THE TREATMENT OF */R/ IN TWO MODERN KHMER DIALECTS

by

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1. INTRODUCTION

1.1 The two modern Khmer dialects of the title are Standard Cambodian (Std) and the regional dialect centering around the national capital, Phnom Penh (PPn). The former dialect is spoken by educated people throughout the country, and is the primary vehicle of mass communication – e.g. radio and public speaking. While the regional speech of the capital area is coming to be more and more confined to the uneducated, there are still many people who can and do handle both Std and PPn in daily life. Such speakers do not infallibly distinguish between the two dialects and hence are ruled out as informants.

A third modern Khmer dialect, touched upon only briefly here, is that of Battambong (Bbg), spoken in and around a large urban center almost 200 miles to the northwest of Phnom Penh. In most respects Bbg resembles Std just as closely as PPn does; it shares with Std the /r/ phoneme that PPn lacks, for example.

1.2 The outstanding point of difference between Std and PPn is, in fact, the treatment of */r/ – a feature instantly noticed by the most unsophisticated observers. In simplest terms, Std has an [r] sound, while PPn does not. (There are, of course, other dialects not mentioned here, some of which have [r] and some of which do not). So great is the prestige of Std, and hence of its distinguishing sound, that the writer has yet to meet a native speaker of Cambodian, of whatever regional or class origin, who could not produce some sort of [r] (phonetically speaking) when he thought the situation called for it. A major difficulty encountered by any investigator in this field, in fact, is the willingness of the normally [r]-less speaker to introduce [r]'s into his citation forms – a willingness reinforced by the schools as well as by the ubiquitousness of the prestige dialect.

1.3 In the absence of reliable and comprehensive comparative work
on modern Cambodian dialects, the assumption is here arbitrarily made that an \(/r/\) in the written language which corresponds to an \(/r/\) in spoken Std is sufficient evidence of an inherited *\(/r/\). The corresponding development in PPn is therefore considered as a reflex of this phoneme of the parent language, unless there is strong evidence to the contrary (as, for example, modern borrowings). Whether this phoneme was phonetically [\(r\)] or something else is of course irrelevant, but much of the evidence from loan-words and from languages written with related alphabets points strongly to an [\(r\)]-like prototype.

1.4 There are three types of occurrence of Std \(/r/\) which must be distinguished for the purposes of the comparison to be undertaken here: 1) absolute initial position in a stressed syllable; 2) second position in a consonant cluster at the beginning of a stressed syllable; and 3) either position in an unstressed syllable. The treatment of *\(/r/\) in PPn is different for all three cases, which are taken up separately below. Graphic Khmer \(/r/\) occurs not only in these positions but also in syllable-final position; Std \(/r/\) does not occur in final position.

2. CONSONANTAL SYSTEMS

2.1 The consonantal phoneme inventories of Std and PPn are identical, apart from the central problem of this paper, *\(/r/\). Phonetic differences between corresponding phonemes of the two dialects are, moreover, almost negligible.

Excluding \(/r/\), Std and PPn share 16 consonants. These are of five distinct articulatory types, occurring in five positions. Only the dental position and the voiceless-stop type are fully represented. The consonants:

\[
\begin{array}{cccccc}
   b & p & m & v & d & t \\
   t & n & l & s & c & \tilde{n} \\
   k & \eta & & & ? & h
\end{array}
\]

Std \(/r/\) is a voiced alveolar consonant, for most speakers a frictionless grooved-tip continuant, but for others a spirant, flap, or (rarely) trill. Bbg \(/r/\) is similarly distributed. Under certain conditions of stress and juncture, Std \(/r/\) is pre-glottalized; this does not happen to the other continuants, \(/v \ l \ j/\).
2.2 Initial consonant clusters are very common in both Std and PPN. The first member of such a cluster is one of the group /p t c k s/ and the second member is any consonant in the inventory, with patterned restrictions. (The "aspirated stops" /ph th ch kh/ are here analyzed as stop plus /h/, since in all other clusters the aspiration of /p t c k/ is predictable from the nature of the second member of the cluster, and no "real" stop-plus-/h/ clusters occur. This analysis turns out to have morphological convenience also, since infixes occur between the stop and the /h/ – e.g. /thum/ “big”, /tumhum/ “size”, with infixed /um/).

2.3 In Std, all five possible /r/-clusters occur: /pr tr cr kr sr/. In all these clusters, the /r/ is fully voiced, and the stops /p t c k/ are unaspirated. In this respect /r/ second in a cluster behaves exactly like the stops (first two columns of chart) – cf. /toun/ “south”, with no aspiration of /t/. On the other hand, when the second member of the cluster is a nasal, continuant, or spirant (last three columns of chart), it is devoiced wherever possible, and the preceding stop is aspirated – cf. [t’la] “cost”, with aspirated /t/, and voiceless /l/.

