

The Development of a Lao-based orthography for Jru'¹

Pascale JACQ

The Australian National University

Abstract

This paper presents my proposed Lao-based orthography for a West Bahnaric language—Jru', developed primarily for the Jru'-Lao-French-English dictionary I am compiling. The reasons for choosing a Lao-based system rather than Roman alphabet or Quôc-ngũ script are discussed briefly in section two. In section 3, I discuss the various problems that arise when a Lao orthography is applied to the Jru' word structure and phonemic inventory. Although many of the Lao characters can be simply applied to similar sounds/phonemes in Jru', the characters of the Lao system will in some cases have quite different applications to the Jru' language. For example three Jru' phonemes are not common to Lao, and many sounds which are restricted to initial position in Lao (such as palatal nasal, and glottal or apical fricatives), are permitted in a broader range of positions in the Jru' word. To solve these problems, either new characters are to be created for these, or else different conventions will need to be applied to the Lao characters if we are to maintain as phonemic an orthography as possible. I discuss these issues and solutions to these problems in section three. An appendix is provided with a list of Jru' words written using the proposed Lao-based orthography, illustrating the new conventions of particular characters.

1. Background

1.1 *Jru' as a Mon-Khmer language*

Jru' (a.k.a. Jruq, Laven, Loven, Boloven) is a West Bahnaric

¹Thanks go to Paul Sidwell and Tony Diller for useful advice and suggestions in the preparation of an earlier draft of this paper (May 2002). Since then, however I have made a few amendments. In December 2002, Paul Sidwell surveyed local attitudes towards the orthography I proposed, and subsequently passed on to me a few changes suggested by Jru' first language speakers from Meuang Paksong and Ban Katuat areas of the Boloven Plateau. I have amended my earlier orthographical conventions to incorporate these suggestions. My thanks go to the Jru' people for their suggestions, patience and their enthusiasm and eagerness in developing an orthography for their language. Any errors or failings in the final version of this paper are mine and mine alone.

language (eastern Mon-Khmer) spoken by the majority of the 40,000 Jru' people listed in the 1995 Lao National Census. Jru' is spoken in Champassak, Attopeu and Sekong provinces in Southern Lao PDR. My research over the past 5 years has been conducted mostly in Paksong district of Champasak Province on the Boloven Plateau, and the phonemic system and word structure presented here is based on the Jru' language spoken in that region.

1.2 *The Jru' phonemic system*

The Jru' language is a 'typical' West Bahnaric language in respect to its word structure and phonemic inventory. There are no phonemic tones or registers, and the word shape is typically monosyllabic—allowing a sequence of up to three word initial consonants, which are of the same sonority², or increasing sonority ('R' in the following structure) towards the rime:

Monosyllabic Word Structure: $W = (C_1)C_2(R)V(C_3)$

C_1 = voiceless consonant (including /ʔ, h/)

C_2 = any consonant (not identical to C_1 or R if present)

R = /r/, /l/

V = any vowel

C_3 = any consonant other than a voiced or aspirated oral stop

In addition, there are less than twenty sesquisyllabic words I have recorded where there is an intermediary phonemic vowel, reduced in length and articulatory quality³ between two initial consonants where the second is one of /h, r, l/.

Sesquisyllabic Word Structure⁴: $W = C_1 \text{ ə } C_2 V(C_3)$

C_1 = /p/, /k/ or /t/

C_2 = /h/, /r/ or /l/

V = any vowel

C_3 = any consonant other than a voiced or aspirated oral stop

1.2.1 *Consonants*

The Jru' consonants are typical for Bahnaric languages, with a distinction for 5 places of articulation (labial, apical, laminal, dorsal, glottal), and a voicing and aspiration contrast for obstruents. Initial sequences, which I treat phonemically as a series of /h/+consonant and /ʔ/+consonant, have a variety of phonetic realisations, which may vary depending on the kind of

²Only the first two of the maximal 3 initial consonants may share the same sonority. Non-phonemic vowel-like segments tend to be pronounced between consonants of the same sonority (i.e. 'sonority plateau') in slow speech.

³For convenience I write this as /ə/.

⁴The numbers for the consonants (C_1 , C_2 , C_3) are important for the choice of character in the proposed orthography (discussed section 3).

consonant which occurs in second position, the length of the following vowel or with ideolectal differences between speakers (see Jacq (2002) for detailed examination of these onset sequences). All consonants listed in Table 1 below may occur in C2 position of the monosyllabic word.

