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AN OUTLINE OF SIAMESE GRAMMAR

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An Outline of Siamese Grammar

Summary

This dissertation presents the main points of a synchronic description of the standard spoken language and chief dialect of Thailand.

The phonemic structure of Siamese is based on a syllable unit, and the individual phonemes are classified in terms of initials, nuclei, finals, and prosodic features of the syllable. There are nineteen consonants, ~~seven~~ *ten* vowels, six tones, and three stress phonemes.

Morphophonemic criteria are used to define larger units: phrases, clauses, and sentences. Two intonations are distinguished, and three types of clause juncture.

The major classes of free lexemes are substantives, numeratives, and isolatives. The first class is subdivided into nouns, verbs, adjectives, and modals. One type of predication is made with a modal or verb as head, another type with an adjective or verb as head, and a third with two nouns in equational relationship. Any complex predication is an extension of one of these types. In endocentric constructions modifiers always follow the head. Bound lexemes are classified in terms of their position with regard to constructions of free lexemes.

Morphological phenomena include reduplication, systematic derivation, and affixation. The total number of morphemes which have non-conditioned allomorphs is small.

Contents

Introduction

The area of the Thai dialect described here is roughly co-extensive with a geographical area of Siam known as the Central Plain. The dialect centers around Bangkok; it extends to the west as far as the Burmese border, and southwest perhaps no further than Ratchaburi; it is bounded on the north and northeast by mountains, and extends eastward as far as the Cambodian border, thus including the small section of Thailand which is east of the Gulf of Siam.

The principal isoglosses separating this dialect, called here simply Siamese, from other dialects of Siam proper are the phonetic shapes and phonemic distributions of tones; there are considerable differences in lexicon also, but apparently very few in syntax. Siamese is the dialect most closely resembling the standard language of Thailand, spoken in official circles in Bangkok and the provincial capitals and understood throughout the country. In effect, this outline treats grammatical features common to both the Central Plains dialect and the standard language, and ignores or adjusts differences between them. Informants of both backgrounds have supplied the material.

The treatment of /r/ and /l/, alone or in clusters, varies so greatly among speakers (those who make the distinction at all) that the choice between these two phonemes in a given lexical unit is simply made in accordance with the official spelling wherever possible. The general statement can be made, however, that the Central Plains dialect contains far fewer instances of /r/ than the standard language.

The period of research covers four years, 1950-54, the first two of which were spent in Siam under concurrent grants from the Southeast Asia Program of Yale University and the American Council of Learned Societies. The first year was devoted mainly to learning the language and beginning the study of Thai literature, the second year to continuing literary studies and beginning the present project.

The principal informant was Mr. Han Ditkum, a student at the Royal Military Academy in Bangkok, during the year 1951-52. Interviews with Mr. Han were conducted only in Siamese. The material is of two types: short utterances in response to specific questions, transcribed by ear, and connected texts transcribed by tape recorder.

Of other informants, the most important are Miss Chaluay Kanchanagama, of the Faculty of Arts of Chulalongkorn University, Bangkok (1951-52); Mr. Chote Raktiprakara, a graduate student in forestry at Yale University (1953-54); and Mrs. William Gedney, of New Haven, Conn. (1954). Interviews with the first two informants were conducted mainly in English, with Mrs. Gedney entirely in Siamese. Mr. Han and Mrs. Gedney are natives of Ayuthya Province. Mr. Chote was born outside the Central Plain dialect area, in Phrae, but both he and Miss Chaluay have been speakers of the standard language since early childhood. -

Of modern descriptive publications on Siamese, the most frequently consulted have been those of Mary R. Haas, especially her Spoken Thai, (co-authored by Heng R. Subhanka; Henry Holt and Co., 1945). Many grammatical conclusions implicit in Miss Haas' pedagogical material recur in the present work; at other points the analyses are obviously at variance.

An article by G. Edward Roffe dealing with a different Thai dialect, 'The Phonemic Structure of Lao' (JOAS 66.289-95), gave useful hints for approaching phonemic problems. A handbook published in Siam, Siamese-English Conversation, by M.C. Prasobsukh Sukhsvasti and an anonymous co-author (Bangkok, 1946), filled a similar role with regard to syntactic problems.

Among older grammars, the most productive of lines of inquiry have been Eakin's Manual for Study of the Siamese Language, Cartwright's Student's Manual of the Siamese Language, and Evald's Grammatik der T'hai oder Siamesischen Sprachen.

Lastly, I wish to acknowledge a great indebtedness to Dr. William J. Gedney, who gave invaluable assistance and advice at the beginning of my research undertaking in Siam, and who later contributed many suggestions, based on his own research and observation, which have found their way into the present analysis. He is not responsible, however, for the accuracy of any statement which appears here as a result of such suggestions.

1. Phonemics

1.1. The syllable

1.1.1. A __syllable__, in Siamese, is a minimum sequence of phones at least one of which is a vowel, which occurs by itself as a complete utterance, or is a residue when such independently occurring syllables are subtracted from a complete utterance. It follows then, that any complete utterance in Siamese consists wholly of syllables.

For example, the sequence $[\text{'p}^{\circ}\tilde{\ell}\ell\text{ə'má·j}]$ 'It's fruit' consists of three syllables: $[\text{'p}^{\circ}\tilde{\ell}]$, $[\ell\text{ə}]$, and $[\text{'má·j}]$. The last fraction of the sequence, $[\text{'má·j}]$, is a syllable because it occurs independently in the meaning 'It's wood'. The second fraction, $[\ell\text{ə}]$, is a remainder in such sequences as $[\ell\text{ə'ʔa·j}]$ '(She's) ashamed', for $[\text{'ʔa·j}]$ occurs independently (with a similar meaning). Since $[\ell\text{ə}]$ and $[\text{'má·j}]$ are syllables, the first fraction is also a syllable.[1]

1.1.2. __Prosodic features__ are phonetic features which are distinctive for an entire syllable rather than for a single constituent segment. The four relevant types of prosodic features are length, stress contour, voice quality, and pitch contour. For example, the syllable $[\text{'má·j}]$ above is longer than either of the syllables preceding it; its stress contour is moderately loud and fading gradually; it has glottal constriction throughout; and it

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[1]Note that although $[\text{ə}]$ can be established as a syllable, by subtraction from utterances like $[\text{'t}^{\flat}\text{am ə'raj}]$ 'What are you doing?', it cannot be subtracted from the sequence $[\ell\text{ə}]$ to yield a residual syllable $[\ell]$, because of the requirement that syllables contain at least one vowel. The analysis of the sequence $[\text{'p}^{\circ}\tilde{\ell}\ell\text{ə'má·j}]$ is therefore complete as given above.

has a high-level pitch contour, rising slightly at the beginning
and falling slightly at the end.

Not all syllables have prosodic features. The syllable [lə]
above is as short as any syllable in the language (and therefore
has no distinctive length), and it has no distinctive character-
istics of stress, pitch, or voice quality.

