

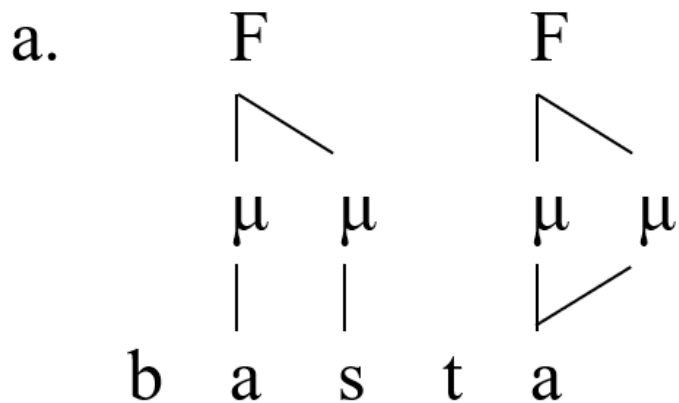
# Mojeño Trinitario Stress and Syncope in Strict CV

## Outline

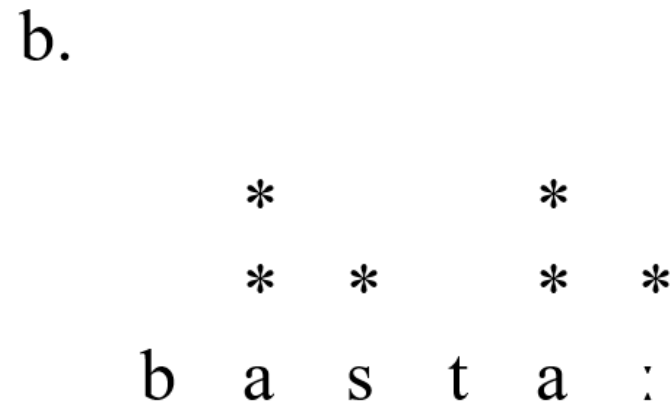
- 1. Background: Moras, grids, Strict CV, Incorporation**
- 2. Mojeño Trinitario data: Rythmic syncope, segmental effects**
- 3. Analyses: Moraic Theory vs. Strict CV**
- 4. Conclusion**

# 1. Background

# Moras & Grids



Headedness  $\neq$  Weight



Headedness = Weight

Either V or C project

# Strict CV

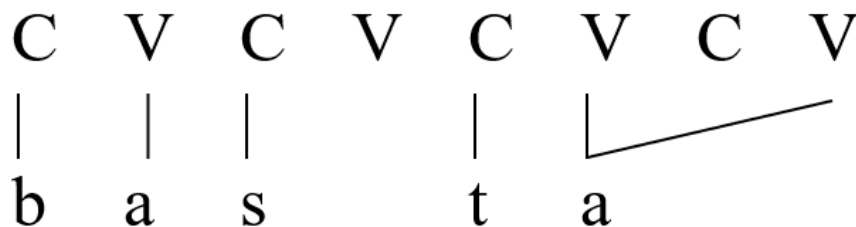
c.



As many V-slots (empty or full) as there are projecting entities in previous representations

# Strict CV

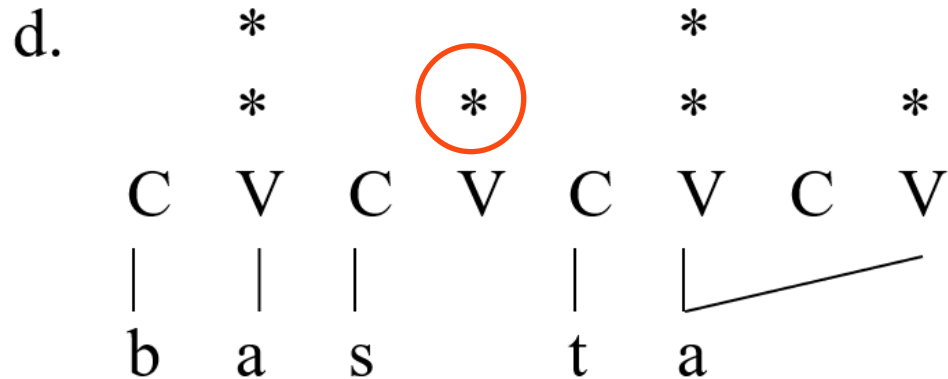
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As many V-slots (empty or full) as there are projecting entities in previous representations

