



## CHAPTER TWENTY-FIVE

**HAKHA LAI\****David A. Peterson***1 INTRODUCTION**

A Kuki-Chin language spoken primarily in and around the city of Hakha in Chin State, Burma and in adjacent areas of India and Bangladesh by about 100,000 people, Lai is also used extensively as a second language by speakers of other Chin languages in the Chin Hills. It has an orthography developed by missionaries during the early part of the twentieth century which is used extensively, although it does not represent vowel length or tone, two essential aspects of the language's phonology. Certain characteristics of the orthography, such as how to represent an alveolar/retroflex distinction in stops and where to mark word boundaries, are subject to ongoing debate.

Lai is a Central Chin language, closely related to Laizo or Zahao (Osborne 1975; spoken in the Falam area), Bawm (Reichle 1981; spoken mostly in Bangladesh), and Mizo (Chhange 1993; spoken chiefly in Mizoram State). Central Chin languages constitute a clear subgroup of the family, with numerous phonological and grammatical innovations distinguishing them from more northerly and southerly Chin languages.

**2 PHONOLOGY****2.1 Segmental phonology**

Table 25.1 gives the segmental phoneme inventory. Where the orthography used does not reflect standard phonetic values, a more conventional phonetic transcription is included.

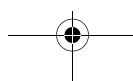
There is little allophonic variation. Stops are unreleased finally. The distinction between short and long vowels, which corresponds to a measurable length difference, also manifests itself in terms of quality: the short vowels are in most cases phonetically more central than their long vowel counterparts. Lastly, there is an allophone [ʃ] of /s/ before [i].

**2.2 Suprasegmental phonology**

Tone has only a small functional load in distinguishing lexical minimal pairs, so it has often gone unnoted in previous descriptions. Nonetheless, tonal distinctions are important. In isolation, monosyllabic words distinguish two tones: falling and high level. When these tones occur in various morphological contexts, however, three tonal contrasts emerge, with two tones (falling and rising) corresponding to the isolation falling tone. It is difficult to find a minimal triplet, but the three-way tonal contrast may be clearly heard in the last syllables of the

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\*Many thanks to Ken VanBik for commenting on an earlier draft of this sketch and for providing and discussing Lai data on demand. Almost all of the insights in this chapter are a result of my own work with him, or his work and work with others over the last several years. Thank you also to Bernard Comrie for helpful criticisms and suggestions.



**TABLE 25.1** SEGMENTAL INVENTORY

Consonants					Vowels	
<b>Stops</b>					<b>Simplex vowels</b>	
p	t	t̚	k	ʔ	i [i], ii [i:] (y)	u [u], uu [u:] (w)
ph [pʰ]	th [tʰ]	th̚ [tʰ̚]	kh [kʰ]			
b	d		g		e [ɛ], ee [ɛ:]	o [o], oo [ɔ:]
<b>Affricates</b>					a [ə], aa [a:]	
	ts				<b>Diphthongs</b>	
	tsh [tʃʰ]				uy, oy, ooy	iw, ew, eew,
	tl [tʰ]				ay [ɛy], aay	aw [ow], aaw
	thl [tʰ]					
<b>Fricatives and laterals</b>					ia, iaa, ua, uaa	
f	s [~ʃ]		h			
v	z				<b>Triphthongs</b>	
	r	l			uay	iaw
	hr [ʃ]	hl [ʃ]				
<b>Nasals</b>						
m	n		ŋ			
hm [m̥]	hn [n̥]		hŋ [ŋ̥]			

following forms: falling *ʔa-diŋ* ‘he drinks’ vs level *ʔa-diŋ* ‘he is honest/it is straight’; level *ʔan-ʔii-law* ‘they’re similar’ vs rising *ʔan-láw* ‘they disappear’; and falling *ʔa-màn* ‘it sells’ vs rising *ʔa-mán* ‘its price’.

Glottalization is a suprasegmental feature involved in marking distinctions in particular verbal ablaut classes and in a transitivizing derivation (see below). Where it is relevant, with open and stop final syllables it is realized as a final glottal stop; with sonorant finals it creates the phonetic impression of a glottalized sonorant.

### 2.3 Syllable structure and morphophonemics

Syllables have the form CV: or CV(:)C. Short vowels do not occur in open syllables. Long diphthongs and triphthongs do not occur in closed syllables. Any consonant of the consonant inventory may occur in syllable-initial position, but voiceless sonorants, fricatives, affricates, and voiced and voiceless aspirate stops do not occur in syllable-final position.

Lai is monosyllabic in that there is an almost perfect one-to-one correspondence between the syllable and the morpheme, especially for function morphemes, but this is not to say that words are monosyllabic. Distributional and semantic considerations suggest highly complex word structure. Lai is almost purely agglutinative in that virtually no morphophonemic processes (other than tonal sandhi) occur at formative boundaries. The only consistent segmental morphophonemic process is shortening of long vowels in open syllables in the first member of compounds.

## 3 INFLECTIONAL MORPHOLOGY

Form classes include nominals (pronouns, nouns, and relational nouns) and verbals (verbal and adjectival). Demonstratives, discourse deictics (markers of information status), quantifiers,

and classifier-numeral compounds are minor class components of nominal phrases, and independent adverbs can further add to the structure of verbal phrases.

### 3.1 Nominal inflection

For the structure of nominal phrases, see Section 5.1 below.

#### 3.1.1 Pronominals

Independent pronouns are listed on the left-hand side of Table 25.2.

Independent (non-bound) pronouns distinguish three persons and two numbers and consist of the generic demonstrative element *maʔ* combined with a pronominal element proper. The use of *-niʔ* with plural pronouns as opposed to *-maʔ* (i.e. *kan-niʔ*, *nan-niʔ*, etc.) contrastively focuses the pronoun (see Lehman and VanBik 1997). *-taa* added to either of these forms yields pronominals used in headless possessive phrases (translatable as, e.g. 'mine'). Independent reflexive/reciprocal pronouns have the structure pronoun-*lee* pronoun (*kaymaʔ-lee kaymaʔ* 'myself', *kanmaʔ-lee kanmaʔ* 'ourselves/each other').

#### 3.1.2 Demonstratives

Nominals may be modified by demonstrative elements. The generic demonstrative element is *maʔ*. More specific demonstrative elements, and an admittedly oversimplified depiction of their semantics, include *khaa* (near addressee), *tsuu* (not visible), *hii* (near speaker), and *khii* (distal). See in particular Barnes 1998 and Bedell (forthcoming) for extensive discussion of the complex syntax and semantics of Lai demonstratives and other deictic elements.