In general, prosodic features contrast with each other in
the same way that segments contrast. ['nâ·] 'face' differs from
['na·] 'field' on the same lexical level that ['ma·] 'to come'
differs from ['na·]; there is also a comparable contrast between
[,na·] (with less loud stress contour) 'let me tell you' and ['na·].
Between features of stress and length, and between features of
pitch and voice quality, however, there is a relationship which
is more complementary than contrastive. The syllables ['lom]
'air' and ['lóm] 'to topple over' will serve to illustrate the
point. In any environment where relative pitch criteria are
present, the contour of ['lóm] begins higher than that of ['lom];
the contours are otherwise identical. In isolation, and in some
but not all other environments, the syllable ['lóm] has the com-
plementary feature of glottal constriction; ['lom] never has it.
Hence the two syllables are always distinguishable. On the other
hand, ['lom] and ['lòm] 'mudhole' are not distinguishable in
isolation, the voice quality being the same in both cases. The
sequences [pen 'lom] 'to faint' and [pen 'lòm] 'to be full of
mudholes', however, are distinguishable, since here the lower
pitch of ['lòm] is evident by contrast with [pen].

For purposes of phonemic analysis, therefore, it is con-
venient to consider features of pitch and voice quality as
interrelated phenomena. A similar interrelation holds between
stress and length.

1.1.3. **Segmental** **features** are all the distinctive phonetic features other than prosodic features.

A **segment** is any fraction of a syllable during which there is no perceptible change in the complex of segmental features.[2] Thus the syllable ['má·j] has three segments, represented by the symbols [m], [a], and [j]; segmental analyses of the three syllables ['lom], ['lóm], and ['lòm] yield identical results: [l], [o], and [m].

The **nucleus** of a syllable consists of one or more vocalic segments. Nuclei of the examples given so far have consisted of only one segment each: [a·] in ['má·j], [o] in ['lom], and [a] in [la]. There are also nuclei of two segments, the second being always [a] and no other segment intervening: ['sǐ·a ɣ] 'sound, voice', with nucleus [i·a].

An **initial** is that fraction of a syllable which precedes the nucleus. Initials in forms cited so far consist of one segment: [m] in ['má·j], [p'] in ['p'ǒĺ], etc. Initials of two consonant segments also occur: e.g. ['tra·] 'stamp', with initial [tr]. Syllables with no initial occur: [a] in ['t'am a 'raj] above.

A **final** is that fraction of a syllable which follows the nucleus. Finals always consist of one consonant segment: [j] in ['má·j], [m] in ['lom]. Some syllables have no final: [a], [la], ['tra·], etc.

1.1.4. To sum up, all syllables have segmental features, and may or may not have prosodic features. Prosodic features fall into two classes, of pitch-quality and of stress-length. The

[2]The presumed transition stages between segments can be safely ignored; any syllable is therefore divisible into an integral number of segments.

contrasts among segmental features are to be considered in terms of initials, nuclei, and finals. In terms of segmental structure, the maximum syllable is CCVVC: ['prî·əw] 'It's sour'. The minimum syllable is V: [ə], in ['t'am ə 'raj].

1.2. Vowels

1.2.1. The greatest number of contrasts among nuclei occurs in syllables with normal (third highest) stress before pause. There are 18 contrasting nuclei of one segment each; these pair off into two sets of 9 vowels: one of relatively long fully voiced vowels, the other of corresponding short weakly voiced vowels. Each nucleus occurs (with random gaps) after all the initials; the long nuclei occur with no final and before all finals except fortis glottal stop; the short nuclei occur before all finals, including fortis glottal stop, but not without a final. This situation is best analyzed by positing a phoneme /./ 'weakly voiced vowel' (written below the nuclear vowel); final fortis glottal stop is thus a determined segment.

The 18 one-segment nuclei are illustrated by the following syllables:

Long full-voiced		Short weakly-voiced	
'lìk	'to bypass'	'phĺịk	'to turn over'
'lȇk	'number'	'lệk	'small'
'laêk	'to exchange'	'kaệk	(onomat.)
'lym	'to forget'	'lỵk	'deep'
'lâyk	'to desist'	'ŋạyn	'silver'
'lȃk	'to haul'	'lệk	'to steal'
'lûk	'child'	'lụk	'to get up'
'lȏk	'world'	'nǫk	'bird'
'laȏk	'to peel, skin'	'tjaǫk	(onomat.)

There are, in addition, 5 contrasting nuclei of two segments each, the second segment of which is always a short lax vowel. Three of the first segments are long and fully voiced, two are short and weakly voiced; the distribution of the two-segment nuclei is parallel to that of the one-segment nuclei. They are analyzed as vowel clusters; the first segment is assigned to /i/, /y/, or /u/, the second to /a/. The five two-segment nuclei:

Long lax		Short tense	
'rîak	'to call'	'ḭát	(onomat.)
'lŷak	'to choose'	3	
'lûak	'to parboil'	'tjṷak	'pure-(white)'
		(also 'tjṷak)	

1.2.2. Definitions and descriptions of allophones of the individual vowel phonemes follow. In general, vowels have shorter allophones before finals: the nucleus of /'la/ 'donkey' is longer than that of /'lâk/ 'to haul'; that of /'lḭ/ 'to abandon' longer than that of /'lḭk/ 'to steal'. Other automatic variations in the length of vowels will be treated in connection with distributional statements of prosodic phonemes (1.4.1.).

Vowels immediately before nasal finals have slightly nasalized allophones: cf. /'lǫm/ 'wind' and /lḭt/ 'to lower',

The vowels:

/i/ High front vowel

1. Upper high front unrounded:[4] /'lḭk/ 'to bypass'.
2. With /./, no final—somewhat lower: /'rḭ/ 'to plan'.

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[3]This gap is apparently not accidental; I have no examples of */ya/.

[4]The first allophone given for each vowel is the most common one, and implies the distributional statement 'Occurs in all environments except those below.'

3. With /./, before a final--still lower, more central: /'phlị̆k/ 'to turn over'.

4. Before /a/--with off-glide toward central position: /'rỉak/ 'to call'. /'kịa/ :wooden shoes', /'ịat/ 'sound of tree-branch creaking'.

5. After plain stops, nasals, and spirants, but not before /a/-- with on-glide from central position: /'pi/ 'year', /'tị̇/ 'to criticize', /'kịn/ 'to eat', /'fị̇/ 'skill', /'sị̇/ 'four', /'hị̇n/ 'stone'.

/e/ Mid front vowel.

1. Upper mid front unrounded: /'lê̂k/ 'number'.

2. With /./, no final--somewhat lower: /tệ̂/ 'to kick'.

3. With /./, before a final--still lower, more central: /'lệ̂k/ 'small'.

/ae/ Low front vowel.

1. Low front unrounded, slightly central: /'lâ̂ek/ 'to exchange'.

2. With /./--somewhat higher, less central: /'kậe/ 'sheep'.

3. After /h/ or no initial--sometimes nasalized: /'ậep/ 'to sneak', /hậ́e/ (final particle).

/y/ High back or central unrounded vowel.

