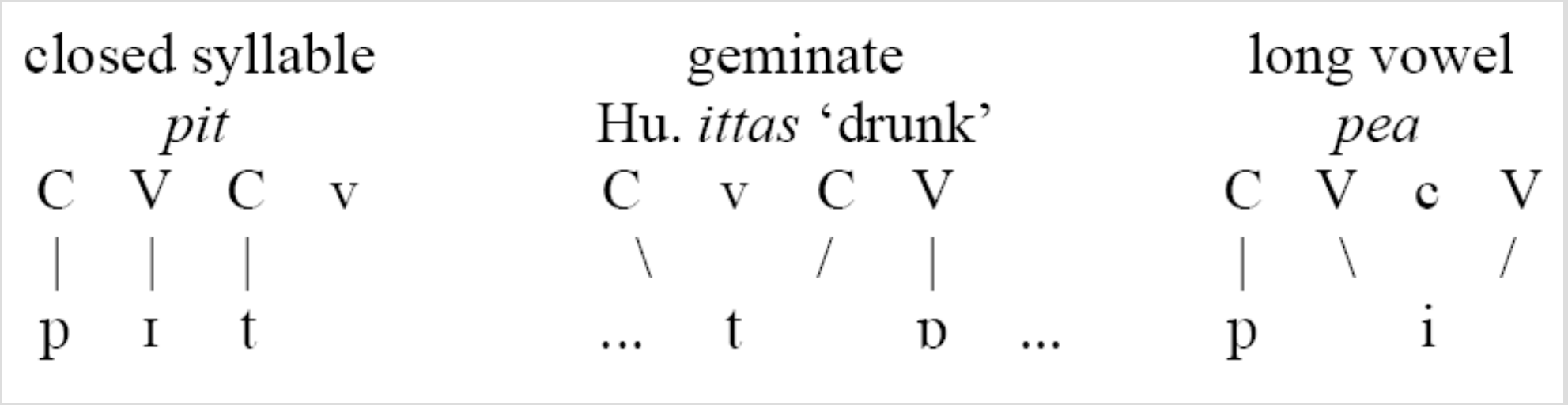
- syllabic constituency and the skeleton merge into a so-called CV-tier, and governing relations are contracted between C and V positions rather than skeletal slots
- This is a logical consequence of:
- the introduction of binarity (i.e., the rejection of *n*-ary branching, which is just one step away from the denial of branching altogether)
- And of empty positions (instead of positing empty C's and empty V's between *certain* V's and C's, resp., a maximally constrained theory should have them between *all* occurrences thereof)

• A language which does <u>not</u> tolerate empty segments will exhibit regular alternances of consonants and vowels; a language which <u>does</u> tolerate empty segments will have apparent consonant clusters and geminate consonants straddling an empty V position as well as long vowels and diphthongs straddling an empty C position

Strict CV Phonology (CVCV/VC):

- Supported by syllable typology: the most unmarked syllable type both cross-linguistically and in language acquisition is (non-empty) CV
- More complex types arise as empty categories get parametrically tolerated (rather than by the syllable inventory being increased)
- Szigetvári (2001: 162) even argues that mainstream phonology tends to reject (the abundance) of empty categories because it is a kind of null hypothesis to only ever use them in a model when there is no other way of analysing a phenomenon...
- ... but that is because *phonologists* are biased: ”Since Indo-European languages are typically furnished with large sets of superficial syllable types, phonologists with such a linguistic background are bound to take it for granted that syllable inventories do contain such varied members [...] What the null hypothesis is thought to be in this issue is most probably a question of tradition.”
- Formal simplicity

- (For more arguments: Szigetvári (2000), Scheer (2004))


closed syllable
pit
C V C v
p ɪ t
geminate
Hu. ittas 'drunk'
C v C V
... t ɒ ...
long vowel
pea
C V c V
p i

Strict CV Phonology (CVCV/VC):

"syllable structure universally, i.e. regardless of whether the language is templatic or not, reduces to CV"
(Lowenstamm 1996: 419)

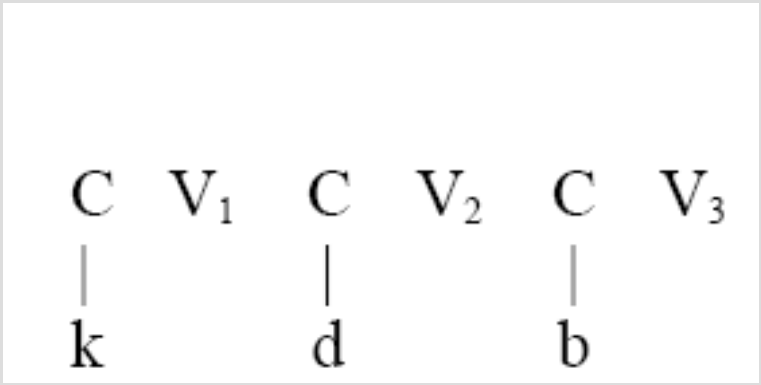
Example from a templatic language:

Moroccan Arabic (data from Kaye 1990):

tan kdɨb 'I lie', *tan kɨdbu:* 'we lie'

verbal radical |kdb| 'lie'

underlying representation:



The licensing of empty nuclei: Proper Government

Proper Government

Nucleus α is properly governed by nucleus β if

(a) α is adjacent to β on the relevant projection; and
(b) α is not properly governed itself.

