2 Hmong secret languages: themes and variations

MARTHA RATLIFF

It seems fitting to me to contribute an article on secret languages, which, in order to serve their primary function, must be created anew and with a difference for each new purpose, to a volume honoring Jim Matisoff and his life-long respect for the richness and diversity of human language. The role of secret languages differs from culture to culture (for those cultures which can boast of them) but whether used for play or serious subterfuge, they would not be worthy of the name 'secret' if they were immediately understandable to a native speaker not privy to its rules. The calcified Pig Latin of English fools no one, because its rules are well understood. But in a culture where secret languages do more work, it is important that speakers continually find ways to use 'secret language formation rules' to create new disguises so that sensitive communications can indeed stay secret.

In the closely related White and Green dialects of Hmong (Hmong Daw and Mong Leng) as spoken in Laos, Thailand, and communities of displaced speakers from Southeast Asia in the West, there seems to be no upper limit to the number of secret languages that can be produced. They are most widely referred to as *lus rov* in White Hmong or *lug rov* in Green Hmong, which means 'turned-back language'. Although less isolated Hmong people in both Southeast Asia and in the West are losing this oral ability as they are losing other aspects of the oral tradition, including their variety of oral poetry, reminiscent in its structure to the oral epic poetry of western cultures (Mottin 1980), some older Hmong people in the United States can still use secret languages, explain their function, and, to some extent, even explain what they are doing when they perform these acts of linguistic contortion.

In this paper I will categorize and exemplify the Hmong secret languages I have collected in interviews with members of the Hmong community in Detroit, Michigan.

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Hmong secret languages have already been described in a number of published papers in English (Ai 1972, Chu 1972, Derrick-Mescua et al. 1982, Catlin 1997) and I know of one brief record of four secret languages published in Hmong (Vang 1994). The Derrick-Mescua paper is especially rich, describing ten different types of *lug rov*, all similar to, but not identical to those described here. In addition to making more of the same type of data available to a wider audience, I also reproduce translations of excerpts from the interviews in which the speakers talk about secret language function and creation. Finally, I will point out what these languages add to our understanding of Hmong phonology, as well as what issues they raise for the phonologist and the psycholinguist.

I am indebted to Xing Zer Kue and Ia Kue, prominent members of the Greater Metropolitan Detroit Hmong community, who located older members of the community who still could use secret languages, assisted in the interviews, and did most of the translations. Pang Foua Her, one of my linguistics students, interviewed her mother for a class term paper on secret languages, and her data have also been included (1994). Finally, I would like to thank these women who are proficient in secret languages and were willing to talk with us: the cousin of Yee Moua, Kalia Vang Vue, Chue Vang Yang, Mao Her Chang, the mother-in-law of Shoua Lao, and Za Her.²

1 The function of secret languages

From published descriptions and interviews, it seems that secret languages are used whenever it is important to keep conversations private: in courtship, between friends, when parents do not want their children to understand them, or when children do not want their parents to understand them. Two contexts of use were described to us in more detail by Mao Her Chang. They may be useful in demonstrating that secret languages were occasionally used for serious business as well as for privacy, for which reason I prefer the term 'secret language' to the equally familiar term 'language game'. For example:

When our ancestors came from China, everyone knew *lug rov*. They learned it so another group or tribe could not know what they were saying ... [W]e had to use *lug rov* so the Chinese and other groups could not understand. It does not seem like a good thing to do, but we did not want them to know. For example, if we wanted to poison the fish, then we would use *lug rov* so that no one would know.

(Mao Her Chang, translation Ia Kue)

The word for 'language' is lug in Green Hmong and lus in White Hmong. For simplicity's sake, I have chosen to represent this word exclusively as lug.

Although all of the people we interviewed were women, it has been reported to us and to others that the use of Hmong secret languages is not limited to women.

Courtship is playful, but it is serious business as well. Traditionally, young people both initiated and concluded their search for marriage partners during the few days of the New Year's festival at the end of the year, during which time games were played to test the skills of potential partners (Mottin 1979).

About fifty per cent of my mother's generation knew *lug rov*. Their generation did not use it with the same purpose as the older generation. Their use was mainly for girlfriend-boyfriend talk. Someone would speak *lug rov* to you, and then you must speak back to them in *lug rov*. But in answering back you must come up with a new *lug rov* and so on ... If you don't know, then you lose. That is why we have a saying:

Koj txhais tsis tau koj tso tes plaus
Koj txhais tsis tiav ces koj tso kev khiav
'If you cannot interpret this, you must release my hand;
If you don't finish interpreting this, then take the road and run.'

