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On the Vowel Length in the Environment *_CiV*

Yukiko Kazumi and Takeshi Shimada

It is predominantly characteristic of the environment *_CiV* to lengthen the vowels except /i/. Some examples are as follows:

(1)	médial ---	médical	rádial ---	rádical
	[iy]	[e]	[ey]	[æ]
	médiate --	médicate	rádiate --	rádicate
	[iy]	[e]	[ey]	[æ]

Each of the minimal pairs above shows that the length of underlined vowels is closely related to the following environment, i.e. whether the vowel is followed by the sequence *CiV* or not. Kazumi (1991) stipulates the behavior of vowels in the environment *_CiV* as in (2):

(2) In the environment *_CiV*,
  (i) *i* must be short, and
  (ii) other vowels must be long.

In this joint research, we pay attention to the long vowels in the environment *_CiV* and observe the relevant data and then attempt to explain why the vowels must be long.

Consider the following data:

(3) a.	Iran/Iranian	Canada/Canadian
	college/collegian	Mongol/Mongolian
b.	harmony/harmonious	colony/colonial
	study/studious	remedy/remedial
c.	luxury/luxuriate	

The data above suggest that *CiV* Lengthening is triggered irrespective of internal structure of *CiV*. In (3a) the environ-

ment *_CiV* is formed when an *iV*-initial suffix is added to a consonant-final stem, while in (3b) it is formed when *V*-initial suffix is added to an *Ci*-final stem. The data in (3c) shows that the *V* in the sequence *CiV* may be the first element of a diphthong.

From the observation above we assume as follows:

(4) In the environment *_CiV*, a syllable must be heavy, i.e., a rhyme must be VV or VC.

If the sequence *VCiV* is given as an input, according to (4), the output can be as follows: (i) *VVCiV* or (ii) *VCCiV*. The output in Present-day English is only (i) as we have seen in (3). Then what about (ii)? We can find such a form in Old English or the West Germanic languages (cf. Lass and Anderson (1975)), and this might suggest that in Old English, as in Present-day English, the environment *_CiV* has the special status.

We next make another assumption from the data in (3). Borowsky (1989) argues a word-medial rhyme must be VV or VC. Given this, the sequence *VVCiV* as an output of *CiV* Lengthening should have a syllable boundary before *CiV*. Thus we assume as follows:

(5) A syllable boundary must be immediately before *CiV* where the preceding vowel is long.

References

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