Table 1. Jru' Consonant phonemes.

	labial	apical	laminal	dorsal	glottal
voiceless obstruents	p	t	c	k	ʔ
aspirated obstruents	p ^h	t ^h		k ^h	
voiced obstruents	b	d	ɟ	g	
nasals	m	n	ɲ	ŋ	
approximants		l, r	j	w	
fricatives			s		h

1.2.2 Vowels

Typical for the West Bahnaric languages of the area, the Jru' vowel system distinguishes three degrees of backness and tongue height, with prosodic length contrastive for all vowel places (unmarked versus extra-short⁵). In addition, Jru' has innovated additional back vowels /ʌ/ and /ɤ/ (not reconstructed for Proto West-Bahnaric by Jacq and Sidwell (2001)), expanding the inventory of monophthongs to 20. In addition to these, three diphthongs /ia/, /iə/ and /ua/ (common to all West Bahnaric languages) are found in Jru'. In my grammar of Jru' (Jacq 2001), I demonstrated (with distributional and spectrographic analyses) how Jru' is in the process of diphthongising /i/ and /u/ to [ie] and [uo] in some environments, yielding new phonemes of restricted distribution, such that the phonemic contrast remains weak. The emerging contrast between the front vowels /i/, /i/, /ie/, /ia/ can be demonstrated before final /t/ with the following set:

/pĭt pjuol/ 'anteater', /hpit/ 'ear', /piet/ 'knife', /piat/ 'tongue'

Between most obstruents or in open syllables⁶, the vowels can be freely interchanged between [i~ie] and [u~uo], e.g. [ku~kuo] 'stay, be located', and these may contrast with the low diphthongs /ia/ and /ua/, e.g. [hkit~hkiet] 'small frog' vs. /hkiat/ 'scabies' and [rik~riek] 'chubby' vs.

⁵Extra-short is the marked length in Jru', with all such vowels being consistently 100ms length or less. Vowels unmarked for length are consistently between 140-200ms (longer in open syllables) (Jacq, 2001:94)

⁶Low diphthongs /ia/ and /ua/ do not occur in open rimes and Jacq & Sidwell (2000) reconstruct these phonemes in West Bahnaric as originating from long */ɛ/ and */ɔ/ respectively. Note that two Jru' words (borrowed from Katuic and other West Bahnaric languages) have not diphthongised: /bru/ 'mountain' (< Katuic) is never pronounced *[bruo], and /pti/ 'slow(ly)' (< Oi) is never pronounced *[pətie].

/riak/ ‘large net’, [hut~huot] ‘rice steaming basket’ vs. /huat/ ‘remove’ etc. Sometimes this is not the case, however, and an /i/ may contrast with an /ie/, e.g. /rit/ ‘ritual’ vs. /riet/ ‘bind’. In some environments, especially before sonorants, [ĩ~i] may be in free variation versus /ie/, and similarly [ũ~u] versus /uo/, e.g. [bĩl~bil] ‘forget’ vs. /biel/ ‘mat’, [rĩn~rin] ‘regret’ vs. /rien/ ‘dizzy’, [hũr~hur] ‘head cold’ vs. /huor/ ‘hurl a spear’. But in similar environments, an /ie/ may contrast with an /ia/, e.g. /hlien/ ‘stop’ vs. /hlian/ ‘slide’ (note also the minimal pair /liŋ/ ‘naughty’, /lien/ ‘party’ (< Lao)), or an /ũ/ may contrast with an /u/ and /ua/, e.g. /mũn/ ‘confused’ (< Lao)’ vs. /mun/ ‘pimples’ vs. [mun~muon] ‘want to’ vs. /muan/ ‘nephew’.

Table 2. Jru' monophthong phonemes.

ĩ , i	ĩ , i	ũ , u
ě , e	ǎ , ə	ǒ , o
ě , ɛ	ǎ , ʌ	ǒ , ɔ
	ǎ , a	

Table 3. Jru' diphthong phonemes.

[ie]	iə	[uo]
ia		ua

The following sections discuss the creation of a standard orthography for Jru', based upon contemporary Lao script. The proposed script is evaluated according to Smalley's (1976) criteria for a successful orthography, in particular:

- **Optimum representation of the language** (such that all 45-47 phonemes in Jru' are distinguished in the script)
- **Maximum ease of learning** (that is, avoiding redundancy and complicated conventions)
- **Optimum transfer** (matching the conventions of the borrowed script (in this case Lao) to the same sounds in Jru' so that bilingual speakers will have little difficulty in using the two orthographies)

Firstly, I discuss the various past attempts at writing Jru' using Roman-based orthographies and why these are not suited to the Jru' language or its speakers. I then illustrate the different ways my informants have transcribed Jru' words using Lao characters and what were the problems and their intuitions in using these characters for Jru'. In section 3, I present a Lao-based orthography for Jru', drawing on my informants' intuitions and regularising the differences in their application of the Lao characters—creating an almost phonemic orthography.