CHRU PHONEMES

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0. INTRODUCTION

Chru, a member of Vietnam's Austronesian family, is spoken by an estimated 10,000 people in the Don Duong district of Tuyen Duc province and in Binh Tuy province. The analysis here is of the language spoken in Diom village in the district of Don Duong, Tuyen Duc province.

1. THE PHONOLOGICAL WORD

A main syllable and one or two optional presyllables make up the Chru phonological word. The main syllable receives heavier stress, the presyllables lighter stress. When two presyllables occur the one just before the main syllable is more lightly stressed.

Using PS for presyllable and MS for main syllable the phonological word is formulated as: \((PS_2) PS_1) MS. The syllables are filled by consonants and vowels as follows:

\[
PS_2: C_1^V_1 \quad PS_1: C_2^V_2C_3 \quad MS: C_4C_5C_6V_3C_7
\]
The fullest phonological word expansion discovered so far is *p*ò*t*r*b|l|o' 'to turn over’. The maximum expansion of the MS is brw|a| 'work'. (Cf. sections 3 and 5 for distribution of phonemes.)

2. CONSONANTS

2.1 CONSONANT CHART

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<td>w'</td>
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<td>y'</td>
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2.2 Analytical problems are posed by the glottalised and post aspirated consonants.

2.2.1 Syllable initial glottalised consonants are 'b, 'd, 'w, 'y. The glottal stop and each of these other consonants function freely as independent phonemes. No preglottalised consonants have been found in presyllabic position in which only a CV and CVC patterns are well attested. These glottalised consonants are most simply analysed as sequences.

2.2.2 Post aspirated consonants are ph, th, kh. In some cases where a verb is used to form a noun through an infixed -n- there is evidence that the stop plus aspiration is a sequence rather than a unit, e.g. phà 'to plane' is in the nominal form pom-hà 'a plane'. Stop-continuant sequences are commonly found in the main syllable. Post aspirated stops do not occur in the presyllable. The simplest analysis, therefore, is to regard post aspirated consonants as sequences of phonemes.

2.2.3 The syllable final post aspirated consonant is [yh]. The syllable pattern clearly indicates a complex unit interpretation. Occurring only word finally [yh] may be analysed as an allophone of /s/ since [s] never occurs word finally, and [yh] and [s] are phonetically fairly
close. Of the few words so far discovered having the -yh ending one, *monayh *pineapple*, is reconstructed by Dempwolff as *kenas and *nanas.*

Ernest W. Lee reconstructs *pineapple* as *m_nas for Proto-Chamic.*

This word appears to be a reflex of Dempwolff's Proto-Malayo-Polynesian reconstructions for *pineapple* which supports [yh] as an allophone of /s/.

For a parallel example, what is reconstructed by Lee as *kapas *cotton* for Proto-Chamic is k paip in Jorai and kpaih in Rade. Here the /s/ is reflected as -ih. On the basis of the foregoing [yh] will be regarded as an allophone of /s/.

2.2.4 The syllable final post glottalised consonants are [w'] and [y']. As with [yh] these are complex units occurring in main syllable final position when the normal pattern has only a single consonant filling that position. One solution is to regard these as allophones of /b/ and /j/ respectively since these segments have phonetic features similar to [w'] and [y']. All are stops, [w'] and /b/ are labial, and [y'] and /j/ are alveopalatal. The phonemes /b/ and /j/ never occur word finally, [w'] and [y'] occur only word finally. However, an allophonic solution raises difficulties of symmetry as James Cooper has pointed out in dealing with this same problem in the analysis of Halang phonemes.

There are no corresponding allophones for /d/ and /g/ which also do not occur word finally. This makes the allophonic solution seem arbitrary.

Another possible solution is to regard [w'] and [y'] as complex units occurring only in word final position. Lee has shown that Proto-Chamic *-c becomes 'i' in Roglai and 'y' in Cham in most environments. Jorai has a similar reflex in lai* 'to say' from Proto-Chamic *iac*; for this Chru has 'iay'. These reflexes add weight to considering [y'] as a unit.

Concerning [w'] Lee notes a single example in Roglai in which *p is reflected as [w']. (Roglai hadiu* 'alive' from *hadip*. The Chru reflex is hadiu'). This shows a complex segment reflected from a simple unit.

On the basis of this historical data and because of the well attested canonical pattern of the main syllable final consonant slot [y'] and [w'] will be considered unit phonemes occurring in the final consonant position of the main syllable.

2.3 LABIAL PHONEMES

/p/ simple voiceless labial stop.

pah 'to slap'
plai 'village'
bah 'to sweep'
biqi 'to buy'
/b/  [b] simple voiced labial stop which may vary to fricative word medially.
brah 'swollen'  ba' 'to carry'
prah 'throw away' wa' 'to write'

[m] median voiced labial resonant when preceded by a glottal stop and followed by a nasalised vowel.
/'bãng/ ['măng] 'time'
/'bang/ ['bang] 'door'

/m/  nasal voiced labial resonant.

/w/  median voiced labial resonant.
ma' 'to take'
wa' 'to write'
pa' 'place'

/w'/ median voiced post glottal labial resonant.
hoďiw' 'alive'  kiōw' 'to stab'
koďip 'to hold in tongs' kiōw 'three'

2.4 APICAL PHONEMES

/t/  simple voiceless apical stop.
tra 'more'  pođoł 'banana'
dra 'young woman'  pođoł 'rest'

/d/  [d] simple voiced apical stop.
mođa 'rich'  dɾoļ 'self'
mọta 'eye'  trọļ 'full'

[n] voiced apical nasal resonant when preceded by a glottal stop and followed by a nasalised vowel.
/ɾođeŋ/ [ɾo'neh] 'youngster'
/ɾođeŋ/ [ɾo'neh] 'pebble'

/l/  lateral voiced apical resonant.

/r/  medial voiced apical resonant.
le_COND 'kidney'  bɾoļ 'to sell'
reh 'to cut open'  bɾoļ 'to give'

/n/  voiced apical nasal resonant.
ana 'mother animal'  anű 'rodent like animal'
sela 'snake'  nhū 'he, she, it'