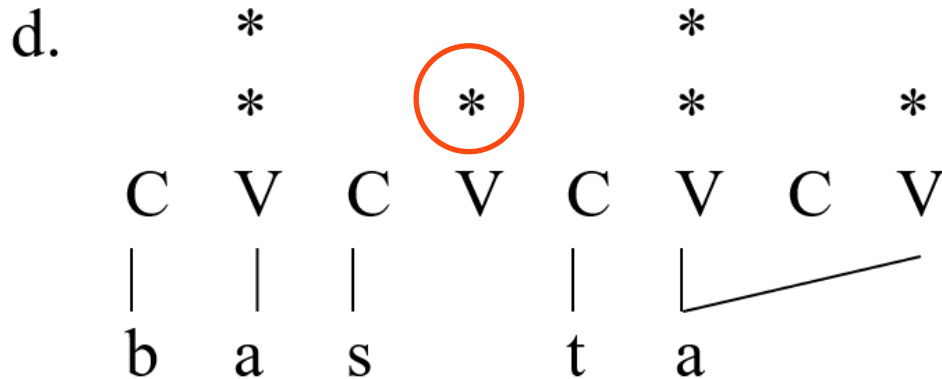
=> Scheer & Szigetváry (2005): The only metrically-significant unit is the V-slot (empty or full).

# Weight in Strict CV



Problem: how can an empty V « project », if it is empty?

# Weight in Strict CV



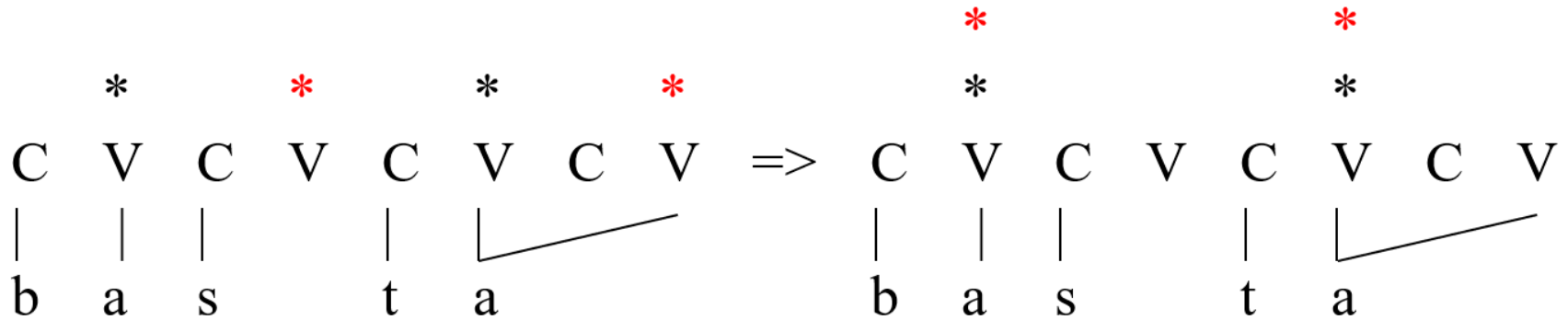
Problem: how can an empty V « project », if it is empty?

**Proposal:** This is precisely why the projection of the empty V **is grouped with that of the preceding contentful nucleus.**



# Weight in Strict CV

e.