1. High, more back than central: /'lym/ 'to forget'.

2. With /./--somewhat lower and more central: /'lỹk/ 'to get up'.

3. Before /a/--with downward off-glide: /'lŷak/ 'to choose'.

/ay/ Low back unrounded vowel.

1. Upper low, slightly central: /'dayn/ 'to walk', /'ŋayn/ 'money'.

/a/ Low or mid central vowel.

1. In general--lower low: /'lâ̂k/ 'to haul'.

2. With /./, before most finals and without final--considerably higher: /'lé̇/ 'to abandon', /'lé̇k/ 'to steal'.

3. With /./, final /j/--higher and more front: /'paj/ 'to go'.

4. With /./, final /w/--more back: /'lê̂w/ 'to tell'.

5. After /h/ or no initial--nasalized: /'hâ/ 'five', /'ąw/ 'to take'.

6. As second segment, with no final--lower mid: /'rya/ 'boat', /'kįa/ 'wooden shoe'.

7. As second segment, before a final--upper mid: /'rɏaŋ/ 'subject', /'kɫaw/ 'to reap'.

/u/ High back rounded vowel.

1. Upper high back: /'lûk/ 'child'.

2. With /./, no final--somewhat lower: /'dų̀/ 'fierce'.

3. With /./, before a final--still lower, more central: /lų̀k/ 'to get up'.

4. Before /a/--with off-glide toward central position: /'lûak/ 'to parboil', /'ɥ́a/ 'I (Chinese speaker)', /'tjɥ́ak/ 'pure-(white)'.

/o/ Mid back rounded vowel.

1. Upper mid back: /'lôk/ 'world', /'tǿ/ 'table'.

2. With /./, before a final--somewhat lower and more central: /'nǿk/ 'bird'.

/ao/ Low back rounded vowel.

1. Mean low back, slightly central: /'lâok/ 'to skin'.

2. With /./--somewhat higher, less central: /'ḳ̀ao/ 'island'.

3. After /h/ or no initial--nasalized: /'ḥ̀ao/ 'to fly (super-naturally)', /'ȧok/ 'to issue'.

/./ Weakly voiced vowel. (Occurs simultaneously with any vowel phoneme. Examples above.)

1.3. Consonants

1.3.1. The greatest number of contrasts among initials occurs in syllables with normal stress before pause. There are 19 contrasting initials of one segment each, and no syllable

is without an initial. In weak-stressed syllables 18 of these initials occur, and there are syllables with no initial; the only initial not occurring is fortis glottal stop, which is hence determined by stress.

The remaining 18 one-segment initials (grouped according to place of primary articulation) are as follows:

	Labial		Dental		Palatal & Velar	
Voiced stop	'bâ	'crazy'	'dà	'to vilify'		
Plain stop	'pà	'forest'	'ta	'eye'	'ka	'teapot'
Asp. stop	'pha	'to conduct'	'tha	'to daub'	'khã	'leg'
Nasal	'ma	'to come'	'na	'field'	'ŋa	'tusk'
Spirant	'fá	'sky'	pha 'sã	'language'	'hâ	'five'
Sonant	'wa	'measure of length'	'la	'donkey'	'ja	'medicine'

Alveolar

jî 'rà 'fennel'

With no initial: 'â 'to open (the jaws)'.

There are in addition 13 initials of two segments each which occur in a fairly large number of syllables. Every such compound initial consists of a plain or aspirated stop plus a sonant. Each occurs (with random gaps) before all nuclei, with the exception of /kw/ and /khw/ which do not occur before back vowels (including /y/ and /ay/).

The two-segment initials are illustrated:

'pla	'fish'	'kwàt	'to sweep'
'pràp	'to subdue'	'kràp	'to prostrate oneself'
'phlât	'to slip'	'klâ	'bold'
'phrae	'silk cloth'	'khwǎ	'right (-hand)'
'tra	'stamp'	'khraw	'occasion'
'tjan	'plate'	'khláj	'resembling'
'thjá	'slow'		

There remain a number of other two-segment initials which occur in an extremely limited number of syllables; some speakers of the standard dialect do not use them at all. In this group, voiced stops and spirants occur as first segments. A partial list follows, with equivalents in the more conservative speech:

'brỹ	'extremely fast'	('prỹ)
'phja	(title)	(pha 'ja)
'fri	'without charge'	('fi)
dràok	'on the contrary'	(dàok, ràok)

1.3.2. The greatest number of contrasts among finals occurs in syllables with normal stress before pause. There are 8 contrasting finals of one segment each, excluding fortis glottal stop, which is determined by /./ (cf. 1.2.1.). Each final can be equated with a stop, nasal, or sonant which also occurs as a one-segment initial; in the case of the stops, /p, t, k/ are selected, on the basis of ease of phonemic definition, to represent the finals. The 8 finals are illustrated as follows:

<u>Labial</u>		<u>Dental</u>		<u>Palatal or Velar</u>	
'dàp	'to extinguish'	'dàt	'to straighten'	'dàk	'to net'
'dạm	'black'	'dạn	'to push'	'dạŋ	'loud'
'dạw	'to guess'			ạn 'dạj	'anything'

With no final: /dὺ/ 'savage', /'du/ 'to look'.

In addition, there are three finals of one segment each
which occur only when the initials which they most closely
resemble begin the following syllable. In all such cases
there is an alternate form with one of the 8 finals above:

/r/ in 'mąr ra 'jât   'manners'   ('mąn-)

/l/ in 'phǒl la 'máj   'fruit'   ('phǒn-)

/s/ in 'râs sa 'daon   'the public'   ('rât-)

There are no finals of more than one segment.

1.3.3. Definitions and descriptions of allophones of the
individual consonant phonemes follow. In general, final con-
sonants have longer allophones after weakly voiced nuclei than
after full-voiced ones: the final of /'mân/ 'certain' is longer
than that of /'mân/ 'curtain'. Other automatic variations in
the length of finals will be treated in connection with pro-
sodic phonemes (1.4.1.).

The plain stops, the nasals, and the spirants, /p, t, k,
m, n, ŋ, f, s, h/, are often strongly velarized before the
high vowels, /i, y, u/; the remaining consonants partly assim-
ilate to a following vowel.

/b/ Voiced[5] labial stop.

1. Lenis bilabial, explosive: /'bâ/ 'crazy'.

2. Occasional variant, in stressed syllables--fortis implosive.

/p/ Plain labial stop.

1. As initial--fortis bilabial voiceless, exploded without
aspiration: /'pà/ 'forest', /'pla/ 'fish'.

2. As initial, occasional variant--labiodental.

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[5]i.e. fully-voiced.

3. As final, lenis bilabial voiceless, unreleased: /'dȧp/ 'to extinguish'.

4. As final, occasional variant, especially before voiced initial in immediately following syllable--lightly voiced: /'ȧp 'nám/ 'to bathe'.

/ph/ Aspirated labial stop.

1. Lenis bilabial--exploded: /'pha/ 'to conduct', /'phrae/. 'silk cloth'.

/m/ Labial nasal.