#### 3.1.3 Possession

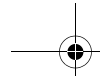
There is no formal indication of possession other than juxtaposition of two nominals. The first of two nominals in sequence will be interpreted as possessor of the second, as in *paalaw nuu* 'Paalaw's mother'. If there is no overt nominal possessor, and optionally even if there is one, possessed nouns bear one of a set of prefixes, also given in Table 25.2. These prefixes express person and number of the possessor and are identical in form to the verbal subject agreement markers (see Section 3.2.2). There are no differences in possessor marking based on semantic characteristics of the possessed entity (e.g. there is no alienable/inalienable distinction).

#### 3.1.4 Case and spatio-temporal relationships

With the exception of absolutes, which are unmarked, nominal phrases bear one of a set of clitic case particles. Subjects of most transitive verbs bear the ergative case clitic *=niʔ*.

TABLE 25.2 PRONOMINALS

	Independent		Possessive prefixes	
	<i>sg</i>	<i>pl</i>	<i>sg</i>	<i>pl</i>
1	<i>key-maʔ</i>	<i>kan-maʔ</i>	<i>ka-</i>	<i>ka-n-</i>
2	<i>naŋ-maʔ</i>	<i>nan-maʔ</i>	<i>na-</i>	<i>na-n-</i>
3	<i>ʔa-maʔ</i>	<i>ʔan-maʔ</i>	<i>ʔa-</i>	<i>ʔa-n-</i>



The locative case clitic =*ʔaʔ* marks static locations, locations towards which a figure moves, or temporal location. The instrumental-ablative case clitic =*ʔin* marks the instrument with which the action is performed, the location from which the action originates, or the area/medium through which the action occurs. Comitative nominals bear the case clitic =*hee*, standards of comparison bear the (etymologically complex) clitic =*naak-ʔin*, and standards in equative constructions are marked by =*thluk-ʔin*, ('be.equal-instrumental/ablative'). In subordinate clauses, the ergative, locative, and instrumental-ablative case particles have an optional allomorph, =*ʔii*.

Most spatial notions are encoded through the use of abstract nouns which refer to locations, e.g. *tshuŋ* 'area inside', *tsuŋ* 'area on top', *taŋ* 'area underneath'. These typically occur as the possessed entity in a possessor-possessed relationship with the entity they relate to and are marked obliquely by either the locative or the instrumental-ablative case clitic (e.g. *ʔin tshuŋ=ʔaʔ* 'inside the house', *ʔin taŋ=ʔaʔ* 'underneath the house', etc.).

A few elements are categorially intermediate between true relational nouns and case particles in that they may occur with or without oblique case markers. The element *tiaŋ* occurs with nouns which express the extent (spatial or temporal) to which an action occurs. *tshuŋ*, which is primarily a relational noun, also has a marginal existence as a case particle attached to time phrases to indicate the duration of an activity. *koŋ* is used to indicate 'about', 'concerning'.

### 3.1.5 Number

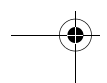
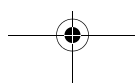
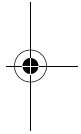
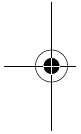
Marking of plurality is not typically required in noun phrases; the verb bears obligatory marking for plurality of the subject and object. =*lee* (which also conjoins nominals and sometimes phrases), =*hnaa* (which also marks non-first person object plurality in the verbal complex), =*tee*, and =*pool*, are sometimes used to mark collectives. All of these particles have such a low text-frequency, that a reliable assessment of their function is impossible to make at this point.

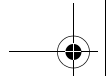
### 3.1.6 Information status

Aside from an extensive battery of valence-affecting constructions which mark deviations from unmarked information status for given argument types, Lai has a set of postposed elements which play an essential role in indicating the discourse status of the nominal phrases they are associated with. The morphology of these discourse deictics is virtually identical to that of pronominal demonstratives, but their semantic effect is quite complex. Like the corresponding pronominal demonstratives, *hii* and *khii* have largely spatial connotations, even in the position of a discourse deictic; but *tsuu* occurs in many instances as a topicalizer in a strict, discourse-internal sense, while *khaa* tends to mark preceding entities as being within the shared knowledge of both speaker and listener more generally.

### 3.1.7 Numeral classifiers

Lai has a reasonably large set of numeral classifiers, which are compounded with numeral roots to form nominal attributes (e.g. *mii pa-khat* 'person classifier-one = one person'). Some classifiers referring to special semantic fields include *muu-* 'granular substances', *thluan-* 'elongated items', *tlaap-* 'flat items', *pum-* 'round or oblong items', *dor-* 'drops of liquid', *zuun-* 'clothing', *faŋ-* 'units of money', container classifiers (e.g. *kheeŋ-* 'plate', *dur-* 'small container'), and group classifiers (e.g. *buu-* 'animal group', *tuaʔ-* 'paired items'). Otherwise,





classifiers may simply be a copy of the head noun itself. There is furthermore a default classifier *pa-*, which also occurs as part of the citation form of cardinal numbers.

### 3.2 Verbal inflection

The verbal complex consists of a (possibly derived) verb stem preceded by up to three prefixal or proclitic elements and often followed by several postverbal particles.

#### 3.2.1 Ablaut

Sentence level morphosyntax is dominated first and foremost by a system of verbal ablaut and concomitant alternations in the case marking of nominals. Most verbal roots have two allomorphs, one phonologically largely predictable from the other (the various alternations involve different tonal properties, presence/absence or character of a final consonant, vowel length/quality, and presence/absence of glottalization). In affirmative, indicative, main clauses, form 1 occurs if the verb is intransitive (1), and form 2 and an ergative case-marking strategy occur if the verb is transitive (2). However, there are also notionally transitive clauses in which form 1 of the verb is used (3).

- (1) *paalaw ?a-thii*  
Paalaw 3SS-die<sub>1</sub>  
'Paalaw died'.
- (2) *paalaw=ni? thil (khaa) ?a-ba?*  
Paalaw=ERG clothes DEIC 3SS-hang.up<sub>2</sub>  
'Paalaw hung up the clothes'.
- (3) *paalaw (khaa) thil ?a-bat*  
Paalaw DEIC clothes 3SS-hang.up<sub>1</sub>  
'Paalaw hangs up/hung up the clothes'.