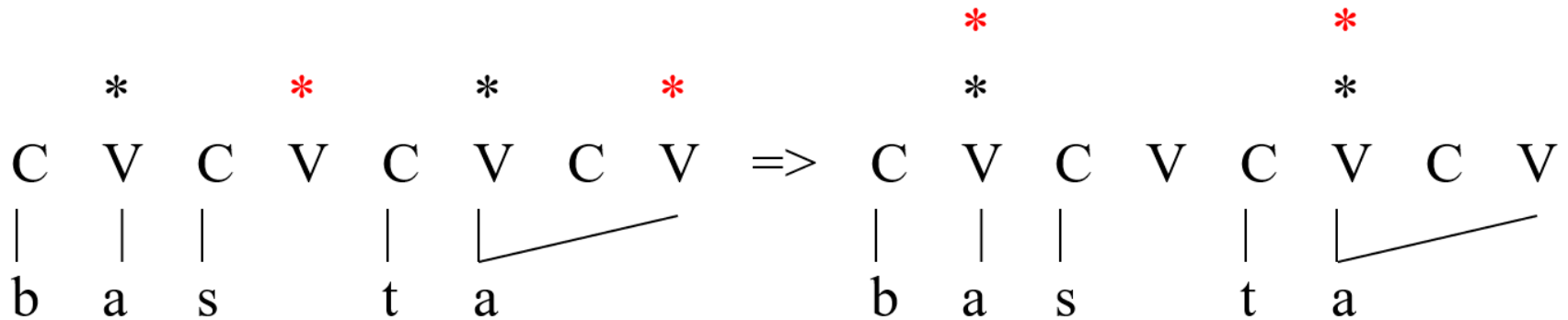


**Proposal:** This is precisely why the projection of the empty V **is grouped with that of the preceding contentful nucleus.**

# “Incorporation”

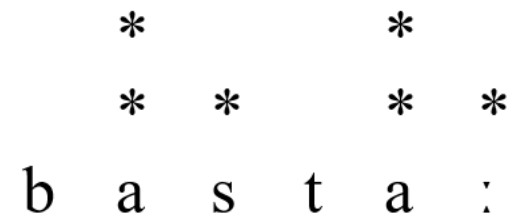
(Ulfsbjorninn 2014)

e.



Unlike in classic grid-based theory (b), the prominence of a vowel in a closed syllable follows from the representation.

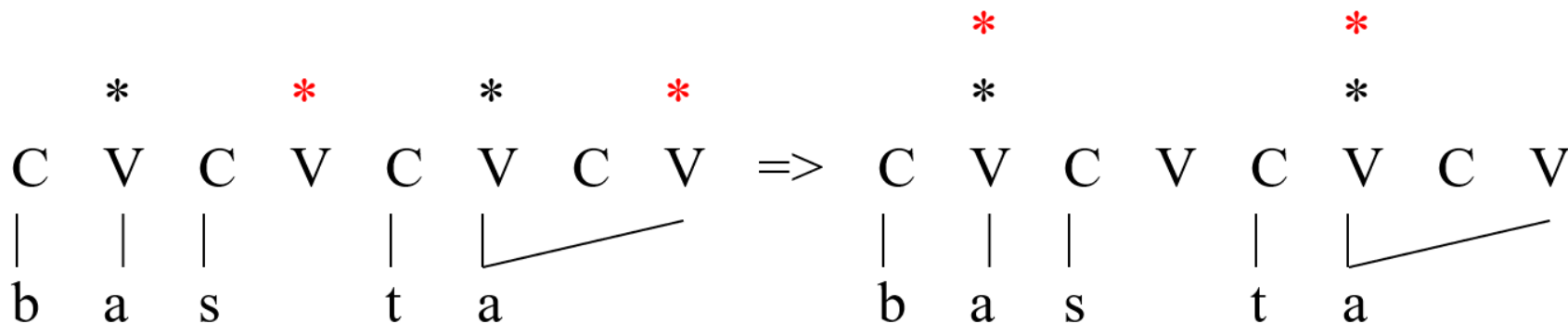
b.