1. As initial--fortis bilabial voiced, released: /'ma/ 'to come'.

2. As final, lenis, unreleased: /'dąm/ 'black'.

3. As final, in syllable with loud diminuendo stress (/!/)--voiceless: /âj !dąm/ (calling a dog named /'dąm/).

/f/ Labial spirant[6].

1. Fortis labiodental voiceless: /'fá/ 'sky'.

/w/ Labial sonant.

1. Voiced high back rounded semivowel: /'kwȧt/ 'to sweep', /'wa/ 'measure of length', /'dęw/ 'to guess'.

2. Occasional variant, initial only--lenis bilabial voiced low-friction spirant, with simultaneous high back tongue position.

3. As second segment of initial after /kh/, and as final in syllable with /!/--voiceless: /'khwȧ/ 'right (-hand)', /!ęw/ 'I'll take it!'.

/d/ Voiced dental stop.

1. Lenis post-dental, explosive: /'dȧ/ 'to vilify'.

2. Occasional variant--implosive.

[6]i.e. high-friction spirant.

/t/ Plain dental stop.

1. As initial--fortis post-dental voiceless, exploded without aspiration: /'ta/ 'eye'.

2. As first segment of initial, before /r/--alveolar: /'tra/ 'stamp'.

3. As first segment of initial, before /j/--with blade articulation at the alveolar ridge and high tongue position behind the blade: /'tjan/ 'plate'.

4. As final--lenis post-dental voiceless, unreleased: /'dǎt/ 'to straighten'.

5. As final, occasional variant--voiced: /'wǐt 'nám/ 'to dip out water'.

/th/ Aspirated dental stop.

1. Lenis post-dental, exploded: /'tha/ 'to daub'.

2. As first segment of initial, before /j/--alveolar, blade articulation, high tongue position: /'thjá/ 'slow'.

/n/ Dental nasal.

1. As initial--fortis post-dental voiced, released: /'na/ 'field'.

2. As final--lenis, unreleased: /'dạn/ 'to push'.

3. As final, in syllable with loud diminuendo stress--voiceless: /!dạn/ 'Push!'.

/s/ Dental spirant.

1. Fortis post-dental voiceless groove-type: /pha 'sǎ/ 'language', /'râs sa 'daon/ 'the public'.

2. Occasional variant, as initial in unstressed syllable if the preceding syllable ends in a voiced segment--voiced: /'mi sì/ 'Of course there are (some).'.

/l/ Post-dental sonant.

1. Voiced lateral: /'la/ 'donkey', /'pla/ 'fish'.

2. As second segment of initial, after aspirated stop—voiceless: /'phlât/ 'to slip'.

3. As final—voiced nasalized: /'phŏl la 'máj/ 'fruit'.

/r/ Alveolar sonant.

1. Voiced low-friction arch-type spirant: /jî 'rà/ 'fennel', /'tra/ 'stamp'.

2. Occasional variant, as initial—voiced lateral,

3. As second segment of initial, after aspirated stop—voiceless: /'phrae/ 'silk cloth'.

4. As final—voiced nasalized: /'mɐr ra 'jât/ 'manners'.

/k/ Plain dorsal stop.

1. As initial—fortis mid-velar voiceless, exploded without aspiration: /'ka/ 'teapot', /'klâ/ 'bold'.

2. As first segment of initial, before /w/—labialized: /'kwât/ 'to sweep'.

3. As final—lenis mid-velar voiceless, unreleased: /'dɐ̂k/ 'to net (as fish)'.

4. As final, occasional variant—voiced: /'tŏk 'nám/ 'to fall in the water'.

/kh/ Aspirated dorsal stop.

1. Lenis mid-velar, exploded: /'khǎ/ 'leg', /'khláj/ 'similar'.

2. Occasional variant—affricated.

3. As first segment of initial, before /w/—labialized: /'khwǎ/ 'right (-hand)'.

/ŋ/ Dorsal nasal.

1. As initial—fortis mid-velar voiced, released: /'ŋa/ 'tusk'.

2. As final—lenis, unreleased: /'dɐŋ/ 'loud'.

3. As final, in syllable with /!/--voiceless: /!lǫŋ/ 'Come down!'.

/h/ Dorsal spirant.

1. Voiceless mid central semivowel, with friction somewhere at the back of the oral cavity: /'hâ/ 'five'.

/j/ Dorsal sonant.

1. Voiced high front unrounded semivowel: /'ja/ 'medicine', /tjan/ 'plate', /ǝn 'ḍǝj/ 'anything'.

2. Occasional variant, initial only--lenis palatal voiced low-friction spirant, slit-type.

3. As second segment of initial after /th/, and as final in syllable with /!/--voiceless: /'thjá/ 'slow', /!pǝj/ 'Let's go!'.

1.4. Prosodic phonemes

1.4.1. There are six contrasting stress contours before pause. These pair off into two sets of three contours each: one set consists of **diminuendo** **stresses** (volume falling off gradually or sharply), the other of **sustained** **stresses** (volume approximately the same at the end of the span of voice within the syllable as at the beginning, with or without increase of volume in the middle). The diminuendo stresses are far more common than the sustained stresses. This situation is analyzed by positing a phoneme /:/ 'sustained stress' (written at the end of the syllable) and two phonemes defined in terms of loudness, /'/ and /!/ (written at the beginning of the syllable). Diminuendo stress and least loud stress are interpreted as the absence of stress phonemes[7].

[7]This is a makeshift solution. The whole problem of stress and syllable-length requires more thorough investigation than has been attempted here.

Allophones of stress phonemes involve differences in syllable-length as well. This in turn affects the length of nuclei and finals; it is to be assumed that such differences are proportionate, and that the allophones of the consonants and vowels affected are thus automatically determinable.

Definitions and descriptions of the individual stress phonemes follow. For convenience in describing allophones, a scale of relative syllable-lengths is used--1 to 5, in increasing order.

/'/ Normal stress (medium volume at beginning of syllable).
1. Comparatively slight diminuendo, with length 2: /ˈpəj/ in /'pəj myaŋ 'nâok/ '(He) went abroad.' ⎯
2. In syllable before pause--greater diminuendo, gradual, with length 4: /'pəj/ '(Yes, he) went', /'nâok/ in /'pəj myaŋ 'nâok/.
3. With /:/, not before pause--even volume throughout, with length 3: /'pəj: kâo 'dâj/ '(You) can go (if you want)'.
4. With /:/, before pause--slight increase in volume toward middle followed by decrease, with length 4: /'pəj:/ '(Yes, he) did go' (slightly contradictory, but not emotional).

/!/ Loud stress (high volume at beginning of syllable).
1. Without /:/--sharp diminuendo, with length 3: /!pəj/ 'Let's go!'
2. With /:/--considerable increase in volume toward middle of syllable, followed by gradual decrease, with length 5: /!pəj:/ '(I) did so go!' (contradictory and emotional).