The difference between the ergative construction and the alternative construction seen in (3) is a subtle one, and, like the comparable alternation in closely related Falam Lai described by Osborne, it is intimately connected to information structure. It has been pointed out by Kathol and VanBik 2001 that the construction in (3) bears considerable resemblance to an antipassive construction in terms of its information structure properties. Moreover, it turns out that while discourse deictics, which are themselves closely tied to information structure, may readily occur with the absolutive argument in (2), they may not be associated with the object argument in (3). However, it should be clear that there are many respects in which (3) could not be considered to be a prototypical antipassive construction. In particular, the object argument is not omissible, and while in some sense it may be syntactically more inert than the object of a monotransitive, it is not overtly marked as an oblique.

Other morphosyntactic contexts 'override' (Kathol and VanBik 2001) this basic system, and require either the form 1 or the form 2 ablaut grade. For instance, regardless of case-marking, the polar interrogative marker (4) and the negative marker (5) require form 1 of the verb.

- (4) *paalaw(=ni?) thil ?a-bat-moo*  
paalaw(=ERG) clothes 3S SUBJ-hang.up<sub>1</sub>-INTERR  
'Did Paalaw hang up the clothes?'

- (5) *paalaw(=niʔ) thil ʔa-bat-law*  
 paalaw(=ERG) clothes 3S SUBJ-hang.up<sub>1</sub>-NEG  
 ‘Paalaw did not hang up the clothes’.

On the other hand, subordinate clauses frequently require the form 2 grade, even if the subordinate clause involves the negative marker (6):

- (6) *ka-paa=niʔ tsaʔuk ʔa-haʔw-law tik=ʔaʔ ka-nuu=niʔ*  
 1SS-father=ERG book 3SS-need<sub>2</sub>-NEG time=LOC 1SS-mother=ERG  
*ʔa-zuar*  
 3SS-sell<sub>2</sub>  
 ‘When my father did not need the book, my mother sold it’.

### 3.2.2 Agreement

Finite verbs are accompanied by a sequence of one or two agreement prefixes, and sometimes one suffix, which exhibit a nominative-accusative alignment. Table 25.3 shows these elements. *A* refers to the agent argument associated with the prototypical transitive verb, *S* refers to the single argument associated with intransitive verbs, and *O* refers to the patient argument associated with prototypical transitive verbs.

The *A/S* markers for singulars are straightforward, as are the *A/S* markers for plurals, since the latter are simply a combination of the former and a plural element *-n-*. The markers for *O* in the first person are the same as the markers for *A* and *S*. Third person *O* is zero-marked, but in the third plural, a postverbal particle *-hnaa* indicates plurality of the object. Second person *O* agreement exhibits allomorphy between *ʔin-*, which occurs after a consonant-final (i.e. plural) *A/S* marker, and *ni-*, which occurs following a vowel-final (i.e. singular) *A/S* marker. The latter allomorph involves a high tone realized on the nasal portion of the *A-O* combination. Again, as in the third plural, plurality of the object in the case of second person plural objects is indicated by the postverbal element *-hnaa*. If *O* is coreferential with *A*, there are special object prefixes, which can be given either a reflexive or a reciprocal interpretation (seen at right in the table). There is no distinction for person in these forms.

There are special subject agreement forms in the jussive mood (cohortative – ‘let first person *V*’, imperative, and exhortative – ‘let third person *V*’), as seen in Table 25.4.

### 3.2.3 Directionals

Verbal complexes may contain one of a class of directional markers occurring between the subject and object agreement markers, though reportedly the semantics of a number of these

TABLE 25.3 VERBAL AGREEMENT MARKERS

	<i>A/S</i>	<i>O</i>	Reflexive object <i>A<sub>i</sub> O<sub>i</sub></i>
1s	ka-	-ka-	-a-
2s	na-	-ni~ʔin-	-a-
3s	ʔa-	-θ-	-a-
1p	ka-n-	-ka-n-	-ʔii-
2p	na-n-	-ni~...-hnaa~ʔin~...-hnaa	-ʔii-
3p	ʔa-n-	-θ~...-hnaa	-ʔii-

TABLE 25.4 JUSSIVE AGREEMENT AND NEGATION

	<i>Singular</i>	<i>Dual</i>	<i>Plural</i>
cohortative			
1 affirmative	-niŋ	-ʔu-siʔ	-hnaa-ʔu-siʔ
negative	-hlaʔ-niŋ	-hlaʔ-ʔu-siʔ	-hnaaa-hlaʔ-ʔu-siʔ
imperative			
2 affirmative	-∅		-ʔu-∅
negative	-hlaʔ-∅		-hlaʔ-ʔuʔ-∅
exhortative			
3 affirmative	-seʔ		-hnaa-seʔ
negative	-hlaʔ-seʔ		-hnaa-hlaʔ-seʔ

has become opaque for younger speakers. In form, the directional *rak-* resembles the verb *raa~rat* ‘come’, and in semantic terms, it marks a venitive (motion towards a deictic center). *rak-* has also grammaticalized as an indicator of past tense. The directional *va-* is an andative (motion away from a deictic centre):

- (7) *tsakay-pool ka-va-kaap-hnaa-laay tiaʔ ʔa-tii*  
 tiger-COLL 1SS-DIREC-shoot<sub>1</sub>-PL.OBJ-FUT QUOT 3SS-say<sub>i</sub>  
 ‘... I’m going to go and shoot tigers!’ he said’.

Another directional particle, *hay-*, is an andative like *va-*, but involves motion directed over a shorter distance. *von-* indicates that the action of the verb is performed suddenly and in the immediate vicinity. *ruŋ-* marks motion from a point above the speaker towards the speaker. *huŋ-* indicates motion upwards towards the speaker and *vuŋ-* motion downwards away from the speaker, respectively. At this point, however, the latter two particles are used pretty much interchangeably.

### 3.2.4 Other inflection in the verb complex

Verb roots may be followed by sequences of up to several bound particles which distinguish modal, aspectual/Aktionsart, tense, mood, and various adverbial categories.

#### 3.2.4.1 Modality

There are several modal elements, which cut across categories in terms of their morpho-syntax, ranging from more to less bound elements. First, there are elements which are bound but show the ablaut alternation characteristic of independent verb stems, such as the potential marker *khaw~khoʔ*. There are also modal elements which are probably best regarded as independent verbs taking a bare verb complement which themselves bear agreement morphology, usually to the exclusion of the complement verb, such as the desiderative *duʔ*, the potential *thiam*, the permissive causative *sian~siaŋ*, and obligative *haaw*. In no case is it actually impossible for these to occur as non-agreeing, bound postverbal elements, however, though some speakers show a preference for one or the other construction type.