# "Incorporation"

(Ulfsbjorninn 2014)

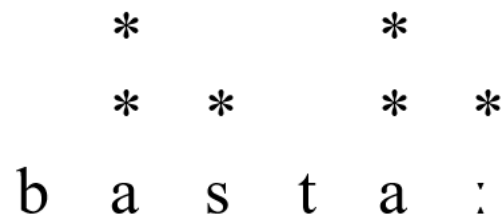
e.



Unlike in classic grid-based theory (b), the prominence of a vowel in a closed syllable follows from the representation.

This view elegantly extends to the phenomenon of **Metrically-conditioned syncope**

b.



## 2. Mojeño Trinitario metrically-conditioned Syncope and segmental effects

# Metrically-conditioned syncope

- In Mojeño Trinitario (Arawak; Rose 2019): all syllables are underlyingly CVCV, but

« Iambic parse » every odd vowel drops (except final)

- |    |                                 |                     |
|----|---------------------------------|---------------------|
| a. | /nu-huma/ => [nhúma]            | ‘1SG-illness’       |
| b. | /su-a-nosi/ => [sánsi]          | ‘3F-IRR-stay’       |
| c. | /ʧfunusihi-re/ => [ʧfnushíre]   | ‘cushion-NPSD’      |
| d. | /tiko-huma-numo/ => [tkohmánmo] | ‘3-VZ-illness-SMOT’ |

« Trochaic parse » every even vowel drops (except-final) – minority pattern

- |    |                             |            |
|----|-----------------------------|------------|
| a. | /mopo-hi/ => [móphi]        | ‘bee-CLF’  |
| b. | /paku-çira/ => [pakçíra]    | ‘dog-DIM’  |
| c. | /kojure-çira/ => [kojrécra] | ‘bird-DIM’ |

# — Metrically-conditioned syncope —

Some vowels resist syncope (in words of both types)

- a. /peti-çira / => [petiçíra] ‘house-DIM’
- b. /tʃĩnenoko/ => [tʃnéno] ‘daughter-in-law-NPSD’

Elsewhere, stress on surface penult; but in (b), on **antepenult**: stress is not computed on the surface form

## Segmental effects

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If syncope places /r/ in coda, it disappears and the vowel is lengthened:

- a. /poriropa/ => [pri:pa]      ‘needle’  
 /su-poriropa/ => [spo:rópa]      ‘3F-needle’

Initial vowels that undergo syncope leave behind a glottal stop

- b. /emotone-ko/ => [ʔmotnéko]      ‘work-NPSD’  
 /etsepi/ => [ʔtsépi]      ‘thread’

# 3. Moraic theory vs. Strict CV



## — Moraic Theory: Iambic parse —

Rose (2019): a moraic analysis

- |    |  |                     |
|----|--|---------------------|
| a. | /( <u>n</u> u-hu)ma/ => [(nhú)ma]                                  | ‘1SG-illness’       |
| b. | /( <u>s</u> u-a)-n <u>o</u> si/ => [(sá)nsi]                       | ‘3F-IRR-stay’       |
| c. | /( <u>t</u> f <u>u</u> nu)(s <u>i</u> hi)-re/ => [(tʃnu)(shí)re]   | ‘cushion-NPSD’      |
| d. | /( <u>t</u> iko)-(h <u>u</u> ma)-n <u>u</u> mo/ => [(tko)(hmá)nmo] | ‘3-VZ-illness-SMOT’ |

- L-to-R iambs, syncope in weak branch
- Unparsed vowel also syncopate (/u/ dans (d)); but
- Final vowels are protected from syncope by assumption
- Non-finality of feet => « unparsed » final CV, CVCV
- stress last foot

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Rose (2019): a moraic analysis

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|----|---|---------------------|
| a. | / (n <u>u</u> -hu)ma/ => [(nhú)ma]                                  | ‘1SG-illness’       |
| b. | / (s <u>u</u> -a)-n <u>o</u> si/ => [(sá)nsi]                       | ‘3F-IRR-stay’       |
| c. | / (t <u>f</u> u)(s <u>i</u> hi)-re/ => [(tʃnu)(shí)re]              | ‘cushion-NPSD’      |
| d. | / (t <u>i</u> ko)-(h <u>u</u> ma)-n <u>u</u> mo/ => [(tko)(hmá)nmo] | ‘3-VZ-illness-SMOT’ |