(Mao Her Chang, translation I a Kue and Martha Ratliff)

2 Hmong morpheme structure and orthography

As is typical of the area, the morpheme in Hmong is monosyllabic, and word derivation is primarily by compounding. There are fifty-eight possible onsets in White Hmong and fifty-six possible onsets in Green Hmong. These onsets include prenasalized stops and affricates, clusters with medial /I/, and voiceless (preaspirated) sonorants. Aspiration is distinctive, but voicing is not.³ There are phonemic distinctions at eight different places of articulation: labial, alveolar, retroflex, palato-alveolar, palatal, velar, uvular, and glottal. In the Romanized Popular Alphabet used in this paper, /s/ is symbolized with x, / ξ / and / ξ / are symbolized with x and z respectively, and / ξ / is symbolized with xy. All other spellings are easily related to their phonetic values.

The rime inventory is simpler. Open syllables are the rule; the only coda consonant is $/-\eta$ / and it has a limited distribution. In the RPA, rimes with a nasal coda and nasalized vowels are marked by doubling the vowel, $/\frac{1}{4}$ is symbolized with w and all other spellings are easily related to their phonetic values.

What are given here as preglottalized voiced initials in White Hmong have only recently developed from clusters with medial /l/ (Jarkey 1987). They correspond to the Green Hmong clusters in the column to the immediate left.

Table 1: Onset inventory (those limited to White Hm in bold, to Green Hm in italics)

p	pl	t	tl	?d	ts	t	t∫	С	k	q	?
p ^h	p ^h l	t ^h	$t^h l$?d ^h	ts ^h	th	t∫ ^h	ch	k ^h	q ^h	
mp	mpl	nt	ntl		nts	ηţ	nt∫	ŋс	ŋk	Nq	
mp ^h	mp ^h l	nt ^h	nt ^h l		nts ^h	ηth	nt∫ ^h	ŋс ^h	ŋkʰ	nq ^h	
hm	hml	hn						hɲ			
m	ml	n						ŋ	ŋ		
m f	ml	n s	hl			Ş		n ç	ŋ		h

Table 2: Rime inventory (those limited to Green Hmong in italics)

Simple rimes	i	i	u
	e	a	Э
Nasal rimes	ε̃ŋ	ãŋ	õŋ
Diphthongs	ia		ua
	ai	aɨ	au

There are seven primary tones and an eighth minor falling-rising tone which is a conditioned variant of the seventh tone. The starting and ending points of the tones are indicated by the pair of numbers following each word (on a scale where 5 is the highest pitch and 1 is the lowest pitch). In the RPA, the tones are marked by final consonants, as given in the middle column below.

 Table 3: Tone inventory (common to both dialects, examples from Green Hmong)

tau 55	-b	to scratch the ground
tau 52	-j	a hammer
tau 24	-v	to light a fire
tau 33	-ø	six
tau 21	-s	to be full (of food)
tau 42 (breathy)	-g	to suffer (something)
tau 21? (creaky)	-m	kidney

3 Types of secret languages: lug ntxeev and lug rov

I collected nine secret languages in all. Although more extensive exemplification could have been presented, very little is actually needed in order to demonstrate the rules of each language. According to speakers, the simplest kind of secret language is *lug ntxeev* 'turned-over language'. In this type of language, there are no added nonsense syllables. Two secret languages of this type were described. In both of these languages and in the first four examples of *lug rov* (languages 1 through 6), the tone of the real word as indicated by the final consonant symbol always stays with the rime of the real word.

1) In this language, pairs of words exchange rimes while the onsets remain in place. This language was described by Pang Foua Her.

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koj le 'you poss. = yours' > ke loj
Paaj Fuab (her name) > Puab Faaj
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2) Here sets of three words are involved. The middle word remains unchanged and the first and third words exchange rimes. This language was described by Pang Foua Her, Kalia Vang Vue, and Chue Vang Yang. Pang Foua Her described this as 'putting first word last and switching first letter'.

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mus ua ntej 'go first' > mej ua ntus
kuv yog hmoob 'I am Hmong' > koob yog hmuv
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The second type of secret language, *lug rov* 'turned-back language', is more complicated. All examples of *lug rov* involve the addition of one or more full or partial nonsense syllables. They involve permutation of onsets, rimes, and/or tones as well. In this and all subsequent examples, the elements of the disguised real words have been underlined to make the pattern easier to see. The first four *lug rov* involve the addition of one or more full nonsense syllables.

3) The simplest of these involves one full nonsense syllable, here *leem*, *lab*, or *loob*, added to each individual word to make a pair of 'words' which disguise the one. The original onset is replaced by the nonsense onset, followed by the original onset with nonsense rhyme. These languages (which presumably can take as many forms as possible nonsense syllables) was described by Pang Foua Her and by Yee Moua's cousin.