PPN, of course, has no /r/-clusters.

3. VOCALIC SYSTEMS

3.1 The vocalic phoneme inventories of Std and PPN are likewise identical, although the ranges of corresponding phonemes in the two dialects are somewhat different phonetically. The chart below presents the nine shared vowels in a phonemic relation which holds true for both dialects.

<table>
<thead>
<tr>
<th></th>
<th>High</th>
<th>Upper Mid</th>
<th>Lower Mid</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front:</td>
<td></td>
<td>i</td>
<td>e</td>
<td>ε</td>
</tr>
<tr>
<td></td>
<td>Non-front, unrounded:</td>
<td>y</td>
<td>o</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Non-front, rounded:</td>
<td>u</td>
<td>o</td>
<td></td>
</tr>
</tbody>
</table>

Bbg lacks the triple distinction in the non-low front range, where it has only two phonemes (written /i e/). Otherwise, the phonemic distribution is the same.

All of the nine vocalic phonemes of Std and PPN, and the eight of Bbg, occur in contrast as short vowels before final /h/. Each vowel also occurs lengthened (as such analyzed here as two occurrences of the same phoneme) and in clusters.

3.2 The particular combinations of vowels occurring in clusters differ radically among Std, PPN, and Bbg. Part of this difference is accounted
for by the fact that Std-Bbg */r/ corresponds in part to certain vocalic
effects in PPN. The remainder of the difference is due to the existence,
quite apart from the question of */r/, of a larger number of vocalic-
nuclear distinctions in Std, which in this respect truly represents a
blending of PPN, Bbg, and other dialects.

The vocalic clusters are too numerous to list completely here. Ex-
cluding the PPN clusters which correspond to */r/ plus vowel, there are a
least 40 inherited clusters (some of which can be analyzed as vowel plus
/j/ or /v/). The table below shows only the points at which Std, PPN, and
Bbg are at variance.

<table>
<thead>
<tr>
<th></th>
<th>Std</th>
<th>PPN</th>
<th>Bbg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>əəə</td>
<td>əəə</td>
<td>əəə</td>
</tr>
<tr>
<td>2</td>
<td>uə</td>
<td>uə</td>
<td>əə</td>
</tr>
<tr>
<td>3</td>
<td>eəa</td>
<td>iə</td>
<td>eəa</td>
</tr>
<tr>
<td>4</td>
<td>aəa</td>
<td>aə</td>
<td>aə</td>
</tr>
<tr>
<td>5</td>
<td>əəa</td>
<td>əəa</td>
<td>əəa</td>
</tr>
<tr>
<td>6</td>
<td>e</td>
<td>e</td>
<td>e</td>
</tr>
<tr>
<td>7</td>
<td>ee</td>
<td>[ee]</td>
<td>ee</td>
</tr>
<tr>
<td>8</td>
<td>aə</td>
<td>aə</td>
<td>aə</td>
</tr>
<tr>
<td>9</td>
<td>ee</td>
<td>ee</td>
<td>ee</td>
</tr>
</tbody>
</table>

Of the PPN clusters which correspond to */r/ plus vowel, at least two
have no other origin:

<table>
<thead>
<tr>
<th></th>
<th>Std, Bbg</th>
<th>PPN</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>rə</td>
<td>əə</td>
</tr>
<tr>
<td>11</td>
<td>rə</td>
<td>ea</td>
</tr>
</tbody>
</table>

3.3 In Std and PPN, all complex vowel nuclei (i.e. clusters and long
vowels) which begin with a non-low vowel phoneme and remain at that
level or fall lower are, facultatively and non-distinctively, pharyngealized.
(In the writing system this distinction is represented, almost perfectly
insofar as Std is concerned, by the selection of initial consonants). For
every example, in the chart above, Std nuclei numbers 1-5 and 9 are normally
so pharyngealized. This is true also of PPN nuclei 7, 10, 11, although not
of their Std correspondences.

Conversely, all Std and PPN complex nuclei which begin with a low
vowel phoneme and most of those which rise (from any level) are not
pharyngealized. This applies, for example, to Std nuclei 7 and 8, and
to PPN 8.
4. EFFECTS OF */r/

4.1 In PPn, the normal reflex of */r/ as a single initial consonant in a stressed syllable is a voiced pharyngeal spirant /H/, plus a rising pitch on the vocalic nucleus /'/, which continues to the end of the voiced portion of the syllable. (In the examples, the accent is written arbitrarily on the first vowel phoneme of a complex nucleus).