#### 3.2.4.2 Aspect/aktionsart

Lai makes a large number of subtle aspectual/Aktionsart distinctions. Some of the more basic, high-frequency aspectual markers include *-liaw* (progressive), *-tsaŋ* (perfect), and *-laay* (irrealis, which in its most basic use marks future tense, but which combines with other tense



and aspect particles to provide a variety of epistemic modal and subtle aspectual senses). A number of aspectual distinctions have to do mainly with future events: immediate prospective (*-hnik*), neutral prospective (*-deeq (maaq)*); and a number focus on the event's continuity: continuative involving effort (*-leen*), continuous but ineffective activity (*-seek*), neutral continuous (*-peq*), and negative neutral continuous/superfluous (*-hley*). Temporary activities are marked by *-taa* and *-tshuq*. Other categories include habitual (*-toon*), perseverative (*-ri?*), experiential perfect (*-bal*), instantaneous (*-tso?* – the action occurs instantaneously), instantaneous unexpected (*duak*), iterative (*-leqmaq*), permanent (*-be?*), exhaustive (*-di?*, and for older speakers, also *-thluu* – all of an absolutive entity is effected by the action), repetitive (*-thaan* – the action is performed again; *-hoy* – the action is unfortunately performed again), additional (*-vee* – another subject performs the action), associative (*-tji* – the action is performed jointly by a plural subject), accidental (*-sual*), and unpremeditated (*-tshom*).

### 3.2.4.3 Tense

There is a basic tense distinction between future (marked by the irrealis marker *-laay*) and non-future events (unmarked). In addition, the directional prefix *rak-* has developed a past tense sense which may be used to explicitly mark past tense, especially in conjunction with various aspectual markers.

#### 3.2.4.4 Evidential and subjective evaluation markers

There are a few markers which indicate the speaker's evaluation of the accuracy of the proposition, or an emotional response of the speaker to the content of the proposition. *-kaw* indicates the speaker's certainty, or at least assumed certainty, in the accuracy of the proposition. *-ruaa*, on the contrary, indicates that the speaker has no direct knowledge of the accuracy of the proposition. The use of *-tuq* in the verbal complex implies that the content of the proposition is counter to the expectations of the speaker. Additionally, there is a set of post-verbal elements clearly related to demonstratives/discourse deictics (*hi?*, *khi?*, *tsu?*, *kha?*) which also conveys quite intricate spatial and evidential information. *?aay* indicates regret on the part of speaker or subject and *?ee* generally indicates excitement on the part of the speaker *vis-à-vis* the content of the proposition.

#### 3.2.4.5 Ideophonic elements

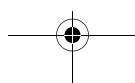
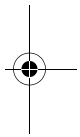
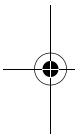
There is a virtually open class of postverbal particles which are comparable in function to what are variously dubbed ideophones, mimetics, or expressives. These conform to a couple of different prosodic templates, and reportedly add to the vividness of the picture which a clause describes in highly specific ways. For instance, in (8),

- (8) *?uysaw ?a-baw-duapmap/?a-baw-diapmap*  
 dog 3SS-bark<sub>1</sub>-IDEO/3SS-bark-IDEO  
 'The dog barked (big, bellowing dog)/(small, yapping dog)'.

the first ideophonic element creates the impression that the dog is large, with an appropriate bark, whereas the second ideophonic element conveys the picture of a little dog and its corresponding bark. The syntactic distribution of ideophonic elements is more complex than the usual postverbal particle. Though they usually occur sandwiched between the verb root and a number of the tense and aspectual particles, in some cases they may occur as nominal modifiers.

#### 3.2.4.6 Comparison

Comparative and superlative constructions require the use of the particles *-de?w* and *-biik*, respectively, as seen in (9) and (10).



- (9) *paalaw* *ʔa-nuu=naakʔin* *ʔa-saaŋ-deʔw*  
 Paalaw 3S.POSS-mother=STAND 3SS-tall<sub>1</sub>-COMP  
 ‘Paalaw is taller than his mother’.
- (10) *paalaw* *ʔa-saaŋ-biik*  
 Paalaw 3SS-tall<sub>1</sub>-SUPERL  
 ‘Paalaw is tallest’.

### 3.2.4.7 Negation

The negative marker in indicative clauses is *-law*. In the jussive mood (and actually in non-finite clauses generally), as we saw above in Table 25.4, negation is marked instead by *-hlaʔ*.

### 3.2.4.8 Mood

Indicative mood is morphologically unmarked. We saw above (Section 3.2.2), that the primary exponents of the various jussive categories are a separate set of subject person/number markers, in addition to a distinct negative marker; other marking remains the same in jussives. Finally, there is a marker *-hŋaa*, which marks the apodosis of (past) counterfactual conditional clauses, in addition to occurring in a disparate range of epistemic modal contexts (a typical example is in (11)).

- (11) *ka-nuu* *sin=ʔaʔ* *khan* *ka-rak-tlun-vee-kaw-hŋaa-law*  
 1S.POSS-mother vicinity=LOC DEIC 1SS-PAST-return<sub>2</sub>-ADD-AFF-SUBJ-NEG  
 ‘Oh, why did I not return with my mother?’

## 3.3 Derivational morphology

### 3.3.1 Compounding

Compounding is highly productive: e.g. *may-thal* ‘fire-bow=gun’, *sii-vaay* ‘medicine-wander=poison’, *thut-dan* ‘sit-separate/filter=seat’. Often the resulting compound is non-compositional.

### 3.3.2 Nominal derivation

*-naak*; which has numerous etymologically related elements throughout the morphology, also functions as a deverbal nominalizer which productively creates locative, instrumental, and action nominals: *sam-meʔ-naak* ‘hair-cut-noml<sub>zr</sub>=barbershop’, *thil-tsook-naak* ‘thing-buy-noml<sub>zr</sub>=shop’, *ʔay-din-naak* ‘eat-drink-noml<sub>zr</sub>=restaurant’, *hmuʔ-naak* ‘see-noml<sub>zr</sub>=seeing’, *peek-naak* ‘give-noml<sub>zr</sub>=giving’. Besides *-naak*, there are two elements which derive nouns from noun bases: *-pii* (augmentative) and *-tee* (diminutive).

### 3.3.3 Ordinal numbers

Ordinal numbers are derived from numeral roots by means of the suffix *-naak*: *pa-hniʔ* ‘two’, *hniʔ-naak* ‘second’, *pa-hli* ‘four’, *hli-naak* ‘fourth’.