A properly governed empty nucleus may remain silent.
Ungoverned empty nuclei receive default phonetic interpretation.

(Subclause (c) in the classical definition, "α and β may not be separated by a governing domain"
is not needed in CVCV, follows from the representation.)

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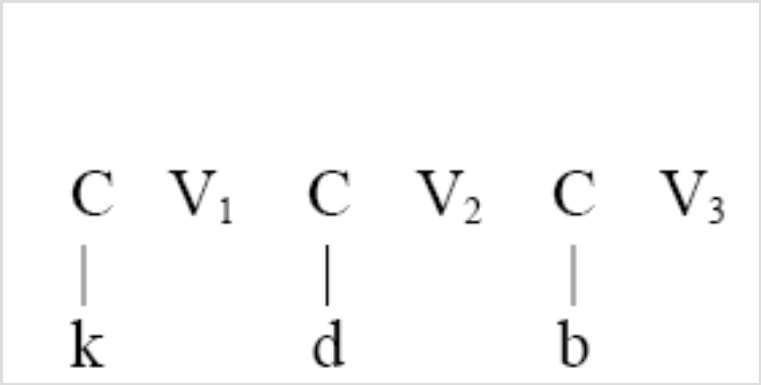

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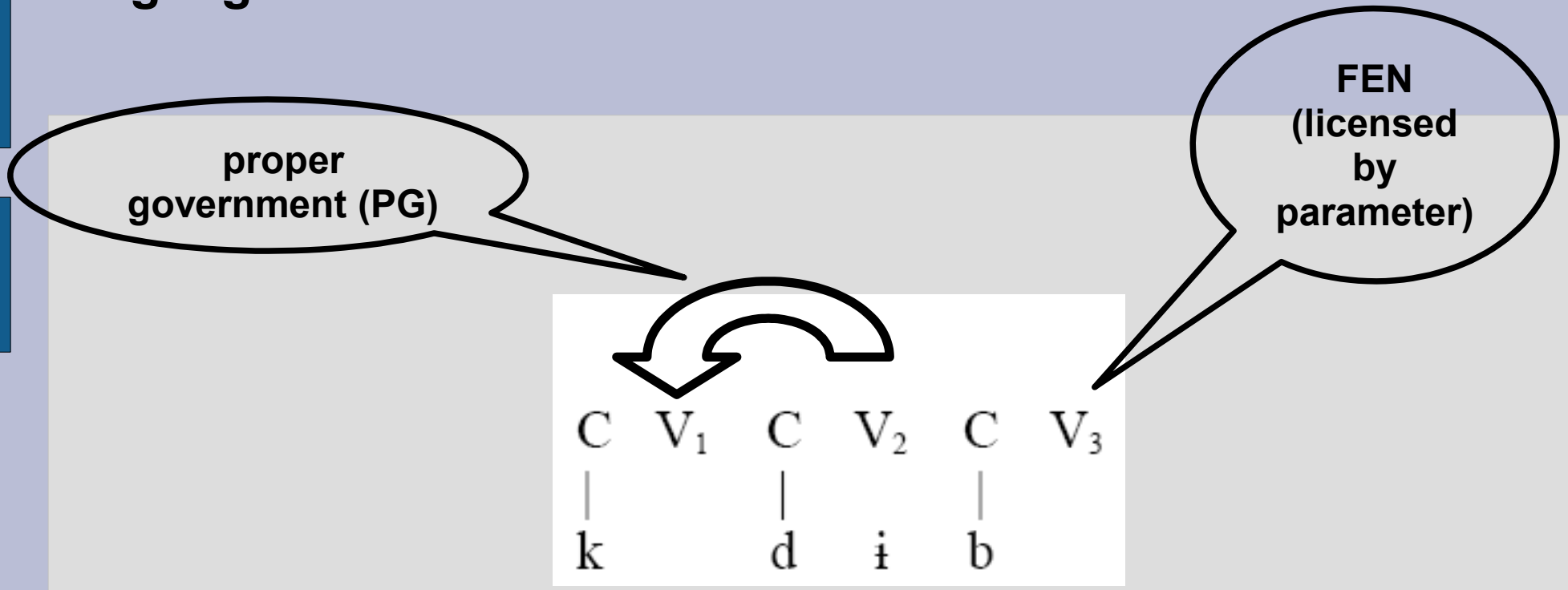

