Class 19
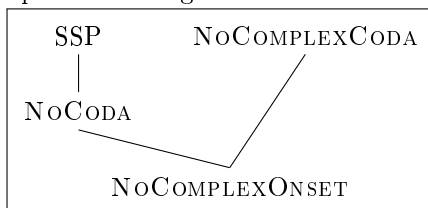# Syllable Structure and Faithfulness

3/28/2022

1 Summary

1.1 Spanish

- Medial rising sonority clusters syllabified as complex onset, not coda + simple onset:
  - /VTRV/ → [V.TRV], *[VT.RV] ⇒ NoCoda ≫ NoComplexOnset
- Medial falling/level sonority clusters syllabified as coda + simple onset, not complex onset:
  - /VSTV/ → [VS.TV], *[V.STV] ⇒ SSP ≫ NoCoda
- Medial 3-consonant falling-then-rising clusters syllabified as simple coda + complex onset, not complex coda + simple onset:
  - /VSTRV/ → [VS.TRV], *[VST.RV] ⇒ NoComplexCoda ≫ NoComplexOnset

(1) Spanish ranking

```
    SSP          NoComplexCoda
     |
  NoCoda
            NoComplexOnset
```

- Initial clusters must be rising sonority.

1.2 Ancient Greek

- **Medial rising sonority clusters syllabified as coda + simple onset, not complex onset:**
  - **/VTRV/ → [VT.RV], *[V.TRV] ⇒ NoComplexOnset ≫ NoCoda**
- Medial falling/level sonority clusters also syllabified as coda + simple onset, not complex onset:
  - /VSTV/ → [VS.TV], *[V.STV] ⇒ explained by NoComplexOnset ≫ NoCoda, so no evidence regarding SSP
- Medial 3-consonant falling-then-rising clusters syllabified as simple coda + complex onset, not complex coda + simple onset:
  - /VSTRV/ → [VS.TRV], *[VST.RV] ⇒ NoComplexCoda ≫ NoComplexOnset

(2) Ancient Greek ranking

```
(SSP)        NoComplexCoda
                  |
            NoComplexOnset

           NoCoda
```
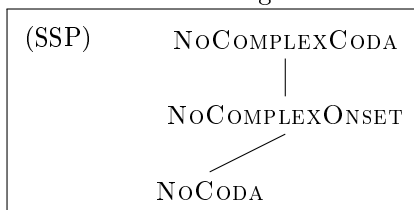
- Initial clusters can be rising, level, or falling sonority.

2   Epenthesis and syllable structure

• Spanish exhibits epenthesis (vowel insertion):

(3)

Simple words			Suffixed words		
/verd/	→ [ver.de]	'green'	/verd-ura/	→ [ver.du.ra]	'greenness'
/padr/	→ [pa.dre]	'father'	/padr-ino/	→ [pa.dri.no]	'godfather'
/karn/	→ [kar.ne]	'meat'	/karn-oso/	→ [kar.no.so]	'meaty'
/tripl/	→ [tri.ple]	'triple'	/tripl-ikar/	→ [tri.pli.kar]	'to triple'

(4)

Simple words			Prefixed words		
/skribir/	→ [es.kri.bir]	'write'	/pre-skribir/	→ [pres.kri.bir]	'prescribe'
/sfera/	→ [es.fe.ra]	'sphere'	/emi-sfera/	→ [e.mis.fe.ra]	'hemisphere'

⋆ How does epenthesis relate to syllable structure in Spanish?

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• Assume that there is a constraint that penalizes epenthesis:

(5)   **Dep:** Assign one violation to each candidate for each vowel it inserts.

∗ This is a **"Faithfulness"** constraint — it penalizes making a change to the input.
   → In rule-based phonology, faithfulness was implicit, because the only way to change the input was to apply a rule.
      ◦ In OT, the concept of faithfulness is implemented with explicit constraints, like Dep.

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⋆ Establish the ranking of Dep in Spanish with respect to the syllable structure constraints in (1)?

⋆ Given the data I've shown you, how does Dep rank with respect to the syllable structure constraints in **Ancient Greek** in (2)?

3   Deletion in Samoan

• Recall the deletion process from Samoan:

(6)   Deletion in Samoan

Simple	Perfective	Gloss	Simple	Perfective	Gloss
tuː	tuːl-ia	'stand'	au	aul-ia	'flow on'
ʔalo	ʔalof-ia	'avoid'	ili	ilif-ia	'blow'
pole	poleŋ-ia	'be anxious'	fesili	fesiliŋ-ia	'question'
milo	milos-ia	'twist'	laʔa	laʔas-ia	'step'
lavaː	lavaːt-ia	'be able'	oʔo	oʔot-ia	'arrive'
siʔo	siʔom-ia	'be enclosed'	moʔo	moʔom-ia	'admire'
sopo	sopoʔ-ia	'go across'	fana	fanaʔ-ia	'shoot'

• Samoan has only (C)V syllables. Which syllable structure constraints are never violated in Samoan?

⋆ How can we understand the deletion process in the context of OT?