### 3.3.4 Valence-affecting morphology

Besides the effect that ablaut has on verbal valence, the verbal complex has additional resources for affecting valence. This morphology is always adjacent to or is lexicalized within the verbal root.

3.3.5 *Middle*

The reflexive/reciprocal prefix (*?ii-* and its allomorphs) also has semi-productive derivational properties, producing what is essentially a middle voice.

3.3.6 *Causatives and applicatives*

Most valence-affecting morphology involves transitivization. There are two levels of derivation, one older and restricted in productivity, and the other of more recent origin and highly productive. The older system produces direct causatives. First, there are a few items showing a causative in *-sak* (e.g. *hmu?-sak* ‘to show’). Next, causatives which involve devoicing (in the case of sonorants) or aspiration (in the case of stops) of the initial consonant of the root (e.g. *thlaak* ‘to fall’, *thlaak* ‘to fell’) reflect the widely recognized Tibeto-Burman *\*s-* causative prefix. *\*s-*causatives are restricted to occurrence with non-stative intransitive roots. Causativization of some stative intransitive roots, on the other hand, involves a glottal feature which is realized either as glottalization of a final sonorant (and in the case of some roots, a change in place of the final consonant from *ŋ* to *n*), debuccalization of a stop consonant (neutralization to *?), or by addition of a final glottal stop to vowel-final roots. When the latter element occurs in conjunction with non-stative or transitive bases, the result is a dative/goal or benefactive applicative verb stem.*

The newer system of causativization, on the other hand, effected by the addition of a particle *-ter*, is quite productive; the forms it produces may be interpreted as involving indirect, as well as direct causation. The system of applicatives, which is likewise highly productive (even with intransitive roots), involves addition of one of seven postverbal elements to the verbal complex, depending on the semantics of the applicative object. (12) to (18) give examples of the applicative morphology.

- (12) benefactive/malefactive applicative  
law *?a-ka-thlo?-piak*  
field 3SS-1SO-hoe<sub>2</sub>-BEN.APP  
‘He hoed the field for me/in my place’.
- (13) additional benefactive applicative  
law *?a-ka-thlo?-tse?m*  
field 3SS-1SO-hoe<sub>2</sub>-ADD.BEN.APP  
‘He hoed the field for my benefit (in addition to his own benefit)’.
- (14) comitative applicative  
law *?a-ka-thlo?-pii*  
field 3SS-1SO-hoe<sub>2</sub>-COM.APP  
‘He hoed the field along with me’.
- (15) allative/malefactive applicative  
law *?a-ka-thlo?-hno?*  
field 3SS-1SO-hoe<sub>2</sub>-MAL.APP  
‘He hoed the field to my deriment’.
- (16) prioritive applicative  
law *?a-ka-thlo?-ka?n*  
field 3SS-1SO-hoe<sub>2</sub>-PRIOR.APP  
‘He hoed the field ahead of/before me’.



- (17) relinquitive applicative  
*law* *ʔa-ka-thloʔ-taak*  
 field 3SS-ISO-hoe<sub>2</sub>-RELINQ.APP  
 'He left me and hoed the field'.
- (18) instrumental applicative  
*tuuhmuy law ʔa-thloʔ-naak*  
 hoe field 3SS-hoe<sub>2</sub>-INST APP  
 'He hoed the field with a hoe'.

Only in the case of *-hnoʔ*, which is generally malefactive, but which with some roots expressing motion (e.g. *kal* 'go' and *kaay* 'climb') may have an allative meaning, is there much deviation from the semantics indicated by these examples. In each of these constructions, the applicative object has more ready access to a number of object properties than the object of the base verb (*law* 'field') does (e.g. accessibility to topicalization and object agreement, potential to be associated with discourse deictics, ability to control zero anaphora in certain types of clause chaining), and the narrative text-based study of applicative discourse-function in Peterson 1999 shows that for many applicative constructions in Lai, using a variety of metrics, the applicative object is more topical than a co-occurring base object.

## 4 SYNTAX

### 4.1 NP syntax

Elements in nominal phrases exhibit the following basic order:

demonstrative relative possessor [head] classifier-numeral quantifier case discourse deictic

A nominal phrase consists minimally of a head noun, which may either be possessed by a preceding noun, or bear a possessive prefix. Quantifiers follow the head noun, and numeral quantification requires a classifier element compounded with a numeral root. Next, all non-absolutive noun phrases bear a case particle. The final element in a nominal phrase is often a discourse deictic (marker of information status); purely spatial deixis always involves a demonstrative element at the beginning of the noun phrase. Relative clauses, including expressions corresponding to adjectives in other languages, generally precede their heads, though the head may also occur internal to the relative clause, giving the impression in some cases of a postnominal relative; adjectival roots may also occur in a distinct, non-finite construction following the nominal they modify.

Discourse deictics show limited agreement in case: if the case of the phrase is anything other than absolutive, the deictic bears the agreement marker *-n*. This behaviour might seem somewhat anomalous for this type of particle, but presumably it simply derives from these particles' earlier status as demonstratives. If a noun marked by the instrumental-ablative case clitic is followed by a discourse deictic, often the case clitic is omitted, and simply understood from the oblique marking of the accompanying discourse deictic. This is not the case for other obliquely marked nouns, however.



## 4.2 Clausal syntax

### 4.2.1 Word order

Arguments are often not instantiated by full NPs, their instantiation being assumed by a pronominal interpretation of verbal agreement marking. When full NPs are present, the basic word order is subject-object-verb, with variable placement of subject and object depending on their case marking and semantic factors. There is a left dislocation position, which attracts heavy constituents and is also used extensively for topicalization. In addition, constituents may sometimes appear in a postverbal afterthought position.

### 4.2.2 Grammatical relations

Marking of the basic S, A and O functions has already been discussed in passing in the sections on case marking particles (3.1), verbal ablaut (3.2.1), and verb agreement (3.2.2). In short, the basic system of grammatical relations as marked on nominals has an ergative/absolutive alignment, and verbal ablaut achieves the effect of an antipassive construction, in which both arguments of a transitive verb are absolutive, but in which the object does not have access to all of the properties generally available to transitive objects (in particular, the object is restricted in its ability to co-occur with discourse deictics). On the other hand, verbal agreement has a fundamentally nominative/accusative alignment.

Multiple objects exhibit a primary object alignment; with a ditransitive verb, the recipient is marked on the verb rather than the patient. This tendency apparently stems largely from the tendency to mark animates to the exclusion of inanimates.