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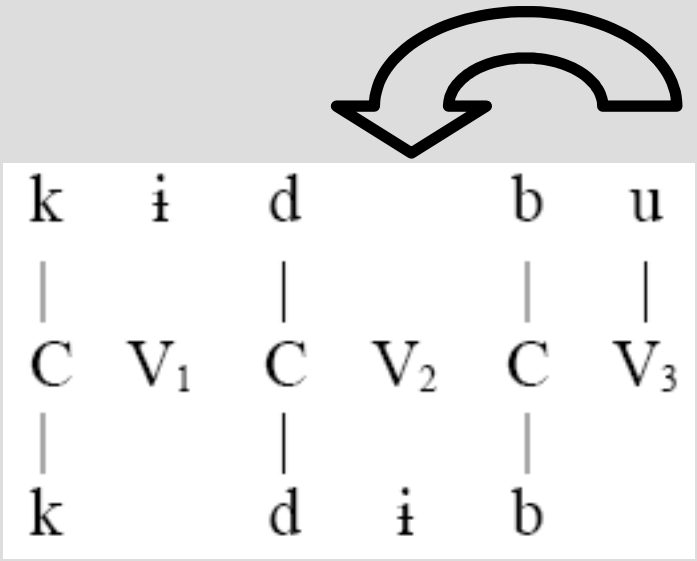
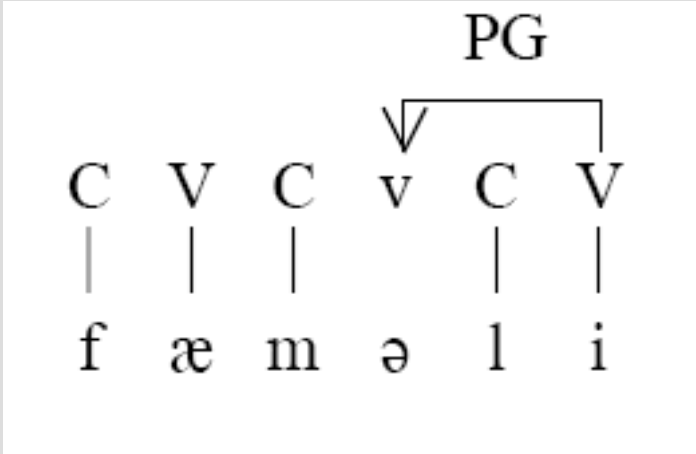


Projection Principle -> no resyllabification!

Vowel~zero alternations in non-templatic languages:



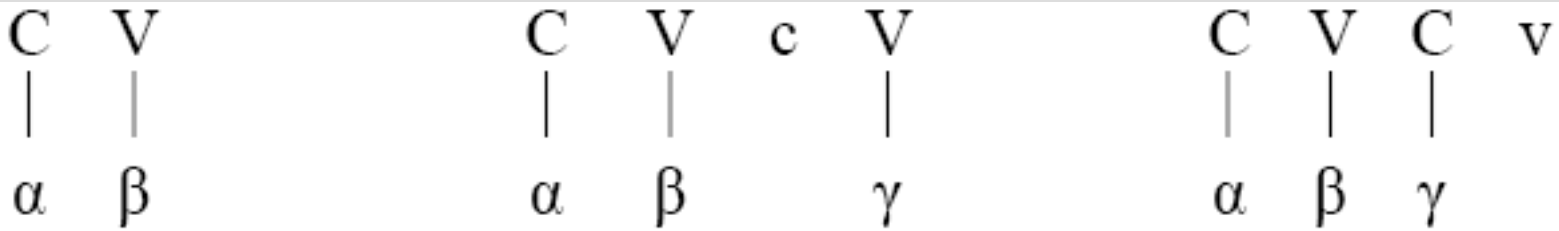
Projection Principle -> no resyllabification!

Syllable weight (in languages like English):
traditional definition: "long vowel *or* closed syllable"

u-ní<te> ***e-léc<t>***

CVCV:

Light syllable: **Heavy syllables:**



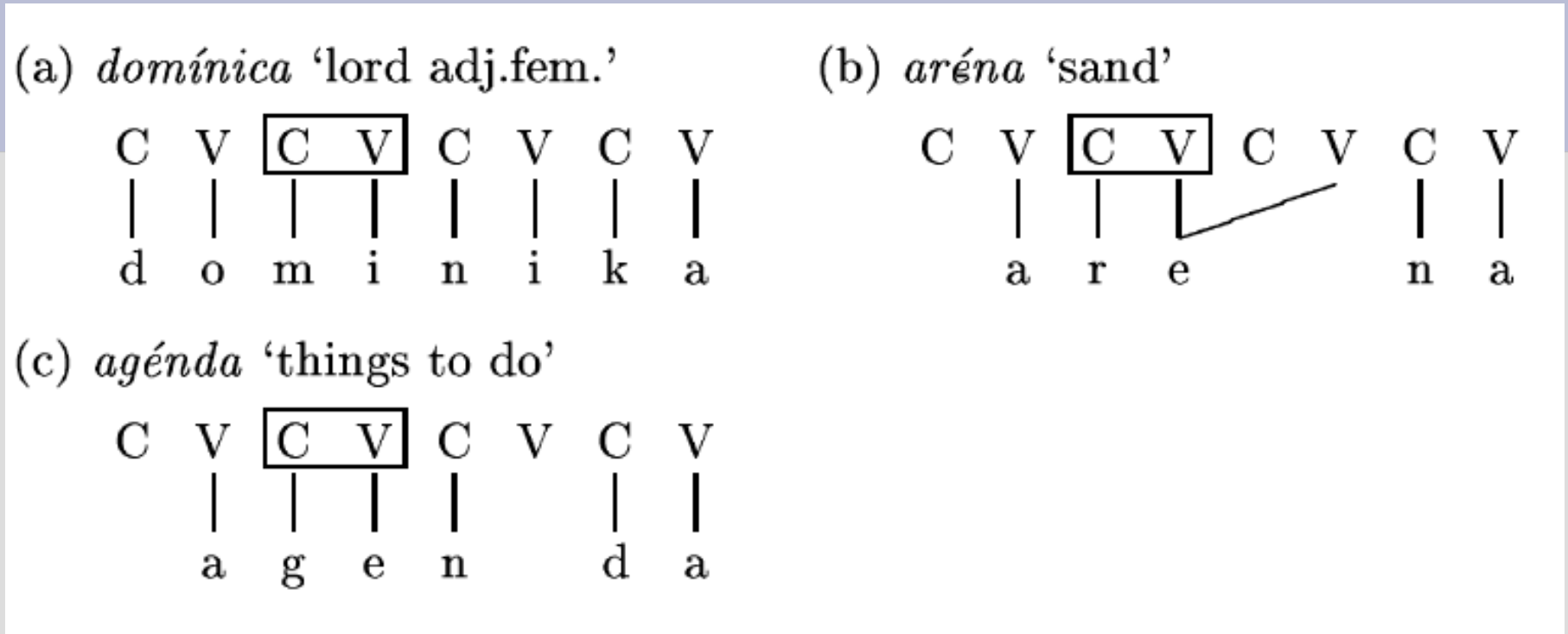
two CV-units

a solution: syllable weight is an epiphenomenon

when a C appears to be moraic this is because of an unpronounced V position next to it, a "mora" is a V position and the adjacent C position

(Szigetvári 2010)

Quantity-sensitive stress systems like Latin or English

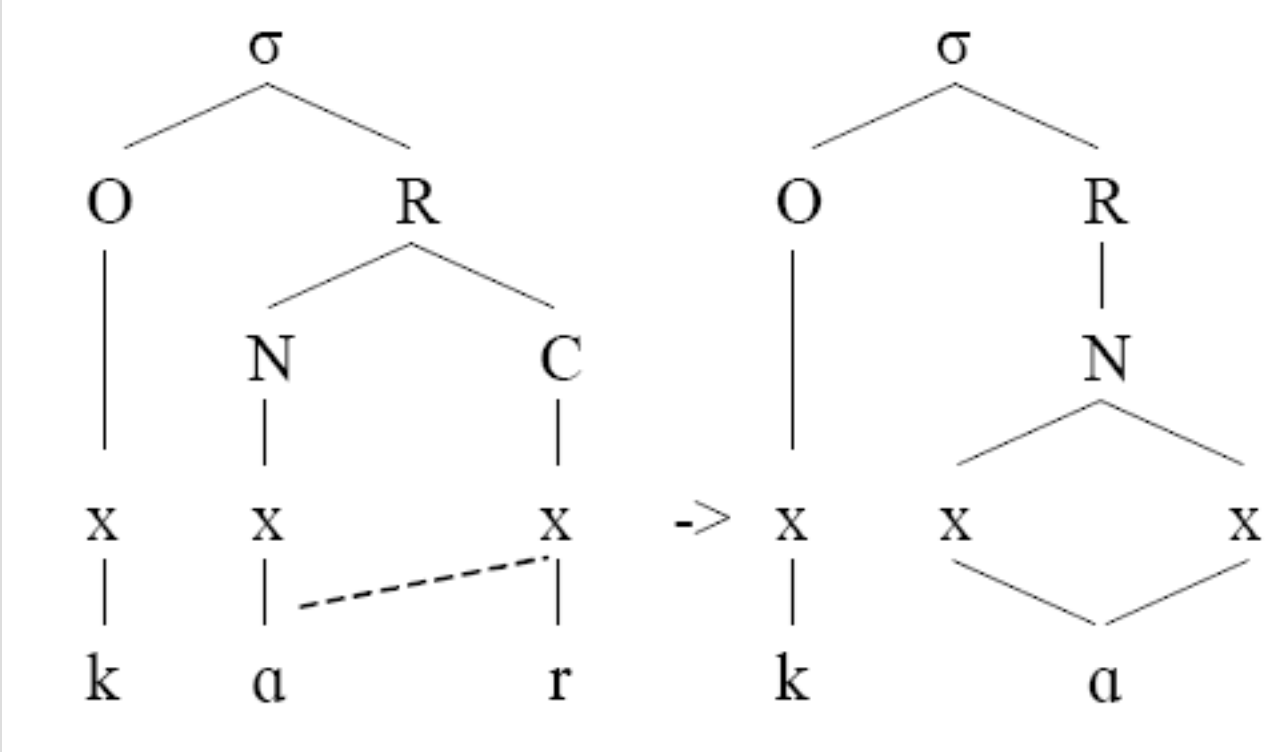


"stress the third-last CV-pair" (cf. Szigetvári 2001: 175)