- L-to-R iambs, syncope in weak branch
- **Unparsed vowel also** syncopate (/u/ dans (d)); but
- Final vowels are protected from syncope **by assumption**
- Non-finality of feet => « **unparsed** » final CV, CVCV
- stress last foot

**Not ideal!!**

## — Moraic Theory: Trochaic parse —

- a. /(mopo)-hi/ => [(móp)hi]      ‘bee-CLF’  
 b. /(paku)-(çira)/ => [(pak)(çíra)]      ‘dog-DIM’  
 c. /(koju)(re-çi)ra/ => [(koj)(réçra)]      ‘bird-DIM’

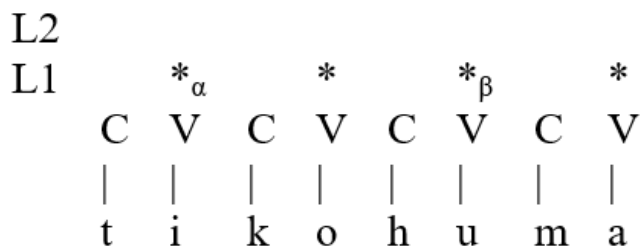
- L-to-R **trochaic** parsing
- **Trochaic feet may be right-aligned (b)...**

**not ideal!!**

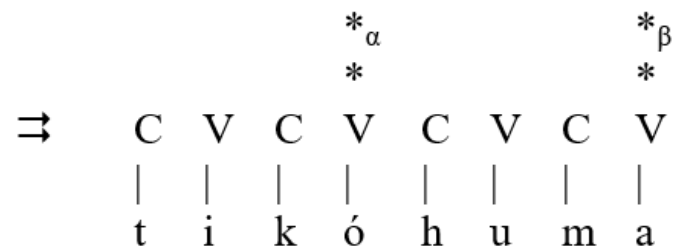
# Strict CV: iambic parse

- Iambic parse: L-to-R incorporation
- Main stress on last L2 except final (non-finality)

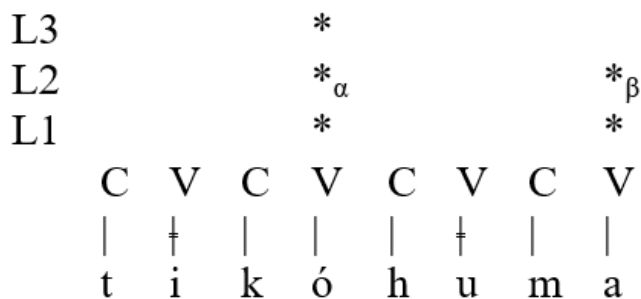
a. Before incorporation



b. After incorporation



c. Main stress assignment



- Incorporation drives syncope! Non projecting Vs cannot support a vowel.
- No need for two syncope configurations (unparsed, weak branch)

# Strict CV: iambic parse

- Words with an odd number of syllables: No final syncope expected.

a. Before incorporation

L3						
L2						
L1		* <sub>α</sub>	*		*	
	C	V	C	V	C	V
	n	u	h	u	m	a

b. After incorporation

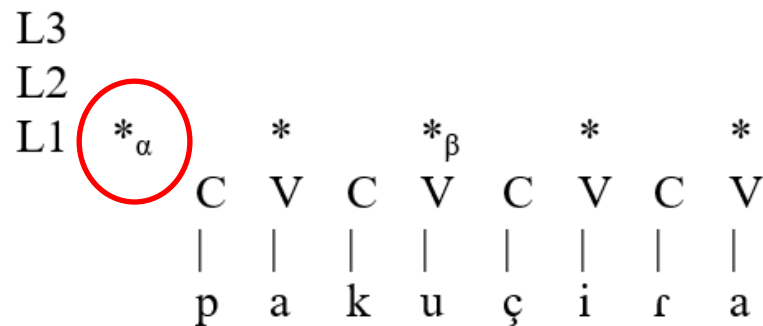
			*			
			* <sub>α</sub>			
			*		*	
	C	V	C	V	C	V
		†				
	n	u	h	ú	m	a

- No need for final vowel assumption.
- No need for « unparsed » syllables.

