

Topic: Rule ordering

1. Canadian raising

(1)

/aɪ/ Raising

$$aɪ \rightarrow \Deltaɪ / \text{---} \begin{cases} \text{[-syllabic]} \\ \text{[-voice]} \end{cases}$$

/aɪ/ is realized as [Δɪ] when it precedes a voiceless consonant.

As a result of this rule, we find the following distribution of data.

<i>tripe</i>	/tɹaɪp/	[tɹΔɪp]	<i>tribe</i>	/tɹaɪb/	[tɹaɪb]
<i>right</i>	/ɹaɪt/	[ɹΔɪt]	<i>ride</i>	/ɹaɪd/	[ɹaɪd]
<i>biker</i>	/haɪkə/	[hΔɪkə]	<i>tiger</i>	/taɪgə/	[taɪgə]
<i>life</i>	/laɪf/	[lΔɪf]	<i>live</i>	/laɪv/	[laɪv]
<i>rifle</i>	/ɹaɪfəl/	[ɹΔɪfəl]	<i>rival</i>	/ɹaɪvəl/	[ɹaɪvəl]
<i>rice</i>	/ɹaɪs/	[ɹΔɪs]	<i>rise</i>	/ɹaɪz/	[ɹaɪz]
			<i>rye</i>	/ɹaɪ/	[ɹaɪ]
			<i>ion</i>	/aɪən/	[aɪən]

(2)

Tapping (revised)

$$\begin{bmatrix} \text{+anterior} \\ \text{-continuant} \end{bmatrix} \rightarrow r / \text{[-consonantal]} \text{---} \begin{bmatrix} \text{+syllabic} \\ \text{-stress} \end{bmatrix}$$

	Phonemic	Phonetic		Phonemic	Phonetic
<i>Ada</i>	/'eɪdə/	['eɪrə]	<i>Dan</i>	/'dæn/	['dæn]
<i>ladder</i>	/lædə/	['lærrə]	<i>adept</i>	/ə'dept/	[ə'dept]
<i>reading</i>	/'ɹɪdɪŋ/	['ɹɪrɪŋ]	<i>Camden</i>	/'kæmdən/	['kæmdən]
<i>edify</i>	/'ɛdɪfaɪ/	['ɛrɪfaɪ]	<i>Hilda</i>	/'hɪldə/	['hɪldə]
<i>sediment</i>	/'sedɪmənt/	['sɛrɪmənt]	<i>Ogden</i>	/'əgdən/	['əgdən]
<i>adolescent</i>	/,ædə'lesənt/	[,ærrə'lesənt]	<i>Edgar</i>	/'ɛdgə/	['ɛdgə]
			<i>pad</i>	/'pæd/	['pæd]

Two ways of ordering raising and tapping:

/aɪ/ Raising precedes Tapping

<i>write</i>	<i>writing</i>	<i>ride</i>	<i>riding</i>	
/'ɹaɪt/	/'ɹaɪt-ɪŋ/	/'ɹaɪd/	/'ɹaɪd-ɪŋ/	underlying forms
'ɹaɪt	'ɹaɪtɪŋ	—	—	/aɪ/ Raising
—	'ɹaɪrɪŋ	—	'ɹaɪrɪŋ	Tapping
['ɹaɪt]	['ɹaɪrɪ-ɪŋ]	['ɹaɪd]	['ɹaɪrɪŋ]	surface forms

Tapping precedes /aɪ/ Raising

<i>write</i>	<i>writing</i>	<i>ride</i>	<i>riding</i>	
/'ɹaɪt/	/'ɹaɪt-ɪŋ/	/'ɹaɪd/	/'ɹaɪd-ɪŋ/	underlying forms
—	'ɹaɪrɪŋ	—	'ɹaɪrɪŋ	Tapping
'ɹaɪt	—	—	—	/aɪ/ Raising
['ɹaɪt]	['ɹaɪrɪ-ɪŋ]	['ɹaɪd]	['ɹaɪrɪŋ]	surface forms

2. Rule ordering: questions and techniques

- How to justify underlying form of a morpheme? Not necessarily same as *citation form*.
- Feeding: first rule creates the environment that makes second rule applicable.
- Bleeding: first rule destroys the environment that would make second rule applicable.
- Counter-feeding / counter-bleeding: if the two rules were applied in the reversed order, then we had a case of feeding / bleeding.
- Hasse-diagram: to visualize a *partial order*.

Reading: Kenstowicz, Chapters 3 and 5.

Homework (due: October 22): Hayes, page 156, exercises 1, 2 and 3.