Bimoraic minimal word constraint in a non-moraic framework?

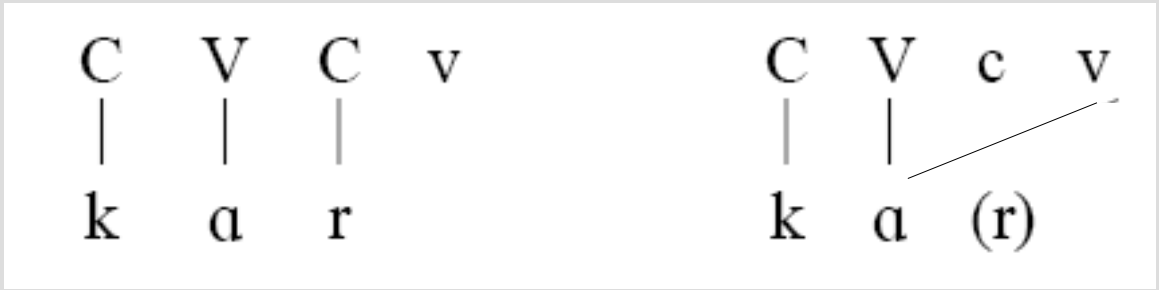
Two CV-pairs

Compensatory lengthening - 1



resyllabification!

Compensatory lengthening - 2



Projection Principle -> no resyllabification!

Compensatory lengthening - 3

(a) Reconstr. *[esmi]

(b) Attic [e:mi]

(c) Aeolic [em:i]

Choice of strategy: a parameter

(Szigetvári 2001: 176)

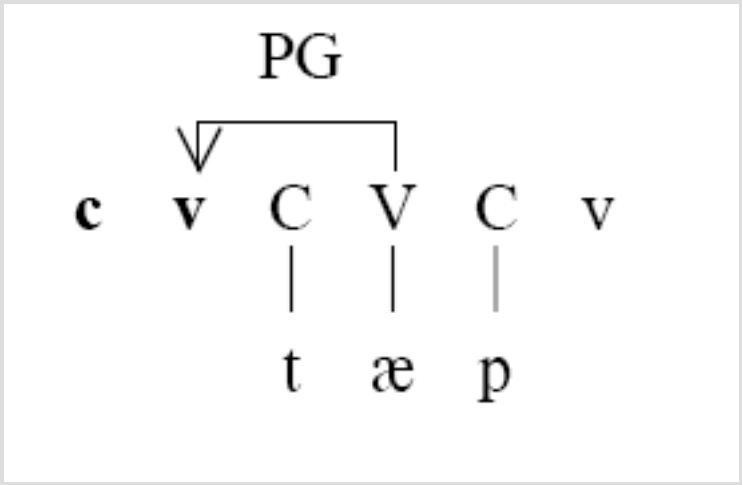
The beginning of the word

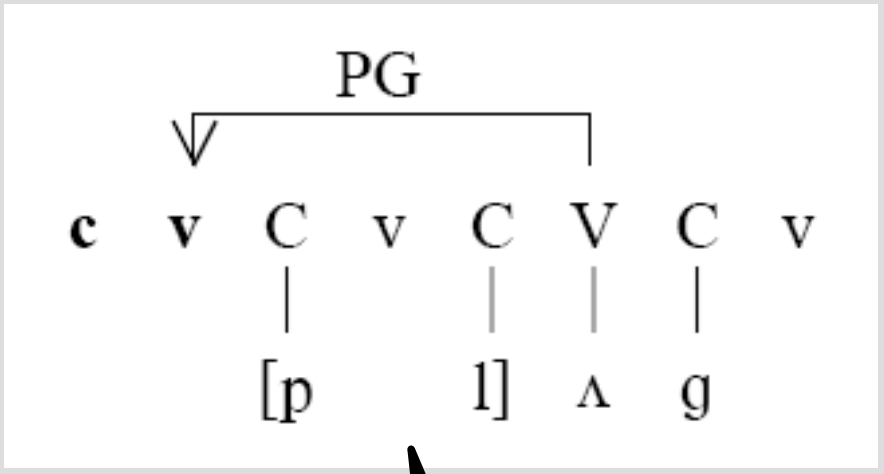
Lowenstamm (1999): phonological processes characteristic of the word-initial position but not of word-medial onsets