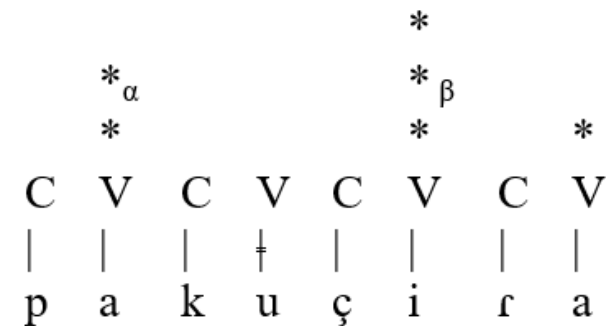
# Strict CV: “Trochaic” parse

- Instead of simply saying “trochaic”, the word can be marked representationally with a *free-standing projection*

a. Before incorporation



b. After incorporation

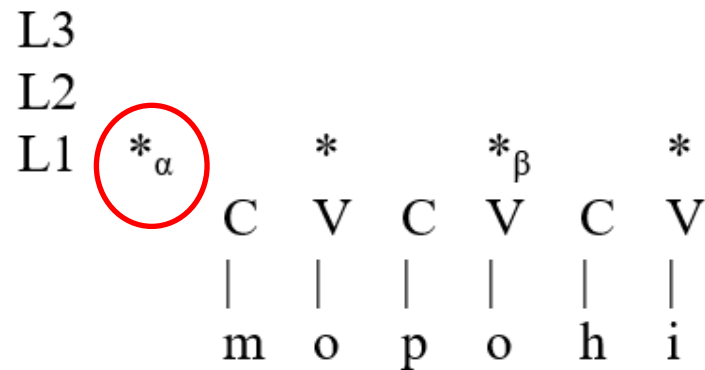


- Incorporation L-to-R as elsewhere.

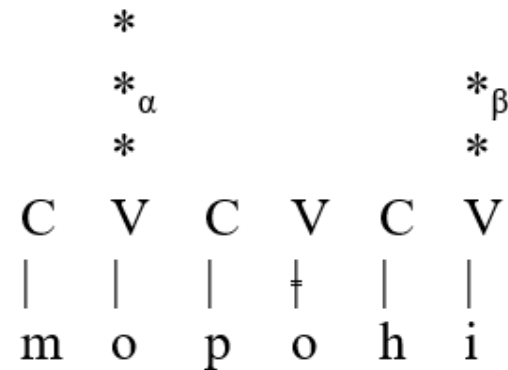
# Strict CV: “Trochaic” parse

- Instead of simply saying “trochaic”, the word can be marked representationally with a *free-standing projection*

a. Before incorporation



b. After incorporation



- Incorporation L-to-R as elsewhere. **No need for two parses in the same language.**







## — Interim Summary —

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- Incorporation = foot-building

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- Incorporation = foot-building

Approach	Moraic account	Strict CV metrics
Theoretical tool		
parsed vs. unparsed	√	Unnecessary
final vowel exemption	√	Unnecessary
two syncope configurations	√	Unnecessary
trochaic vs. iambic	√	Unnecessary (freestanding *)
different non-finality requirements in two parses	√	Unnecessary

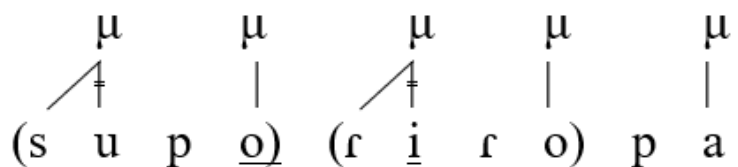
+ Resistant vowels formalized representationally

# Moraic Theory: /r/-deletion

- /r/-deletion + compensatory lengthening: /r/ cannot hold mora of deleted vowel, delinks; preceding vowel lengthens.