In unstressed syllables there are also determined differences in length:
1. Not before pause--length 1: /myaŋ/ in /'pəj myaŋ 'nâok/, /ka/ in /'la ka 'mî/ 'The donkey and the bear.'

2. Before pause--length 2 to 3: /pəj/ in /'hǎj pəj/ '(It) has disappeared.'.

3. With /./ and no final, before pause--length 1: /lǎ/ in /mə̂j 'pəj: lǎ/ '(I guess I) won't go.'.

4. With /:/, before pause--length 3 to 4: /sɪ̆/ in /'pəj sɪ̆:/ 'Get going!'.

/:/ Sustained stress.
Undecreased volume at end of voiced span of syllable. Examples as above.

1.4.2. The situation with regard to contrasts among tones is complex (cf. 1.1.2.). If X is the totality of segmental phonemes of any syllable, there are six contrasting tones in the environment !X: (among others):

!pə̄j:	'I did, so, go!'[8]
!jà:	'Better not!'
!ráon:	'It is, so, hot!'
!tǎj:	(exclamation)
!nâ:	'It's the <u>front</u>, I tell you!'
!nǎ:	'It is, so, thick!'

In the environment ⧾'X⧣ only four tones occur, /ˋ/ and /˜/ being missing. In most other environments, there are five tones, either /ˊ/ or /˜/ being missing. Hence no tone is determined.

Definitions and descriptions of the six tone phonemes follow.

/-/ Mid tone.
1. Pitch starting at a relatively central point in the

_____

[8]/-/ is mid tone, heretofore unmarked.

pitch-range of the utterance and continuing level to end of voiced part of syllable: /'pə̄j mȳaŋ 'nâok/ (first two syllables), /'nā:/ '(Yes, it's) a field,'

2. X#--dropping slightly toward the end: /'hǎj pə̄j/ '(It) has disappeared.', /mə̂j 'pǝ̄j/ '(I) didn't go,'.

3. 'X#--starting at a point in the pitch-range which cannot be placed (for lack of context) and dropping slightly toward the end: /'pə̄j/ '(I) went', /'lǫm/ '(It's) wind' or '(It's) a mudhole' (cf. /pǝn 'lǫm/ 'to faint' and /pǝn 'lǫ̂m/ 'to be full of mudholes).

4. !X:--rising sharply and then falling off gradually: /!pǝ̄j:/ 'I did so go!'.

　　/ˇ/ Low tone.

1. Pitch starting on a relatively low point, continuing level to end: /'jǎ 'pǝ̄j/ 'Don't go,'.

2. X#--dropping slightly toward end: /'náoj 'nǎ/ '(It's) a custard-apple.'

3. !X:--rising slightly toward end: /!jǎ:/ 'Better not!'

　　/´/ Constricted high tone.

1. Pitch starting at a relatively high point and rising slightly, with constriction of the vocal chords gradually increasing in intensity (producing a 'creaky' voice quality): /'ráon pǝ̄j/ '(It's) too hot', /'ná:/ '(My) aunt'.

2. 'X#--dropping slightly at end, with a (determined) lenis glottal stop as final if no other stop final is present: /'ráon/ 'It's hot', /'lǫ́m/ '(It) toppled over'.

3. !X:--rising sharply and then falling off gradually: /!ráon:/ 'It is, so, hot!'

/˜/ Plain high tone.

1. Pitch starting at a very high point, rising still higher, with no constriction: /'dɪ: 'di/ '(It's) extremely good', /!tãj:/ (exclamation).

2. X:≠ (except !X:)--starting at a lower point (still relatively high), rising slightly, then falling off gradually: /'pə̄j nã:/ 'Come on and go!', /'fɔ̃n 'tɔ̀k 'sũ:/ '(It was) raining cats and dogs'.

/ˆ/ Falling tone.

1. Pitch starting at a relatively highpoint, rising slightly, then falling rather sharply to about mid point, with slight constriction throughout: /'hâj pə̄j/ '(I) gave it (to him)', /'nâ:/ '(It's) the front'.

2. 'X≠--falling less sharply to low point: /'pə̀j 'dâj/ '(You) can go'.

3. ᴼX--falling not quite to mid point, and without the rise at the beginning: /mâj 'pə̄j/ '(I) didn't go'.

4. !X:--starting somewhat higher than the general allophone and falling more sharply to low point: /!dâj:/ 'Of course it's possible!'

/ˇ/ Rising tone.

1. Pitch starting at a relatively low point, dropping slightly, then rising sharply to high point: /'hǎj pə̄j/ '(It) has disappeared', /'nǎ:/ '(It's) thick'.

2. X≠--rising less sharply to just above mid point: /'nǎ/ '(It's) thick'.

3. ᴼX--starting from near mid point, and without the drop at the beginning: /nǎ 'nǎ/ '(It's) rather thick'.

4. !X:--starting somewhat lower than the general allophone and rising more sharply to high point: /!nǎ:/ 'It is, so, thick!'.

1.5. Distribution

1.5.1. The maximum structure of the Siamese syllable is symbolized in the following formula, which also summarizes the positions in which phonemic symbols are written:

$$S_1C_1C_2V_1\overset{T}{\underset{V_3}{V_2}}C_3S_2$$

For example, the second syllable of the utterance /'khǎw ꜙtjɥak:/ '(I tell you) it's pure white!' contains one phoneme from each of these categories.

The minimum syllable is symbolized as V_1; e.g. the second syllable in /'tham a 'raj/ 'What are you doing!'

The meanings of the symbols are as follows:

T -- any tone phoneme.

S_1 -- the stress phoneme /'/ or /ꜙ/.

S_2 -- the stress phoneme /:/.

C_1 -- any consonant phoneme.

C_2 -- one of the consonant phonemes /j, r, l, w/.

C_3 -- one of the consonant phonemes /p, m, w, t, n, k, ŋ, j (r, l, s)/.

V_1 -- any vowel phoneme but /./.

V_2 -- the vowel phoneme /a/.

V_3 -- the vowel phoneme /./.

Within this general distributional scheme there are the following limitations:

If C_2 is /j/, C_1 is one of this set: /t, th, (ph)/.

If C_2 is /r/, C_1 is /p, ph, t, k, kh, (b, f, d)/.

If C_2 is /l/, C_1 is /p, ph, k, kh/.

If C_2 is /w/, C_1 is /k, kh/ and V_1 is /i, e, ae, a/.

If V_1 is /i, e, ae/, C_3 is not /j/.

If V_1 is /y, ay, u, o, ao/, C_3 is not /w/.

   (Thus /j/ and /w/ in final position contrast only after /a/.)

If V_1 is /i, u/ and C_3 is /w, j/, V_3 is not present.

If V_1 is /y/ and C_3 is /j/, V_2 is present.

If V_1 is /i/ and C_3 is /ŋ/, either V_2 or V_3 must occur.

If V_1V_2 is /ya/, V_3 is not present.

If $V_1V_2V_3$ is /i, ay, ya/, C_3 is /p, t, k/ or not present.