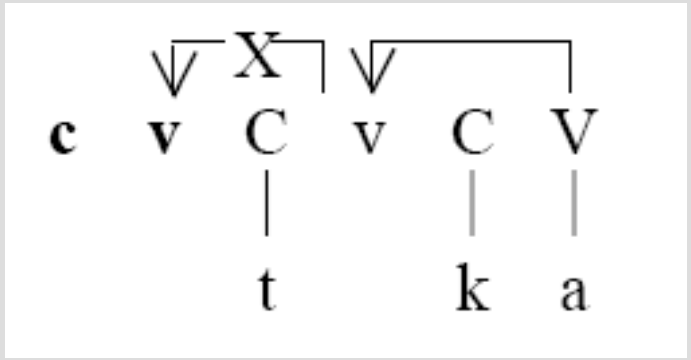
“Rather than being conventionally marked by the insertion of a # symbol to its left, the word is preceded by an empty CV span. The major difference between this proposal and the traditional view lies in the fact that the initial empty CV span is a true phonological site, over which a number of operations will be shown to take place, or in terms of which a number of generalizations will be shown to receive expression.” (Lowenstamm, ibid: 157)

the word is preceded by an empty CV span

Phonotactics:





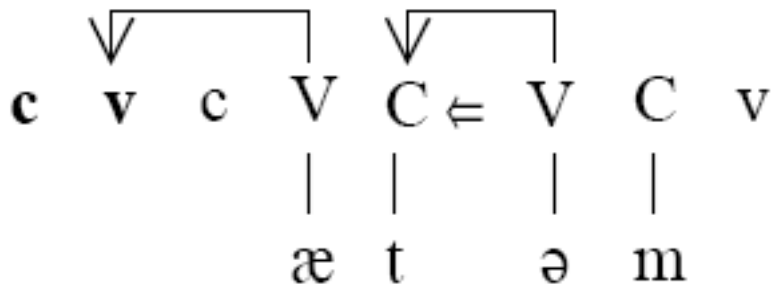


"closed domain"

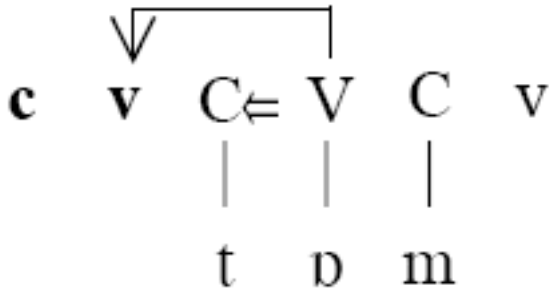
the word is preceded by an empty CV span

Strong vs. weak phonological positions:

a. *atom*



b. *Tom*



(~Ségéral-Scheer 1999)

a. Vocalicness is loud, not only acoustically but also in the sense that V slots in the phonological skeleton aim at being pronounced. (Szigetvári 1999: 62)

b. Consonantalness is mute, if nothing intervenes a C position will stay silent. (Szigetvári 1999: 62)

c. Government spoils the inherent properties of its target. (Szigetvári 1999: 66)

d. Licensing comforts segmental expression of its target. (Ségéral and Scheer 1999: 20)

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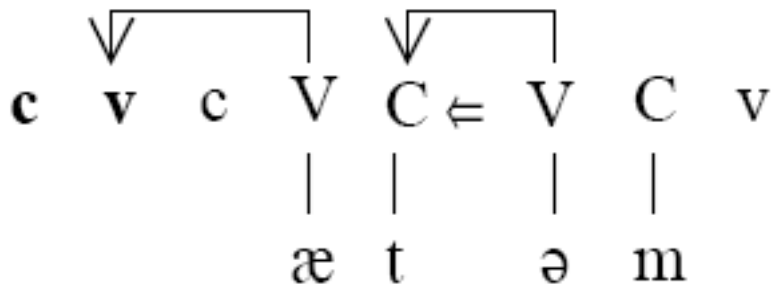
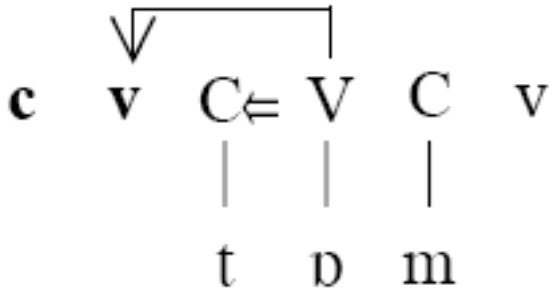