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with leem: kuv 'I' > l\underline{uv} \underline{k}eem with lab: kuv > l\underline{uv} \underline{k}ab with loob: kuv > l\underline{uv} \underline{k}oob
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4) An extension of 3, here two full nonsense syllables may also be added in a three-syllable pattern. Here *lab* and *leem* are the nonsense syllables. The original onset is replaced with the nonsense onset, followed by the original onset paired with each of the two nonsense rhymes. This *lug rov* was described by Mao Chang Her.

Yee Moua's cousin described the same language using *loob lia* as the nonsense words:

5) Two full nonsense syllables, here xab and xwj, may also be added to one real word to create a three-syllable pattern: the original rhyme is replaced by the nonsense rhyme -wj, followed by entire unbroken nonsense syllable xab, followed by original word with the onset replaced with nonsense onset x-. This language is actually not very difficult to decipher, because all the hearer needs to do is pay attention to the beginning and ending of each set of three syllables. This language was described by Kalia Vang Vue and Chue Vang Yang.

$$kuv$$
 'I' $> \underline{k}wjxabx\underline{u}v$

6) The next *lug rov* is the most remarkable of those I have heard. It was given to us by Yee Moua's cousin. Again, two full nonsense syllables, here *lab* and *leem*, are added in a two-syllable pattern. But what differentiates this from the others is that the nonsense syllable chosen is dependent upon syntactic constituent boundaries: *lab* is used phrase-medially, and *leem* is used phrase-finally. A longer sample is necessary to illustrate this pattern.

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Koj cov mov qab qab. > [Loj \underline{k}ab \ lov \underline{c}ab \ lov \underline{m}eem] [l\underline{a}b \ qeem] You CLF rice sweet sweet NP VP 'Your rice is good.'
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$$Kuv$$
 $nyiam$ koj . > $[Luv \ keem] [liam \ nyab \ loj \ keem]$ I like you NP VP 'I like you.'

Notice that the entire VP is marked as a phrase with a pronominal object in the second example, but when the object is a full noun phrase as in the third example, the verbal complex is marked as one phrase and the object is marked as a separate phrase.

The last three *lug rov* involve the addition of one or more partial nonsense syllables. The last language also involves the wholesale substitution of a nonsense tone pattern over the entire utterance.

7) In this language, only a new onset (y-) and a new tone (-m) are added to the word to be disguised. In a two-syllable pattern, the nonsense tone replaces the actual tone of the word to be disguised, and then the nonsense onset replaces the onset of a copy of the same word. As language 5 above, this language is not very difficult to decipher, because all the hearer needs to do is pay attention to the beginning and ending of each set of two syllables. This language was described by Pang Foua Her, Za Her, and Mao Her Chang.

kuv 'I' > kum yuv

puas Q particle > puam yuas

zoo 'good' > zoom yoo

8) In this language, two partial nonsense syllables are added in a three-syllable pattern. The first partial nonsense syllable is the toneless *ncaa* and the second partial nonsense syllable is just the onset *l*-. The onset of the disguised word appears in the first syllable only; the rime and tone of the disguised word appear in the second two syllables. The rime of *ncaaa* appears in the first syllable and the onset of *ncaaa* appears in the second. The onset *l*- appears in the third syllable. All syllables have the tone of the disguised word. This language is clearly easier to comprehend from the example than to describe! It was given to us by Za Her.

kuv 'I' > kaay ncuv luv

9) The final *lug rov* combines the addition of a partial nonsense syllable and the substitution of an alternating nonsense tone pattern for the lexical tones. We recorded this language on two different occasions with three different speakers. The first, given to us by Kalia Vang Vue and Chue Vang Yang, involves a nonsense syllable made up of the onset y-, a copy of the vowel of the preceding disguised word, and the -v (rising) tone. These added syllables are pronounced between the real words, which are pronounced with the -s (low level) tone in place of the lexical tone. The 'melody' of this language is thus low-rise-low-rise-low-rise. This is clearly a deeper disguise than some of the other languages because the lexical tones have been eliminated, and are only recoverable from context.

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Koj yuav mus dab tsi > Kos yov mus yuv das yav tsis yiv?

you will go what (yuav is not encoded)

'What are you going to do?'
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Shoua Lao's mother-in-law gave us the same pattern with different variables: a nonsense syllable made up of the onset tx-, a copy of the vowel of the preceding disguised word, and the -g (breathy) tone, alternating with the real words pronounced with the -j (high falling) tone. The melody of this language is thus fall-breathy-fall-breathy.