Finally, it has been noted by Bickel (2000) that Lai agreement, as elsewhere in Sino-Tibetan, is not always of the canonical 'identificational' type, but may instead be partitional, appositional, or relational, the latter seen particularly in psycho-collocational constructions like the one in (19), in which agreement is not with the third singular 'my heart', but rather with the entity the expressed emotion relates to.

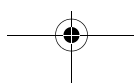
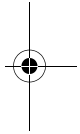
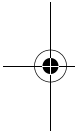
- (19) *ka-luŋ kan-rook*  
 1S-heart 1PS-break.down<sub>1</sub>  
 'I am disappointed at us'.

### 4.2.3 Coordination

Coordination of NPs involves the clitic =*lee*, which also sometimes marks clausal conjunction. The most frequent clausal coordination construction makes use of an encliticized particle =*?ii*, which may otherwise appear clause-initially as an independent conjunction; prosodic inclusion in the first clause distinguishes the enclitic use from its clause-initial use.

### 4.2.4 Subordination

Subordination involves three basic types of construction: adverbial subordination, relativization, and complementation.



#### 4.2.5 Adverbial subordination

Finite indicative clauses may without any formal modification occur as the object of the oblique case particles =*ʔaʔ* and =*ʔin* to yield adverbial subordinate clauses expressing the circumstance under which an event described in the main clause occurs, as in (20).

- (20) *ka-tiin = ʔaʔ*                      (*khan*) *ʔa-kal*  
 1SS-come.home<sub>2</sub>=LOC    DEIC    3SS-go<sub>1</sub>  
 ‘When I came back home, he left’.

Related to this subordination pattern is the marking of the protases of conditional clauses, seen in (21), which involves addition of the locative case particle and the discourse deictic *tsu-n*, which tends to mark topicalization, to the corresponding indicative clause:

- (21) *ka-tiin = ʔaʔ*                      *tsun ʔa-kal-laay*  
 1SS-come.home<sub>2</sub>=LOC    DEIC    3SS-go<sub>1</sub>-IRR  
 ‘If I come home, he will leave’.

In addition, there is a class of constructions consisting of relational nouns with more or less concrete semantics which are marked obliquely (by the locative or instrumental-ablative case clitic) and inserted after zero-nominalized clauses to indicate a variety of adverbial relations. In some cases the relational elements involved are used independently as relational nouns (e.g. *v hmuu = ʔaʔ* ‘back (=after) v’, *v hlaan = ʔaʔ* ‘front (=before) v’, *v tshuŋ = ʔaʔ* ‘inside (=while) v’, *v laay = ʔaʔ* ‘towards (=when about to) v’, *v tsaa = ʔaʔ* ‘sake (=because) v’). In other cases, the relational elements only occur in these constructions (e.g. *v tik = ʔaʔ* ‘when v’).

Besides these relatively compositional subordination strategies, there are some less compositional subordinators, though parts of them are identifiable. Concessive clauses are marked by *-naa = ʔin* and purposive clauses are marked by *dij = ʔaʔ*. Besides the *v tsaa = ʔaʔ* construction, reason clauses may also be indicated by *-koo*; *-koo* reason clauses, as opposed to most other adverbial subordinate clause forms, are usually non-finite: they take no subject agreement markers and they have a negative marker like that found in the jussive mood. *-buu = ʔin* and *-paʔ = ʔin* mark a subordinate action which is simultaneous with that of the main clause, but unlike the other subordinate clause types, their subject must also be identical to that of the main clause. Lastly, a more complex purposive clause is marked by a combination of a number of otherwise straightforward elements: *-naak-tsa-dij = ʔaʔ*.

#### 4.2.6 Relativization

Relative clauses may be externally- or internally-headed, though both strategies are not available for all target types. Externally-headed relativization is illustrated in (22) to (27). Externally-headed relatives are proposed finite clauses with a gap corresponding to the target of relativization.

- (22) Intransitive subject target.  
*in = ʔii*                      *ʔa-it-mii*                      *lawthlawpaa*    *ka-hmuʔ*  
 house=LOC    3SS-sleep<sub>1</sub>-REL    farmer                      1SS-see<sub>2</sub>  
 ‘I saw the farmer who slept in the house’.

- (23) Transitive subject target.  
*thil ?a-bat-tuu lawthlawpaa ka-hmu?*  
 thing 3SS-hang<sub>1</sub>-REL farmer 1SS-see<sub>2</sub>  
 'I saw the farmer who hung up the clothes (*lit.* the things).'
- (24) Transitive subject target.  
*thil ?a-bat-mii lawthlawpaa ka-hmu?*  
 thing 3SS-hang<sub>1</sub>-REL farmer 1SS-see<sub>2</sub>  
 'I saw the farmer who hung up the clothes'.
- (25) Transitive object target.  
*lawthlawpaa = ni? ?a-ba?-mii thil ka-hmu?*  
 farmer = ERG 3SS-hang<sub>2</sub>-REL thing 1SS-see<sub>2</sub>  
 'I saw the clothes the farmer hung up'.
- (26) Locative target.  
*lawthlawpaa = ni? thil ?a-ba?-naak thiŋkuŋ ka-hmu?*  
 farmer = ERG thing 3SS-hang<sub>2</sub>-REL tree 1SS-see<sub>2</sub>  
 'I saw the tree the farmer hung the clothes up on'.
- (27) Instrumental target.  
*lawthlawpaa = ni? ŋa ?a-tan-naak naam ka-hmu?*  
 farmer = ERG fish 3SS-cut<sub>2</sub>-REL knife 1SS-see<sub>2</sub>  
 'I saw the knife the farmer cut the fish with'.

Relativization on given targets requires a particular ablaut grade and an invariant relative clause particle. Table 25.5 summarizes the morphological devices involved for different target types.

There is no clear difference between the *-tuu* and *-mii* relativizers except in terms of their potential relativization targets, but *-tuu* has a much lower text frequency.

For certain targets, relative clause heads may occur internally as well as externally. This is shown in (28)–(30) for intransitive subject, transitive subject, and object targets.

- (28) *?in = ?ii lawthlawpaa ?a-it-mii ka-hmu?*  
 house = LOC farmer 3SS-sleep<sub>1</sub>-REL 1SS-see<sub>2</sub>  
 'I saw the farmer who slept in the house'.
- (29) *nikum = ?ii lawthlawpaa thil ?a-bat-mii ka-hmu?*  
 last.year = LOC farmer thing 3SS-hang<sub>1</sub>-REL 1SS-see<sub>2</sub>  
 'I saw the farmer who hung up the clothes last year'.
- (30) *nikum = ?ii lawthlawpaa = ni? thil ?a-ba?-mii ka-hmu?*  
 last.year = LOC farmer = ERG thing 3SS-hang<sub>2</sub>-REL 1SS-see<sub>2</sub>  
 'I saw the clothes the farmer hung up last year'.