Std /riiol/ “riel, piastre” PPn /Hiiol/
Std /ʁoɔoi/ “hundred” PPn /Hɔɔoi/

Historically, absolute initial */r/ occurs almost exclusively before vocalic nuclei of the pharyngealized type. The few examples which can be found in PPn that correspond to absolute initial /r/ followed by a plain vowel in Std are recent loan-words: e.g. Std /raacæa/ “Raja (name of a hotel).” The various interpretations of such loan-words in PPn, which include substitution of /l/ for /r/ in some cases, throw no light on the historical picture.

On the other hand, */r/ plus plain vowel is quite common in stressed syllables preceded by an unstressed prefix.

Std /dɔm’ʁei/ “elephant” PPn /dɔm’Hœi/  hayń (R)

In some cases, however, the */r/ behaves in PPn as if it were part of a cluster (cf. 4.2. below). This category includes at least one loan-word:

Std /ba’ranŋ/ “French” PPn /pẽañ/ (as if from */pranŋ/).

4.2 The reflexes of stressed *xr (where x equals a permitted consonant) all produce rising pitch in the vocalic nuclei which follow them, but there are no clear cases of /H/ for */r/. A contributing factor is that all vocalic nuclei following *xr become pharyngealized in PPn, if they were not so to begin with. The first element in an original plain-vowel nucleus is, moreover, raised to a higher position, producing the extra vocalic clusters mentioned in 3.2. The resulting nuclei, except for /oɔ/ and /ea/, are identical with nuclei already existing in PPn. Examples:

Std /pram/ “five” PPn /pẽam/
Std /tɔŋŋ/ “straight” PPn /tɔŋŋ/
Std /kraŋŋ/ “much” PPn /kɔŋŋ/
Std /kroɔm/ “under” PPn /kɔɔm/
Std /seŋŋ/ “female” PPn /sẽŋŋ/

When the vocalic nucleus is already pharyngealized, there is no effect in PPn other than the rising tone:
Incomplete evidence on dialects neighboring the Phnom Penh area, for example that of Takeo, indicates that at least some speakers regularly aspirate the stops in this class of words. This aspiration is analyzed as /H/ rather than /h/, because of the pharyngealization in the environment.

PPn /cûŋ/ “corner” Takeo /cHûŋ/

There are by this time many speakers in the capital proper who do this, but the aspiration does not seem to be a feature of PPn itself.

4.3 Initial and clustered */r/ in unstressed syllables are totally lost in PPn, being represented neither by /H/ nor by rising pitch. Two common prefixes involving initial */r/ are Std /ro-/ and /rum-/, which correspond normally to PPn /ə-/ and /əm-/ respectively:

Std /ro'böh/ “thing” PPn /ə'böh/
Std /rum'khaan/ “to annoy” PPn /əm'khaan/

In a few words, PPn has /a-/ for /ro-/: 

Std /ro'naa/ “a saw” PPn /a'naa/

In unstressed consonant clusters, the */r/ is also lost:

Std /pro'hael/ “approximately” PPn /pə'hael/
Std /тро'ceoʔ/ “cool” PPn /tə'ceoʔ/
Std /cro'lom/ “to miss” PPn /ə'lom/
Std /kro'hoom/ “red” PPn /kə'hoom/
Std /sro'laŋ/ “to like” PPn /sə'laŋ/

These particular PPn forms, however, are frequently heard from Std speakers as well, in less formal contexts.

5. CONCLUSION

As far as PPn is concerned, the question of the phonemic status of [H] and ['] remains to be settled. The structure of the inherited vocabulary is such that it is very difficult to find minimal pairs involving either phone. Present evidence indicates that [H] and [h] are allophones of the
same phoneme, the former occurring only in syllables with rising pitch, and the latter elsewhere.

This solution, however, depends in turn on the establishment of a phoneme */r/, rising pitch. So far, only one reliable minimal pair has been located:

PPn /ćiəŋ/ “artisan” (Std /ćeəŋ/)
PPn /ćiəŋ/ “to sing” (Std /criəŋ/)

Undoubtedly, other such pairs exist. Even if they do not, phonemic status for */r/ seems indicated by patterning and the abundance of near-pairs. This solution for the rising tone in PPn is, incidentally, attractive in a historical sense. Rising pitch is the one feature of PPn which corresponds in all instances to inherited stressed */r/, and vice versa.

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