In a discussion of Mon-Khmer subgroupings in Viet Nam, Thomas noted the divergence of Cua from other North Bahnaric languages:

Within the (North Bahnaric) group Cua appears to be slightly divergent; although it shows 56-61% cognates with Hrê, it is only 50-53% cognate with the other languages in the group. Cua also shows more phonological deviation from the other members of the group, which possibly led to a non-recognition of cognates. The others of the group, including Jeh, Rengao, and Halang, are 55-60% cognate with each other.¹

The purpose of this paper is to state a unique but shared phonological shift of Cua and Kōtua as well as other distinctives of these languages in contrast to the other North Bahnaric (NB) languages, giving rise to the classification of Cua and Kōtua as Eastern North Bahnaric (ENB).

Cua and Kōtua are both languages found in Quang Ngãi province of central Viet Nam. The Cua are in the eastern mountains arising from the coastal low lands whereas the Kōtua are in the west between the Cua and the Sedang, occupying parts of both Quang Ngãi and Kontum provinces. The linguistic border between the Kōtua and the Sedang, significantly, coincides with the watershed between the South China Sea and the Mekong River Valley. The Sedang are west of the watershed entirely within Kontum province. The Kotua and the Sedang converge at present in resettlement villages at Mang Buk.²

Final nasal shift

The most distinctive historical feature of Cua and Kōtua phonology is the shift of some Proto-North-Bahnaric (PNB) final nasals to stops.³

After PNB initial nasals (N), h, and glottal stop (q), PNB final nasals are retained in ENB; but after all other initial consonants (C₁), PNB final nasals become voiceless stops (P) at the same point of articulation as the former nasal. This is illustrated in the following formula.
Todrah is known to have a shift of PNB final nasals to stops. The Modra shift, however, is more restricted than that of ENB. In Modra only PNB final nasals following short vowels which in turn are not preceded by an initial nasal or glottal stop have become final stops:

\[
\begin{array}{c}
\text{PNB} \\
\begin{bmatrix}
q & \check{\text{VN}} \\
\text{N} & \check{\text{VN}} \\
\end{bmatrix}
\end{array}
\quad \text{M} \quad \begin{bmatrix}
\check{\text{C}} \\
\text{N} \\
\end{bmatrix}
\]

Other ENB distinctives

1) Lack of register. Neither Cua nor Kotua evidence any vowel register contrast. All the other NB languages, excepting only Bahnar, have two contrastive vowel registers—a tense and a lax register. The lack of such a feature in Cua and Kotua further distinguishes them from the other NB languages. That the contiguous Sedang dialect roteang koleq likewise seems to lack this register phenomenon is presently inexplicable.

2) Vocabulary differences. The following vocabulary differences between Kotua and the other NB languages were noted on the Kotua word-list footnoted above. Cua words subsequently added to this list include no cognates with Kotua, five with PNB. (S and R forms are given where a PNB reconstruction is lacking).

<table>
<thead>
<tr>
<th>PNB</th>
<th>Cua</th>
<th>Kotua</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>*rapit</td>
<td>rapiat</td>
<td>liò</td>
<td>'tongue'</td>
</tr>
<tr>
<td>*ti</td>
<td>ti</td>
<td>lok</td>
<td>'hand'</td>
</tr>
<tr>
<td>*blew</td>
<td>kataal</td>
<td>kôteq</td>
<td>'thigh'</td>
</tr>
<tr>
<td>*qbaq</td>
<td>baq</td>
<td>pap</td>
<td>'father'</td>
</tr>
<tr>
<td>*por</td>
<td>pong</td>
<td>poi</td>
<td>'cooked rice'</td>
</tr>
<tr>
<td>PHarS*kaqmoak</td>
<td>kaqdoh</td>
<td>tako'ng</td>
<td>'tree bark'</td>
</tr>
<tr>
<td>PHarS*kor.</td>
<td>apó</td>
<td>kôdau</td>
<td>'roof'</td>
</tr>
<tr>
<td>S trirôu</td>
<td>kajou</td>
<td>nggu</td>
<td>'mosquito'</td>
</tr>
<tr>
<td>S nôu</td>
<td>mîq</td>
<td>you</td>
<td>'mother'</td>
</tr>
<tr>
<td>S ngoh</td>
<td>ay</td>
<td>ñduq</td>
<td>'older brother'</td>
</tr>
<tr>
<td>S nà</td>
<td>ay</td>
<td>naiq</td>
<td>'older sister'</td>
</tr>
<tr>
<td>S po</td>
<td>baal ép</td>
<td>pi</td>
<td>'you--pl.'</td>
</tr>
<tr>
<td>S jia</td>
<td>kadrup</td>
<td>kru</td>
<td>'firewood'</td>
</tr>
<tr>
<td>S kodê</td>
<td>tiil</td>
<td>bit</td>
<td>'kill'</td>
</tr>
<tr>
<td>R koyal</td>
<td>khill</td>
<td>hngaïq</td>
<td>'wind'</td>
</tr>
</tbody>
</table>

3) Shift of final r to l in Cua, loss of final r in Kotua.

| (c)h)ûr. | suul | chu | 'pig' |
| *gyêr | iil | iu | 'chicken' |
| *qbar | baal | baiq | 'two' |
| *akar | (kaqduh) | akau | 'skin' |
| *sur | (hiip) | tsu | 'smell' |
| *por | (pong) | poi | 'cooked rice' |

Exceptions in Kotua:

*manår | panûl | kanar | 'wing' |
*haqar | gâl | kar | 'drum' |
Examples:

Form PNB Cua Kotua gloss
*NVN *hanăm sanum hanam 'year'
   *manën̄ panêng kanêng 'crossbow'
   *sanën̄ kânêng hâng 'tooth'
   *mâng kamung mäng 'night'
   *ranông ranâng ranâng 'neck'
   *tahngam thoom naham 'eight'
*hVN PHrs *yihîam suum siam 'breathe'
Exceptions:
   *hêm tahôôp tâhôôp 'bathe'
   *maham bahaap/ bâhâap 'blood'
*qVN *âm äm 'give'
   *ông ōng 'boy, son-in-law'
Exceptions:
   *um ôôp tâhôôp 'winnow'
   *ûn ûn 'fire'
C₁ VN
   *chêm séép chip 'bird'
   *baqdâm paqdap patap 'five'
   *tachîn kasiit chit 'nine'
   *kân kôt kôt 'big'
   *plōîn plëék plîk 'sky'
   *hanglōng salâk hloôk 'star'
   *(ka)rōng karâk rok 'back'
   *xôông gôk kûk 'jungle'
   *khłom klôôp hlôp 'blow'
   *klâm klooôp kliap 'liver'
   *kon koot kuat 'child'
   *pun poot pôt 'four'
   *hrîn hareek hrik 'hundred'
   *kâtseîn khiak katsêk 'bone'
S trôông trôôk/ trôôk 'path'
   truak
S klôông klook/ klook/ kalook/ kalook/ kalook/ kalook/ kalook/ kloông kloông kloông kloông 'seed'
R jèng jôôk njek 'leg'
Exception:
   *qdon tuan 'ear'

In the case of Cua for which more data is available, the author has noted 72 examples exemplifying this final nasal shift with perhaps only 3 or 4 exceptions.
In the other NB languages only the Môdôra dialect of
(4) Shift of final ǐ to w in Kotua.
   *apāl  pal  apau  'mortar'
(5) Voiced fricative ŵ in Kotua.
   *tsũk  kluk  ŵuk  'cloud'
   S sau  yoŋ  ŵuŋ  'fear'
(6) Affricated ts in Kotua: 7
   *katsen  kxiak  katek  'bone'
   *sur  tsu  'smell'
   *sũt  chuuy  tsut  'wipe'

Kotua has a fricativized voiceless lateral as in hlok 'star'. Kotua initial voiced stops are prenasalized; e.g. mb. Kotua final nasals are sometimes prestopped; e.g. ¼n.
The word-final voiceless lateral ¼l in Cua is unique among Viet Nam languages. 8

In Sedang ethnodialectal terminology the Kotua are referred to as rōteang koqñán. 9 Though the inclusion of the Kotua group among the Sedang dialect terminology might suggest that Kotua is a dialect of Sedang, this is rather a case of the Sedang extending their dialect terminology to their neighbors (cf. rōteang nam ǐ for the Sedang Rengao, the Rengao neighbors to the Sedang).

Cua vowel length does not regularly correspond to PNB vowel length; especially PNB short vowels more often correspond with Cua long vowels than Cua short vowels.
FOOTNOTES


2. Of the approximately 22 villages represented in the five resettlement villages at Mang Buk, only two are Kotua. The others are all Sedang. These two are the original Mang Buk village and Lang Ruih (now in Dak Sea resettlement village).

3. Cf. Jacqueline G. Maier, 'Cua phonemes.' In *Mon-Khmer Studies III*, The Linguistic Circle of Saigon and The Summer Institute of Linguistics, Saigon, 1969. pp. 9-19. Especially footnote 5: "It is interesting to note that of the 1700 word dictionary used for this data, only 8% of the final consonants are nasals. Comparing this language with other Mon-Khmer languages (most of which have a much higher percentage of nasal finals), it would appear that Cua usually makes a shift to a voiceless stop at the same point of articulation as the nasal ending in these other languages." In Sedang, for example, over 30% of the words have a final nasal and, excluding open-syllable words, 47% of all words with final consonants have a final nasal.

4. PNB forms or, in their absence, Proto-Hrê-Sedang (PHrsS), are from my "A phonological reconstruction of Proto-North-Bahnaric", to be published. The author is responsible for Sedang (S) forms. Cua forms are from a manuscript dictionary by Jacqueline Maier and Eva Burton of the Summer Institute of Linguistics. Kotua forms are from a 200-word list taken in Mang Buk by the author in February 1969 (informant Nai of Thu Thok village, reportedly two days' walk east of Mang Buk). Rengao (R) forms were kindly supplied by Kenneth J. Gregerson, also of the Summer Institute of Linguistics.

Orthography used herein is basically equivalent to the Vietnamese quốc-nginx with the following exceptions: - indicates short vowels in PNB whereas double vowels indicate long vowels in Cua; - indicates lax register in PNB and R whereas - indicates tense register in S. ńl represents a voiceless fricative lateral in Kotua. ń represents a glottal stop.
5. This would not be an exception if the initial shift *mah- to ph- preceded the final nasal shift, and if aspirated stops like ph were excluded from the h classification and associated with the C₁ consonants.

6. See Kenneth J. Gregerson and Kenneth D. Smith, 'The development of Todrah register' also in this volume.

7. PNB *ts was reconstructed on the basis of Bahnar t, Proto-Jeh-Haláng s, Sedang s, and Hrê s correspondences. This reconstruction is confirmed by such subsequent findings as Kötua ñ and ts, Rengao x [ts], and Todrah ts.


9. See my 'Sedang ethnodialects', *Anthropological Linguistics* 11.5.143-47 (May 1969), and 'More on Sedang Ethnodialects' in this volume.