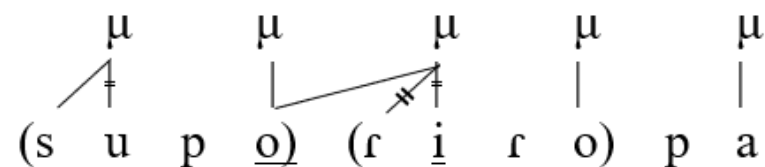
/su-poriropa/ ‘3f-needle’ => [spo:ropa] – mora dissociation and reassociation

a. Mora reassociation



⇒

b. Compensatory lengthening

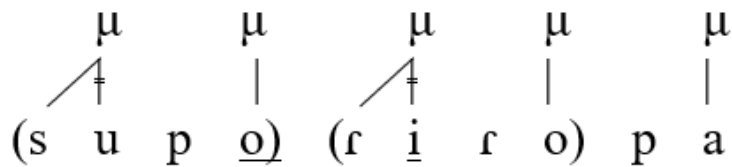


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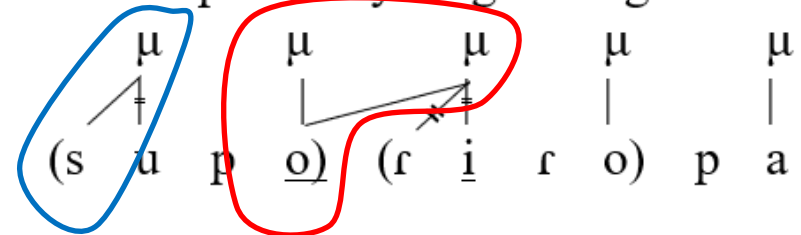
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b. Compensatory lengthening

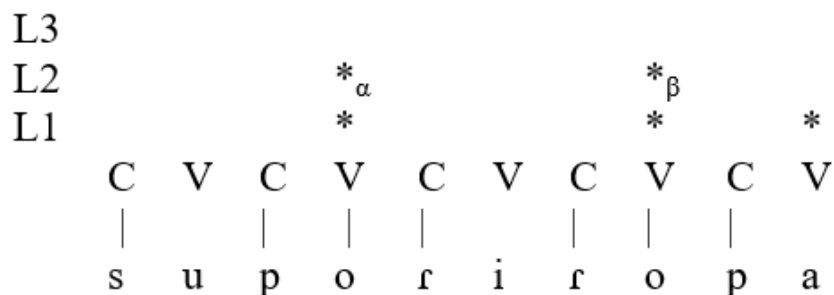


- **Problem!** Long vowel straddles two feet, in violation of syllable integrity.
- **Problem!** Moraic onset!

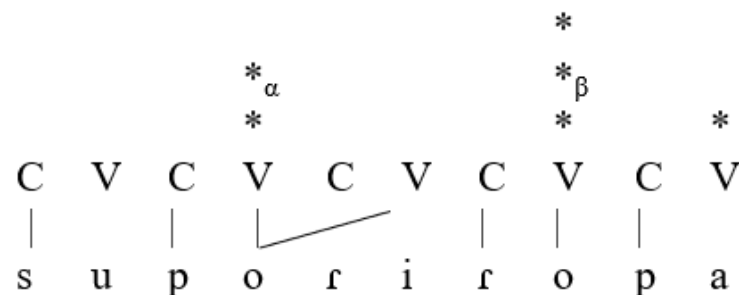
# Strict CV: /r/-deletion

- /r/ requires licensing. Unlicensed, it dissociates, preceding vowel compensates:

a. After incorporation



b. Compensatory lengthening & stress



- No moraic onsets, no foot-straddling.