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Kuv tsis nyam koj > Kuj txug tsij txig nyaj txag koj txog
I not like you
'I don't like you.'
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These nine languages only represent the tip of an iceberg; this is clear from an examination of the other sources on Hmong secret languages listed below. Some of the languages described in these sources are reminiscent of those described above, but others present new twists: Catlin (1997) describes a sung *lug rov*, in which the real words are sung quickly on changing eighth notes between quarter notes. A series of distracting (rhyming) nonsense syllables are sung on the longer, and hence more salient quarter notes, which are always sung on the same pitch. In one of the *lug rov* published by Blia Tcheu Vang (1994), there are two layers of disguise: once you have unscrambled the flipped onsets and rimes and have removed the nonsense elements, you find that the vowels of some or all of the real words have been replaced, so that *koj mus dab tsi* what are you going to do?' decoded once, is *koj mas dab tsa*, in need of yet more decoding.

4 A window into linguistic structure

These secret languages, taken together, give clear support for two aspects of phonological structure which have now become well-established: the hierarchical structure of the syllable, and the independence of tone as captured in autosegmental models of phonology.

All of these secret languages move, copy, and/or replace the onsets and rimes of syllables, as opposed to whole syllables or individual phonemes. And although the first six of these languages might lead one to think that the tone was necessarily fused with the rime—since in these languages wherever the rime goes, the tone goes, too—the last three languages show that tone may be split off and changed independently from the rime. Secret languages may thus be added to the following types of indirect evidence for these units of linguistic structure:

1) the native Pahawh Hmong writing system, in which onsets and rimes are

symbolized and in which, over several versions, tone gradually came to be symbolized separately from the rime (Smalley et al. 1990), and;

2) those forms of Hmong instrumental music which directly represent language through tone-to-musical pitch associations (Catlin 1997).

Secret language 6 may give evidence for syntactic constituent structure as well as the significance of noun phrase 'weight': in this language that marks the ends of phrases with a different nonsense syllable, an object consisting of several words with a common noun as its head is treated as a separate constituent whereas a pronoun object is treated as part of the verb phrase. I would not like press this too far, however: upon reviewing the secret languages in Derrick-Mescua (1982) that alternated nonsense syllables, it was much harder to see a link with phrase structure. It may be that some speakers mark phrase structure and others don't, or considerations of euphony may govern the alternation of the nonsense syllables, and the change of to a different nonsense syllable phrase-finally only occurred in my sample by accident.

These secret languages also demonstrate that the syllable is the most salient unit of linguistic structure in Hmong. The rule seems to be that, with minor exceptions, every syllable gets its own disguise, even meaningless syllables in opaque compounds and disyllabic borrowings. For example, both syllables in the opaque compound dabtsi 'what' were disguised in secret language 9: das yav tsis yiv. And the borrowing fabkis français' in secret language 6 was pronounced lab fab lis keem. This contrasts with secret languages like English Pig Latin, in which structural disguise operates at the level of the word: 'Latin' is 'atin-lay', not 'a-lay in-tay'.

There are two exceptions to the rule that every syllable gets its own disguise. The occasional function word can simply be skipped (see language 9, where the future marker yuav is not encoded). More interestingly, reduplicated morphemes only get encoded once, or only once-and-a-half. In secret language 6, reduplicated qab 'sweet, delicious'—qab qab 'very delicious'—is only encoded once: lab qeem. And in secret language 5, the reduplicated verb nco 'miss (someone)'—nco nco 'miss (someone) greatly'—is not simply an encoding of a single nco, which would have been ncwj xab xo, nor is it an encoding of both syllables, which would have been ncwj xab xo ncwj xab xo, but comes out ncwj ncwj xab xo. The onset is paired with the nonsense rime twice, but the rime is only encoded once. This echoes the pronunciation of reduplicated words in Hmong, in which the first syllable is very short and has a reduced vowel, and suggests that reduplication in Hmong is a derivational rather than a syntactic process.

Secret languages also potentially provide a test for synchronic co-occurrence restrictions. Presumably, some co-occurrence restrictions are so strong that even secret language speakers would quickly adapt in order to avoid a highly illegal form, whereas other co-occurrence restrictions are not as strong, and forms illegal in the 'regular'

language would be allowed in this special context, much as they are in the exceptional phonology of expressives (Ratliff 1992, Chapter 4). The co-occurrence restriction between [+spread glottis] initials—which includes aspirated stops and affricates, voiceless fricatives, and voiceless sonorants—and the breathy (-g) tone is apparently not inviolable. One speaker using secret language 5, in disguising the name Ntxawg, produced Ntxwj xab xawg. Xawg [sai 42, breathy tone] contains the combination of a voiceless fricative and the breathy tone, which normally do not co-occur.