b. *Tom*



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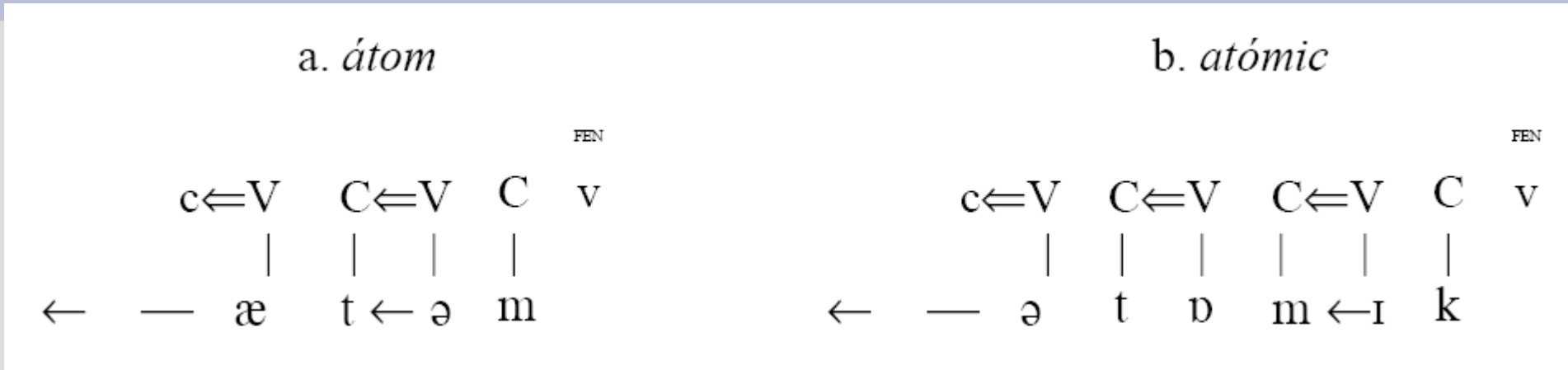
Cross-word stress-sensitive lenition in English:

á[ɾ]om, a[t^h]ómic; hi[ʔt] me; hi[ɾ] Ánn, hi[ɾ] Aníta



(1) V->C government applies on the melodic tier.
(2) Stressed vowels can only govern the boundary-marker CV.

(Szigetvári 1999, Balogné Bérces 2006)

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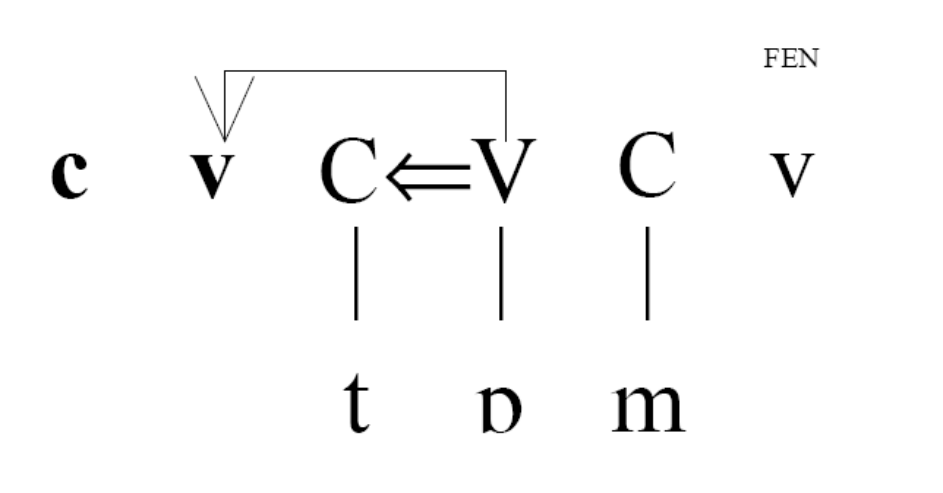