TABLE 25.5 PRIMARY RELATIVIZATION STRATEGIES

Role of target	Intransitive subject	Agent	Patient	Instrument, locative
Ablaut grade	form 1	form 1	form 2	form 2
Relativizer	-mii	-mii/-tuu	-mii	-naak

It is important to note that the relative clause of all of these examples includes a temporal adverbial 'last year', which is marked with the oblique case clitic =*ʔii* rather than =*ʔaʔ*. As discussed earlier in the section on case marking, =*ʔii*, occurs only in subordinate clauses, so the presence of this adverbial in each sentence unambiguously indicates that the target of relativization is syntactically internal to the (subordinate) relative clause in question. Internally-headed relative clauses are not possible with the *-tuu* relativizer. For instruments, the internal relative clause head is not marked obliquely, because if it is, the relativization is interpreted as targeting a locative. Internally-headed relatives targeting locatives may have an obliquely marked head, but such sentences are ambiguous between a locative target and an instrument target.

#### 4.2.7 Complementation

As was mentioned in the discussion of modal elements, it appears that the best analysis for some modal elements is as modal auxiliaries which take bare verb stem complements. However, there are also a number of finite complement types marked by specialized complementizers. The most general complementizer is identical to one of the relativizers, *-mii*. *-mii* complements appear with a number of verbs of cognition, as in example (31).

- (31) *paalaw = niʔ ʔa-tsoo ʔa-zuar-mii khaa ʔa-thaʔy*  
 Paalaw = ERG 3S.POSS-cow 3SS-sell<sub>2</sub>-COMP DEIC 3SS-know<sub>2</sub>  
 'He knows that Paalaw sold his cow'.

There is no distinction between direct and indirect speech, and verbs of speaking and other verbs of cognition require a (quotative) complementizer based on the proverb *-tii* 'do/say', *tiaʔ*, as in (32).

- (32) *paalaw = niʔ ʔa-tsoo ʔa-zuar tiaʔ ʔa-tii/ʔa-zuʔm*  
 Paalaw = ERG 3S.POSS-cow 3SS-sell<sub>2</sub> QUOT 3SS-say<sub>1</sub>/3SS-believe<sub>2</sub>  
 'He said/believes Paalaw sold his cow'.

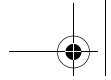
Finally, *diŋ = ʔaʔ*, which acts as a purposive clause marker in other contexts, acts as a complementizer:

- (33) *lawthlawpaa = niʔ ʔa-tsoo ʔa-zuar diŋ = ʔaʔ paalaw = niʔ*  
 farmer = ERG 3S.POSS-cow 3SS-sell<sub>2</sub> COMP = LOC Paalaw = ERG  
*ʔa-leem/ʔa-nool*  
 3SS-persuade<sub>2</sub>/3SS-request<sub>2</sub>  
 'Paalaw persuaded the farmer to sell his cow/requested that the farmer sell his cow'.

### 4.3 Major sentence types

#### 4.3.1 Indicative

Indicative sentences are not coded by any special marking.



#### 4.3.2 Copular

Equational copular sentences are formed with a predicate nominal and an appropriately conjugated form of the copular verb *sii*. Existential copular sentences use a separate copular predicate, *ʔum*.

#### 4.3.3 Jussive

As discussed in conjunction with verbal inflection, jussive sentences involve special subject person and number, as well as negative markers. Otherwise, these sentences do not differ materially from indicative sentences in their syntax. Another common way to form imperatives is simply to postpose the particle *-tuaʔ* to a form 1 verb stem. *-loo* marks imperatives and cohortatives as more polite.

#### 4.3.4 Interrogative

Polar interrogatives are indicated by the sentence-final particle *-moo* (for some speakers the particle *-maa* is used), as in (34).

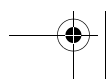
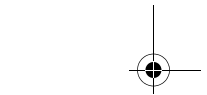
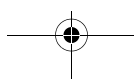
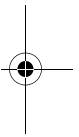
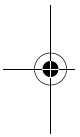
- (34) *na-min thoɔŋseew ʔa-sii=maa*  
 2S-name Thawng Ceu 3S-be<sub>1</sub>=INTERR  
 'Is your name Thawng Ceu?'

Content questions are characterized by (optionally left-dislocated) dedicated question words (*zay* 'what', *ʔahaw* 'who', *khoy/khoykaa=ʔaʔ* 'where', *zay tii=ʔin* 'how', *zay ruəŋ=ʔaʔ* 'for what reason', etc.) In most cases, the particle *=daʔ* is also added to the question word, as in (35).

- (35) *faalaam=ʔaʔ ʔahaw=daʔ na-thaʔy*  
 Falam=LOC who=QUES 2SS-know<sub>2</sub>  
 'Who do you know in Falam?'

## REFERENCES

- Barnes, Jonathan (1998) 'Tsuu khaa tii hla?: deixis, demonstratives and discourse particles in Lai Chin', *LTBA* 21.1: 53–86.
- Bedell, George (1995) 'Agreement in Lai', papers from the Fifth Annual meeting of the Southeast Asian Linguistics Society, Tempe: Program for Southeast Asian Studies, Arizona State University, 21–32.
- (1996a) *Clitic Climbing in Lai. Pan-Aisatic Linguistics*, proceedings of the Fourth International Symposium on Languages and Linguistics, Vol. 2, Nakhon Pathom: Mahidol University, 405–15.
- (1996b) 'Passives and clefts in Lai', to appear in papers from the Sixth Annual Meeting of the Southeast Asian Linguistics Society.
- (1997a) 'Causatives and clause union in Lai (Chin)', *Mon-Khmer Studies* 27: 219–32.
- (1997b) 'Benefactives and clause union in Lai', to appear in papers from the Seventh Annual Meeting of the Southeast Asian Linguistics Society.
- (1998a) 'Nominal auxiliaries in Lai', to appear in papers from the Eighth Annual Meeting of the Southeast Asian Linguistics Society.
- (1998b) Describing and explaining Lai, ICU ms.
- (1999) 'Word combination in Lai', to appear in papers from the Ninth Annual Meeting of the Southeast Asian Linguistics Society.