Finally, these secret languages also give us information about which consonants Hmong treats as default, or neutral consonants. In secret language 4, I observed a dissimilation effect when strictly following the rules would result in a string of like onsets. The words to be disguised in each case began with either hl- or l-. The onsets of the two nonsense syllables in this language are also l-. To effect the dissimilation, one of the consonants k-, n-, or y- was chosen to replace not the nonsense onset, but the real onset hl-, while r- was chosen to replace the real onset l-. This must have made these words much harder to decipher. For example, hlub 'to care for' did not become * lub hloob hlia, but either lub koob kia or lub noob nia; hlob 'elder' became not *lob hloob hlia but lob yoob yia; and lus 'language' did not become *lus loob lia, but rather lus roob ria. It is probably not accidental that one of these replacement consonants, the k-, is the only consonant not symbolized in the native Pahawh Hmong orthography. In this onset-rime writing system, if the reader sees no onset symbol for a given word, he or she is to supply a k- onset. This is remarkable in that this writing system has not only a symbol for a glottal stop onset, but also has a symbol for the absence of an onset (Smalley et al. 1990, Chapter 4).

5 Phonological awareness

Equally significant to their implications for linguistic analysis are the psycholinguistic questions raised by these highly complex secret languages. Simply put, how do speakers do it?⁴

Prerequisites for speaking *lug rov* must be both the understanding that units smaller than the syllable exist and the ability to segment the speech stream into these units. Secret languages may thus pose a challenge to those psycholinguists who have claimed that 'phonological awareness', or awareness of linguistic units smaller than the syllable, can

Mao Her Chang reported that speaking lug rov is a matter of talent; not everyone is able to do it, or do it well. Talent played an acknowledged role in the phonological awareness experiments with Chinese subjects in Read et al. (1986), and was also mentioned in connection with the Miao secret language discussed by Chu T'ing (1972).

only develop through learning an alphabetic writing system (Morais et al. 1979, Read et al. 1986):

'[S]egmentation skill' ... does not develop with cognitive maturation, non-alphabetic literacy [as the ability to read Chinese], or exposure to a language rich in rhymes and other segmental contrasts. It does develop in the process of learning to read and write alphabetically. (Read et al. 1986:31–32)

To test this limited (and Western-biased) notion of phonological awareness, we attempted to set up and record a situation in which two speakers of *lug rov* would work out the rules of a new secret language on-the-spot. We were not able to do this, but we did interview two speakers and asked them to teach us how to speak a secret language. The first session was held with Mao Her Chang, fifty-five years old at the time, and literate in Hmong (translation Ia Kue).

Mao Her Chang: I will teach the simplest type of *lug rov* first [language 7]. All you have to do with this type of *lug rov* is add the sound 'yos'. For example, the word *koj* ['you'] can be said *kom yoj* ... One simply adds the sound 'yos' to the end of the word

Xing Zer Kue: Do you know it's the 'yos' you're adding?

Mao Her Chang: We don't know that we are adding the 'yos', but we can hear the sound 'yos yos' in it.

Xing Zer Kue: So you can hear the sound, is that correct? Back then, did you know how to read and write? Did you know about the 'yos' or letter 'y'?

Mao Her Chang: We did not know, but now that I do know I've figured out that we are just adding a sound to it. When you say it, the sound, whether it is a high or low pitch depends on what vowel and tone you add to make the sound. When we would just speak it we would not know what it meant, but after we learned it then we knew.

The second session was held with Za Her, ninety years old at the time, and illiterate in Hmong (translation Ia Kue).

Za Her: We don't know the way you know things now. I don't know how to read or write, so I will just say this and you can add whatever you want to it.

Ia Kue: Can you teach me so that I can create my own?

Za Her: You just listen to the way I say it and them you just know. If you can say what I've been teaching you then you can create your own ... right away. It doesn't take a long time!

These exchanges suggest that literacy, and perhaps also analytic habits of mind that come with education, are necessary in order for speakers to be able to articulate what is

happening when they use secret languages (Koopmans 1987). But psycholinguists do not measure phonological awareness by the speaker's ability to describe tasks, but rather by their ability to perform tasks. Notice that Read et al. (1986) link phonological awareness to 'segmentation skill', not the ability to reflect upon that skill. I would think that the simple laboratory tasks that have been used by psycholinguists to measure phonological awareness—for example, upon hearing the stimulus 'pa', the subject must suppress 'p-' and produce '-a'—would be child's play for the Hmong women interviewed in this study, whether literate or illiterate.

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