If C_3 is /p, t, k/, or

If C_3 is not present and V_3 is, T is not /ˇ/ or /⁻/.

   1.5.2. The minimum structure of the pause-group is a single stressed syllable: /'ma/ '(Yes, he) came'. The maximum structure, or even a formula which would cover it, is not yet determinable. The desired unit, which would be larger than the syllable and smaller than the pause-group, has not been found below the morphophonemic level.

   It seems probable, however, that the immediate constituent analysis of any utterance could be accurately predicted from the occurrence of /'/ and /:/ in some such context as the phonemic phrase.

2. Morphophonemics

2.1. Systematic resemblances of morphemes

2.1.1. Certain acoustical phenomena not dealt with in the previous chapter are to be introduced at this stage: rate of utterance, pitch register, and syncopation.

Variations in the speed of utterance are on at least three separate levels: idiolectal, stylistic, and grammatical.[1] The phonemic analysis which has been presented is based on utterances at speeds somewhat below the average. The morphophonemic statements which follow are based on comparisons with more rapid utterances of all three categories.

Pitch register is the degree of deviation from the expected norms of a given speaker's tones. The term is used to apply to both a single syllable and to relations among a sequence of syllables. In general, the more rapid the utterance, the less subjective observations about pitch register become.

Syncopation is a self-explanatory term. In a sequence of syllables 'AB, if syllable 'A has more than its usual length, and syllable B is shorter than usual, the latter is said to be syncopated. This phenomenon is very common in rapid speech.

2.1.2. In rapid speech the following tone replacements occur in syncopated syllables: rising, falling, and constricted high tones become plain high; low and mid tones fall together as low tone after a falling or low tone, as mid tone elsewhere; syllables with original plain high tone are not syncopated.

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[1]Cf. 2.2.3. Some attempt has been made to differentiate the first two types also.

Normal		Rapid
'dū nǎŋ 'sỹ	'to look at books'	'dū nǎŋ 'sỹ
'pāj mǎỹ 'dâj	'You can't go.'	'pāj mǎj 'dâj
'hǎj ném 'phỹŋ	'honey-jar'	'hǎj nǎm 'phỹŋ
'thî rōŋ 'rian	'at the school'	'thî rǒŋ 'rian
'nǎw kwà 'nén	'colder than that'	'nǎw kwā 'nén

In syncopated syllables without final, or with /j/ or /w/ as final, only six vowels appear. The distinction between full and weak voice disappears (the result being written without /./). The vowels /o/ and /ao/, /e/ and /ae/, /a/ and /ay/, fall together (written /o/, /e/, /a/). The clusters /ia/, /ya/, and /ua/ lose their first vowel. The vowels /i/, /y/, and /u/ alone are unaffected.

Examples are given where a change is made in the transcription:

Normal		Rapid
kǎo	'then'[2]	kǒ
lǎe	'and'	lǎ
thǎy	'shall we?'	thǎ, thā
sîa	'by contrast'	sǎ
lỹa 'kāyn	'excessively'	lǎ 'kāyn
dûaj	'with'	dǎj

On the basis of these facts, transcriptions of syncopated syllables are changed as follows from this point on. The mark /˘/ represents the falling together of low and mid tones: /thǎ 'hǎn/ 'soldier'. Since syncopated syllables are written only with /˘/ or /˜/, the presence of any other tone mark will

[2]Many of these are particles, and the glosses are very inexact.

suffice to show that an unstressed syllable is not syncopated.

In addition, mid tone will no longer be written: /'mā/ becomes /'ma/.

The following syllables illustrate the loss of voice distinction (there are no contrasts for /e/ and /o/):

Slow[3]		Rapid
thǐ 'nǐ	'here'	thǐ 'nǐ
kị 'la	'sports'	kǐ 'la
we 'la	'time'	wĕ 'la
ry 'sǐ	'holy man'	rў 'sǐ
rý 'du	'season'	rў 'du
pha 'sǎ	'language'	phǎ 'sǎ
phạ 'nạn	'wager'	phǎ 'nan
phâ 'jǐŋ	'woman'	phǚ 'jǐŋ
thý 'lạw	'to improve'	thǚ 'lạw
bo 'ran	'ancient'	bŏ 'ran

In syncopated syllables which follow syllables ending in a voiced sound, the voiceless stops all have some voicing; in the extreme case /p/ and /ph/ are thus replaced by /b/, /t/ and /th/ by /d/; /k/ and /kh/ are phonemically unaffected:

Normal		Rapid
wị 'thja thạ 'hǎn	'military science'	=dǎ 'hǎn
'ti tạ 'pu	'hammer a nail'	-dǎ 'pu
'fǎ phạ 'nǎŋ	'wall'	-bǎ 'nǎŋ
'thạm pạn 'ru	'perforate'	-bĕn 'ru

In all types of unstressed syllables, initial clusters with /r/ and /l/ usually lose their sonant; this never happens,

[3]With some speakers, these vowels fall together even at the normal rate of utterance.

however, with /j/ and /w/ clusters:

Normal			Rapid
'ŋan khrɤ́ŋ 'ní	'this fair'		-khɛ̆ŋ 'ní
'wɯ́ŋ klɤ̆p 'bân	'run back home'		-kɐ̆p 'bân
'khɤ̌w tjɐ̀ 'pɛj	'he'll go'		-tjɐ̆ 'pɛj

2.1.3. Certain other resemblances among syllables in rapid speech involve morphological criteria. For example, the morpheme /kàon/ 'before, first, in anticipation, temporarily' appears in four different shapes--with fully vôiced and weakly-voiced vowel, stressed and unstressed:

. 1. /'ma 'kàon/ '(Yes, he) came in first (in the race).'

2. /'ma kàon/ 'Come here a moment.'

3. /'kàon 'nɤ́n: ìk/ 'Even before that.'

4. /khɤ̌w 'rḭan 'tjɤ̀p kàon 'náoŋ/ 'He finished his studies
   ahead of his younger brother.'

These putative allomorphs are not conditioned by stress; e.g. allomorph 3 also occurs before an unstressed syllable: /'kàon tjɐ̆ 'lɤ̀n ǎ 'raj/ 'Before you play anything...'. They are conditioned, however, in terms of a circularly defined clause. Allomorph 1 occurs only as the last stressed syllable of a clause (unless a succeeding syllable has special stress, /!/ or /:/). Allomorph 2 occurs only after an allomorph of type 1 in the same clause. Allomorph 3 occurs only before type 1. Allomorph 4 occurs anywhere after type 3 and before type 1.

A _clause_ is the maximum fraction of an utterance for which such statements hold true. Clauses are usually marked otherwise, by a gradual slowing down of the speed of utterance, and they are sometimes separated by pause. Examples (with

allomorph-types indicated below):

/'tŝoŋ sụat 'mọn kȧon ≠ 'thỹŋ tjă 'khŝw nạon 'dâj/ 'You

   3ʲ   4   1   2   3·ʲ 4   3   4   1

have to say your prayers first, before you can go to bed.'
(Two clauses.)