- (forthcoming) 'The syntax of deixis in Lai', *LTBA*.
- (2000) 'Postpositions and relational nouns in Lai', paper presented at Pan-Asiatic Linguistics, Ho Chi Minh City.
- Bedell, George and Kenneth VanBik (2000) 'Lexical and syntactic causatives in Lai', to appear in papers from the Tenth Annual Meeting of the Southeast Asian Linguistics Society.
- Bickel, Balthasar (2000) 'On the syntax of agreement in Tibeto-Burman', *Studies in Language* 24.3: 583–609.
- Chhange, Lalnunthangi (1993) 'Mizo syntax', unpublished University of Oregon PhD dissertation.
- Haye-Neave, D.R. (1948) *Lai Chin grammar and dictionary*, Rangoon: Superintendent of Government Printing and Stationery, Burma.
- Kathol, Andreas (2000) 'The morphosyntax of Lai relative clauses', in Ronnie Cann, Claire Grover, and Phillip Miller (eds) *A Collection of Papers on Head-Driven Phrase Structure Grammar*, Stanford: Stanford University Press.
- Kathol, Andreas and Kenneth VanBik (1999) 'Morphology – syntax interface in Lai relative clauses', Pius Tamanji, Masako Hirotani and Nancy Hall (eds) *NELS* 29: 427–41.
- (2000) 'Lexical constraints and constructional overrides: on the syntax of verbal stem alternations in Lai', unpublished manuscript, University of California, Berkeley.
- (2001) 'The syntax of verbal alternations in Lai', paper presented at the Linguistic Society of America Annual Meeting, Washington, DC.
- Kavitskaya, Darya (1997) 'Tense and aspect in Lai Chin', *LTBA* 20.2.
- Lehman, F.K. (1963) *The Structure of Chin Society: A Tribal People of Burma Adapted to a Non-western Civilization*, Illinois Studies in Anthropology, No. 3, Urbana: The University of Illinois Press.
- (1996) 'Relative clauses in Lai Chin, with special reference to verb stem alternation and the extension of control theory', *LTBA* 19.1: 43–58.
- Lehman, F.K. and VanBik Kenneth, (1997) *Notes on Lai Chin personal pronouns and overt case marking*, *Studies in the Linguistic Sciences* 27.2: 81–86.
- Macnabb, D.J.C. (1891) *Hand-book of the Haka or Baungshe Dialect of the Chin Language*, Rangoon.
- Melnik, Nurit (1997a) 'The sound system of Lai' *LTBA* 20.2: 9–19.
- (1997b) 'Verbal alternations in Lai', *LTBA* 20.2: 163–72.
- Newland, A.G.E. (1897) *A Practical hand-book of the Language of the Lais*, Rangoon.
- Olawsky, Knut J. and VanBik, Kenneth (2000) 'Introduction to Lai tonology', unpublished manuscript, University of California, Berkeley.
- Osborne, Andrea Gail (1975) 'A transformational analysis of tone in the verb system of Zahao (Laizo) Chin', unpublished PhD dissertation, Cornell University.
- Patent, Jason D. (1998) 'A willy-nilly look at Lai ideophones', *LTBA* 21.1: 155–200.
- Peterson, David A. (1998) 'The morphosyntax of transitivization in Lai (Haka Chin)', *LTBA* 21.1: 87–153.
- Peterson, David A. (1999) 'Discourse-functional, historical, and typological aspects of applicative constructions', unpublished PhD dissertation, UC Berkeley.
- Peterson, David A. and VanBik, Kenneth (forthcoming) *A Reference Grammar of Lai*, Max Planck Institute for Evolutionary Anthropology and UC Berkeley.
- Plauché, Madelaine C., de Azcona, Rosemary Beam Roengpitya, Rungpat and Weigel William F. (1998) 'Glottalized Sonorants: A Phonetic Universal?' *BLS* 24: 381–90.
- Reichle, Verena (1981) *Bawm Language and Lore: Tibeto-Burman Area*, Bern: Peter Lang.
- Roengpitya, Rungpat (1996) 'Classifiers in Lai', unpublished manuscript, University of California, Berkeley.
- (1997) 'Glottal stop and glottalization in Lai (connected speech)', *LTBA* 20.2: 21–56.
- VanBik, David (1986) *English–Chin (Haka) Dictionary*, Haka.
- VanBik, Kenneth (1997a) 'Lai adverb classification', unpublished manuscript, University of California, Berkeley.
- (1997b) 'Relative clause in Lai', unpublished manuscript, University of California, Berkeley.
- (1998) 'Lai psycho-collocation', *LTBA* 21.1: 201–33.



- (2000) 'Three types of causative constructions in Lai', unpublished manuscript, University of California, Berkeley.
- (forthcoming) 'Causatives in Lai', to appear in Graham Thurgood (ed.) papers from the Eighth Annual Meeting of the Southeast Asian Linguistic Society (SEALS VIII), Tempe, Arizona: Department for Southeast Asian Studies, Arizona State University.
- VanBik, Kenneth and VanBik, David (2000) Lai–English dictionary, unpublished manuscript, University of California, Berkeley.
- Yamashita Smith, Tomoko (1998) 'The middle voice in Lai', *LTBA* 21.1: 1–52.

#### FURTHER READING

As an important language of wider communication in the Chin Hills, Lai was the subject of a pair of grammatical descriptions made at the end of the last century by British military personnel (Macnabb 1891 and Newland 1897); a somewhat later description is Hays-Neave (1948).

While a large number of Tibeto-Burman languages have been given more or less satisfactory grammatical descriptions in the last few decades, few languages have been subject to the kind of work which has been carried out on Lai. In the last decade, no less than three groups of researchers have conducted investigations on Lai grammar: Bedell in Japan, Lehman in Illinois, and several graduate students at the University of California, Berkeley under the guidance of Matisoff all produced independent studies on a wide variety of topics (see references); although they so far do not constitute a complete reference grammar, these studies nonetheless cover a wider range of topics than is covered in many sources available for any other language in this part of Tibeto-Burman. Besides the extensive literature which has appeared on Lai in recent years, a full reference grammar and collection of narrative texts is under preparation by the author and Kenneth VanBik. In terms of lexical resources, Kenneth and David VanBik had been preparing a Lai–English dictionary to complement David's English–Lai dictionary; since David's untimely death in 2000, Ken has continued work on this project and hopes to complete it in the near future. Lorenz Löffler has also been working independently on dictionary materials with a collaborator from Hakha.