# Moraic Theory: [ʔ]-insertion

- Vowel syncope, leaves mora behind, [ʔ] inserted to preserve mora:

/etsepi/ 'thread' => [ʔtsépi] – mora dissociation and glottal insertion

a. mora deletion

μ	μ	μ			
( e	ts	e)	p	i	

⇒

b. Glottal insertion

μ	μ	μ			
(<ʔ>	e	ts	e)	p	i

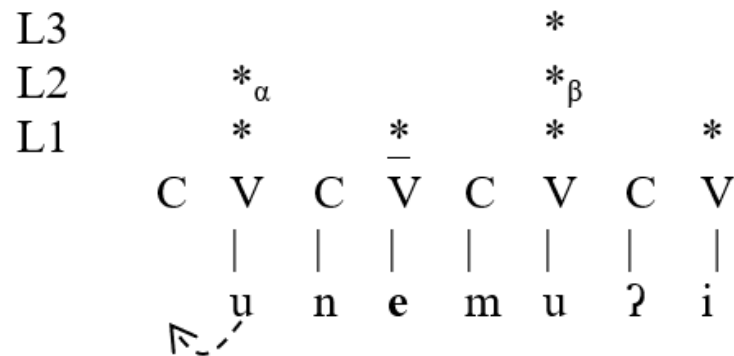
*(Note: In the original image, a blue oval highlights the <ʔ> and the mora above it, with a line connecting them.)*

- Problem! Moraic onset!

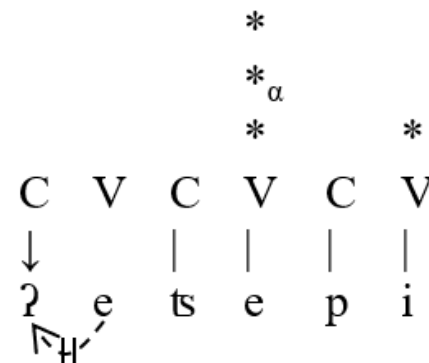
# Strict CV: [ʔ]-insertion

- Vowel syncope (b), can't govern preceding onset => epenthesis.

a. /unemuʔi/ 'water-CLF' => [unemúʔi]



b. /etsepi/ 'thread' => [ʔtsépi]



- No need for moraic onsets.





## Interim Summary

- Incorporation = foot-building

Theoretical tool \ Approach	Moraic account	Strict CV metrics
parsed vs. unparsed	√	Unnecessary
final vowel exemption	√	Unnecessary
two syncope configurations	√	Unnecessary
trochaic vs. iambic	√	Unnecessary (freestanding *)
different non-finality requirements in two parses	√	Unnecessary

+ Resistant vowels formalized representationally

+ No need for foot straddling or moraic onsets

# 4. Conclusion

## Conclusion

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- In Strict CV, moras are superfluous, since both CVC and CVV involve a second empty nucleus.
- Using grid-theory, Ulfsbjorninn (2014) proposed that empty nuclei project, and their projections are incorporated into those of adjacent contentful ones.
- The motivation for incorporation in this case is the **marked status of the empty, projecting nucleus**.
- Metrically-conditioned syncope, as in Mojeño Trinitario, can also be modeled in this approach. Once the only projection of a contentful nucleus is incorporated, it may not support its vowel => syncope.
- In this case, the motivation for incorporation is the **creation of prominence**, exactly like the motivation for foot-building.

## Conclusion

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- The only source of metrical structure in this account is the nucleus (empty or full).
- Unlike the competing moraic account in Rose (2019), the Strict CV one does not appeal to
  - syllables, moras, feet,
  - Final vowel exemption
  - syncope in both weak-footed and unfooted positions
  - parsed vs. unparsed constituents,
  - different parses (with different grammars) in one language,
  - moraic onsets,
  - foot-straddling vowels.
- Of course, all of these tools were not ad-hoc inventions by Rose (2019). There are, for instance, languages for which moraic onsets have been proposed. But the lesser tools and marked configurations one needs, the better.

## Conclusion

- It remains to be seen whether a Strict CV metrics approach can explain other phenomena that have been accounted for with these tools.



"Plant many trees so the country is rich and beautiful"

Thank You!



CV CV

## References

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