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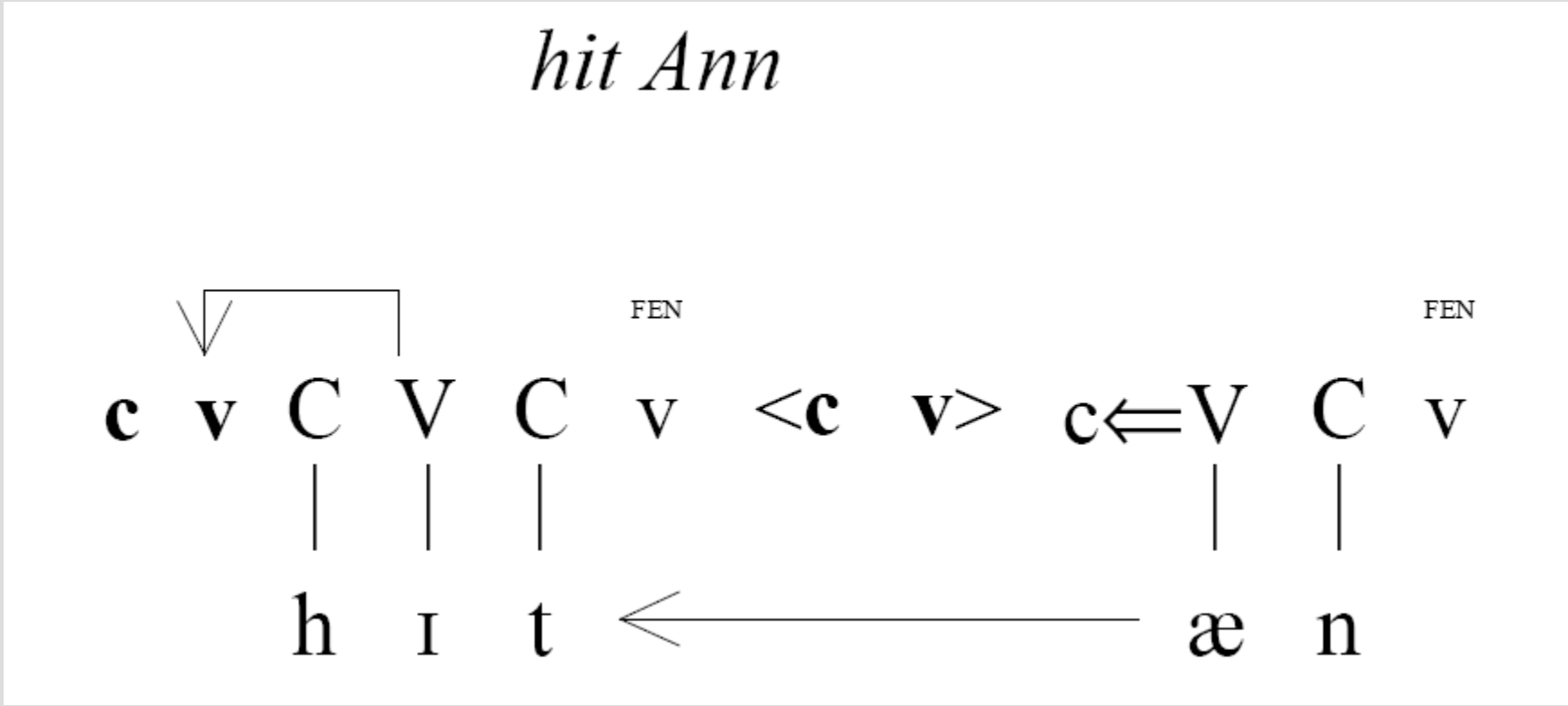
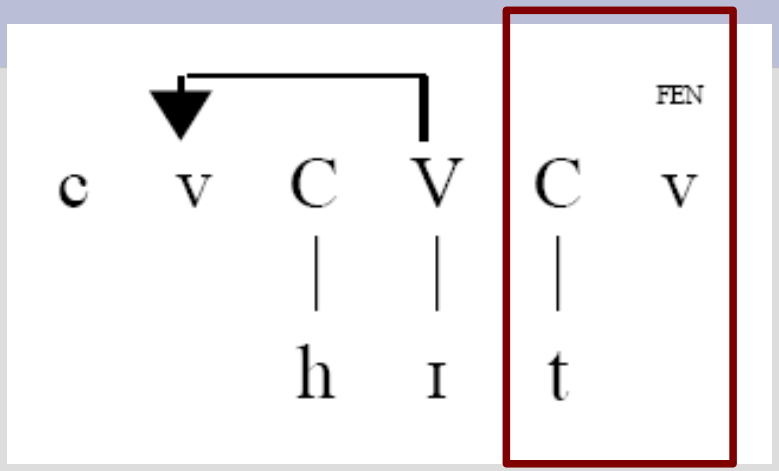
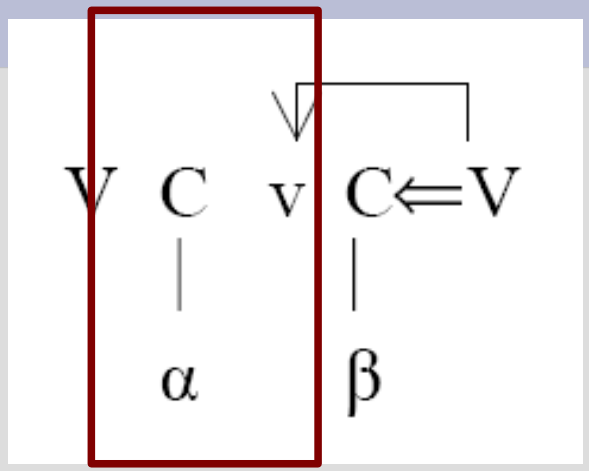


= *hit Anita*

(~Balogné Bérces 2006)





Why is the ”coda” weak? Because it is followed by an empty v position, which is unable to license it.

Conclusions

- **Strict CV Phonology achieves absolute representational universality**
- **All cross-linguistic variation is derivable from parameters governing aspects of the representation *other than branching***
- **Manages to observe (prosodic) structure preservation**
- **Even the Germanic-type phonology of English is compatible with the CVCV framework (with slight modifications/amendments)**
- **That is, English meets Strict CV Phonology**

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