/'tŝoŋ sụat 'mọn 'kȧon 'thî tjă 'khŝw nạon 'dâj/ 'You

   3ʲ   4   3   3   3   4   3   4   1

have to say your prayers before you can go to bed.' (One clause).

The <u>node</u> of a clause is the morpheme which has allomorph 1,
or the stressed syllable of that morpheme if it is polysyllabic.
In the above example /'dâj/ is the node. In the clause /'du
nȧŋ 'sỹ/ 'Look at the book', the node is /'sỹ/, which is not
a morpheme.

2.1.4. Most morphemes which have a fully-voiced vowel in
allomorph 1, like /'kȧon/, have a similar patterning of the
other allomorphs: 1. /'mâk/ 'much, many'; 2. /mâk/; 3. /'mŝk/;
4. /mŝk/. A few which have constricted high tone are irregular,
in that the vowel is weakly voiced even in allomorph 2: /'wáj/
'for future reference'.

1. /'ạw 'wáj/ 'Keep it.'

2. /'ŋạyn thî khẉw 'dâj wẹj/ 'The money he had gotten.'
Morphemes without final have full voicing in allomorph 3 if
the following syllable is syncopated: /'du/ in /'du nȧŋ 'sỹ/ above.

Morphemes which have a weakly-voiced vowel in allomorph 1
receive varying treatment. Most, like /'mọn/ 'prayers, chants',
have only three forms: 1. and 3. are alike, 2. is the same
unstressed, and 4. is syncopated (2.1.2.). Morphemes ending
in /j/ or /w/ belong to this class for some speakers, but for
others belong to the full-voice class, especially if the tone
is /'/ or /^/. Some speakers make no distinction between

/'dȩ̂j/ 'It's possible' and /'dâj/ 'it's thread'; between /'khȩ̂w/ '(It will) go in' and /'khâw/ 'It's rice'.

Free morphemes are cited in their allomorph 1 form: /'kâon/, /'mǫn/. In texts, sufficient distinction is made among clause-positional allomorphs by indicating the stress. Where there are differences among individual speakers (/'dâj/) or deviations from pattern (/wȩ́j/), forms are quoted as heard.

2.2. Intonation and Juncture

2.2.1. Clauses final in an utterance have two types of intonation: diminishing pitch register and sustained pitch register. The significant part of the pitch register begins at the node (2.1.3. end) and extends to the end of the clause. In the diminishing type the tones are cast progressively lower; if the node is the last syllable, it does not have sustained stress (/:/). In the sustained type, the register remains level, or may rise considerably; if the node is the last syllable, it has sustained stress. (Since /:/ always falls on the node, and is to this extent predictable, it will not be written in such cases from here on.) Diminishing register is written with a period, /./, sustained register with a raised dot, /˙/. Examples:

/'pȩj 'dâj mȃj˙/	'Can you go?'
/'pȩj 'dâj sĭ./	'Sure, I can go.'
/'pȩj 'dâj sĭ˙/	'Sure, I can go!'
/'pȩj 'dâj./	'Yes, I can!'

Clauses whose nodes have loud stress, /!/, are written analogously: if the stress is sustained, with /˙/; if not, with /./.

Phonemic			Conventional
/!pəj:/	'I did, so, go!'	/!pəj˙/
/!pəj/	'Let's go!'	/!pəj./

2.2.2. Clauses non-final in an utterance have junctures with succeeding clauses. Such junctures are of three types: open, close, and parallel.

<u>Open clause juncture</u> is characterized by a higher pitch register at the beginning of the second clause, and is written with /./ if the first clause has diminishing pitch register, and with /˙/ if it has sustained pitch register. There is nearly always a pause. The meaning of open clause juncture is 'no immediate connection between clauses.'[4]

<u>Close clause juncture</u> is characterized by a lower pitch register at the beginning of the second clause, and is written with /;/ if the first clause has diminishing register, and with /:/ if it has sustained register. The meaning of close clause juncture is 'some connection between the clauses exists.' In general, /A;B/ means 'B explains A,' and there is usually a pause. /A:B/ means 'A determines B,' and there is usually no pause.

It is possible to find direct contrasts (in these examples without pause):

/'mậj jăŋ 'nə́n; 'dɪ̆aw 'lɪ̆t./

'Don't do it that way—it'll come loose.'

/'mậj jăŋ 'nə́n: 'dɪ̆aw 'lɪ̆t./

'Unless you do it that way, it'll come loose.'

[4]Examples involve too large a context to be quoted conveniently; one short one is saved for contrast later.

(The literal translation of both examples is 'not like that, soon loose'.)

It is also possible to find partial contrasts between clauses joined by /./ and /;/ (in these examples with pause):

/'phǒm mǎj 'pɑj. lɤ̌w 'khụn lǎ hǎ./

'I'm not going. How about you?'

/'phǒm mǎj 'pɑj; 'tɕ̂oŋ 'thɑm 'ŋan./

'I'm not going, I have to work.'

Parallel clause juncture is characterized by total pitch registers which are approximately the same for both clauses; it is always written with /,/. That is, /A,B./ means that both clauses have diminishing pitch registers starting at about the same point, and /A,B°/ means that both have similar sustained pitch registers. The meaning of parallel clause juncture is 'The order of clauses is not significant.' The two clauses usually have syllables in common, and there is almost always a pause between them:

/'sǎm wǎn 'di, 'sì wǎn 'khɑ̂j./

'(His) health is in and out.' (lit. 'three days good, four days feverish').

/'maoŋ 'hě̌n mǎj, 'du 'hě̌n mǎj°/

'Can you see it? Do you see it?'

There are direct contrasts between type /A,B./ and /A,B°/:

/'pɑj kɤ̌ 'dâj, 'jù kɤ̌ 'dâj./

'You can go or stay (it doesn't matter much).'

/'pɑj kɤ̌ 'dâj, 'jù kɤ̌ 'dâj°/

'You can either go or stay (what are you arguing about?).' (Lit, 'go then can, stay then can.')

2.2.3. Parenthetical clauses are inserted in the middle

or at the end of other clauses, and are heard as distinct from them through a change in the rate of utterance. The inserted clause is spoken very fast, and the normal speed is resumed if the original clause continues. Parenthetical clauses have their own intonations, and are set off by parentheses in the transcription:

/'khǎo 'sÿ ('dâj mǎj') 'nǔ tǔɐ 'ní./
'I'd like to buy--can I?--this mouse.'

/khǎw 'phût ('khɟ́w bǒk 'wâ,) ǎj 'tjɟ̂w 'la.../
'He said to him, he said, "Hey, you donkey..."'

2.2.4. A <u>phrase</u> is any clause for which the transition to or from an adjacent clause is not one of the above clause junctures; i.e. where there is a single register contour for both clauses. Phrases are separated by the mark /⧸/.

Phrases are more common in normal and slow speech than in rapid speech. The single clause quoted in 2.1.3. meaning 'You have to say your prayers before you can go to bed' was uttered at a slower rate of speed by the same speaker in three phrases:
/'tɟ̂oŋ 'sǔat 'mon ⧸ 'kǎon 'thî tjǎ 'khɟ̂w naon ⧸ 'dâj./

A <u>complex</u> <u>clause</u> is any such sequence of phrases, or a clause containing a parenthetical clause (2.2.3.).

What is a complex clause in normal speech sometimes corresponds to two clauses with close juncture in slow speech. The node of the first clause usually has sustained stress:

Normal	Slow
/'bao rǐ 'sǎt ⧸ ja 'sùp/	/'bao rǐ 'sǎt; 'ja sùp/

'tobacco company'

Other examples (given only in slow style):
/'khɟ̂w 'paj 'dûaj kɐn; 'sǎoŋ 'khon./
'The two of them went together.' (Lit, 'they go together,

two people'.)

/'àok kăm 'lɛŋ 'kaj; 'taon 'thjáw:/

'(In) the morning exercise period,,,' (Lit. 'put out body energy, morning period,...'.)

Complex clauses of two and three phrases occur frequently; clauses of more than three phrases are progressively less frequent. Examples:

2 phrases: /'năm ≠ 'thâ tjă 'mɔ̀t./ 'The water (1) seems to be all gone (2).'

3 phrases: /'phî ≠ 'khɛ́w mă 'thjuan ≠ hăj 'paj 'thîaw;/ 'My brother (1) invited me (2) to go on a trip (3).'

4 phrases: /'thaŋ rŏŋ 'rian năj 'ráoj ≠ 'thỹ 'wâ pŏn 'sìŋ săm 'khạn ≠ săm 'rập 'nɛ́k rian 'naj thă 'hăn.≠ 'mâk:/ 'The Military Academy officials (1) consider it [sports] an important thing (2) for the cadets (3) very much (i.e. very important) (4),...'

2.2.5. A sentence is any complete utterance, or any fraction of such an utterance, which is bounded wholly by long pauses or open clause junctures. Thus, in the foregoing section, all the examples ending in /./ or /'/ consist of a single sentence, except the one illustrating open clause juncture, which consists of two sentences (p. 28, top).

3. Tactics

3.1. Survey of tactics

3.1.1. The morphemes of Siamese are of three broad types:
free, semi-bound, and bound.

A __free__ __morpheme__ is any morpheme which occurs as the only
constituent of a sentence: /'paj./ '(He) went.'[1]

A __semi-bound__ __morpheme__ is any non-free morpheme which
occurs as the only constituent of a clause or phrase, pro-
vided it also occurs both as clause initial and clause final:
/'baj/ 'classifier for dishes, etc,' in /'tjan 'tàek paj /
'baj/ 'One dish got broken.', /'baj 'ní:/ 'This one (dish)',
/'sǎoŋ 'baj./ 'Two of them (dishes)'.

A __bound__ __morpheme__ is any other morpheme: /kǎ/ 'with, and'
in /'la kǎ 'mǐ/ 'The donkey and the bear.'.

Most morphemes of Siamese correspond to phonemic units of
one syllable: /'dayn/ 'to walk', /'di/ 'good', /'nâ/ 'face,
front'. Polysyllabic free morphemes are quite common, however:
/krǎ 'sǐp/ 'to whisper', /sǎ 'dùak/ 'convenient', /prǎ 'tu/
'door'. There are morphemes of as many as four syllables:
/'na 'mǎt sǎ 'kan/ 'to pay homage'. Combinations of more than
four syllables are analyzable into two or more morphemes:
/mǎ 'hǎ 'wǐt jǎ 'laj/ 'university' contains the bound morpheme
/mǎ 'hǎ/ 'big', which occurs also in /mǎ 'hǎ sǎ 'mǔt/ 'ocean'.

There are a few bound morphemes which correspond to phone-
mic units of less than a syllable: the /p/ in /'pràp/ 'to sub-
due' has a causative meaning; the /k/ in /'kràp/ 'to prostrate

[1]The intonation /./ is not regarded as a morpheme; the
stress /'/ is part of the allomorph here selected.

oneself' has a reflexive meaning: cf. /'râp/ 'flat, level'.
(Consequently some monosyllabic free morphemes have allomorphs
which are less than a syllable: /'râp/ and /-ràp/.) Other
subsyllabic morphemes enter freely into new combinations. Poly-
syllabic bound morphemes are rare: /kăm 'lɛ̩ŋ/ (predicate attri-
bute with progressive meaning), and /thjă 'phɛ́o/ 'especially for'.

3.1.2. Morphemes combine in four types of order: consecu-
tive, simultaneous, discontinuous, and repetitive. /'dayn/
'to walk' occurs in all of these orders:

1. With /'dâj/ 'possible' in consecutive order: /'dayn
'dâj./ '(He) can walk.'

2. With /!/ 'contradictory proposition' in simultaneous
order: /!dayn'/ 'Certainly he walks (there)!'

3. With /ǎmn/ 'formalization' in discontinuous order:
/dăm 'nayn/ 'to proceed'.

4. With itself in repetitive order: /'khɛ́w 'dayn, 'dayn;/
'He walked and walked...'.

Combinations of these orders are possible: /'fɛj 'fayj/
'the electrical system' contains two morphemes, /'fɛj/ 'fire,
electricity' and /-ay-/ 'that sort of thing' (an infix);
/'fɛj/ is in repetitive order with its allomorph /'f-j/, which
in turn is in discontinuous order with /-ay-/.

3.1.3. A **lexeme** is any morpheme of at least one syllable,
or any combination of morphemes of which the result is an
integral number of syllables, which is a minimum immediate
constituent of any construction in which it occurs.[2]

Free morphemes are not always lexemes: /'dayn/ in /'dayn
'dâj./ '(He) can walk' is a lexeme, but it is only part of a

[2]I.e. which is cut last, if cut at all.

lexeme in /'dayn 'thǎew/ 'to march' (cf. /'thǎew/ 'row, sector').
Some bound morphemes are lexemes: /kǎ/ 'with, and'; some are not:
/-ǎmn-/ in /dǎm 'nayn/ 'to proceed'.

From this point on, continuous polysyllabic lexemes are
joined together by hyphens between the syllables, whether or
not this reflects the correct analysis: /dǎm-'nayn/.

3.1.4. <u>Morphology</u> is here defined as the system of interval
construction of analyzable lexemes. A survey of the principal
morphological types follows.

A <u>derivative</u> is a lexeme composed of an allomorph of a
free morpheme or lexeme in construction with a bound morpheme:
/'faj-ʔfayj/ and /'prǎp/.

A <u>compound</u> is a lexeme whose constituent morphemes them-
selves occur as lexemes: /'dayn-'thǎew/, 'to march'; /'hǎn-'tjaj/
'to sympathize', from /'hǎn/ 'to see' and /'tjaj/ 'heart';
/'roŋ-'rian/ 'school', from /'roŋ/ 'building' and /'rian/ 'to
study'. Modifications of compounds are always made on the
second member: /'hǎn-'tjaj, 'hǎn-'tjayj ǎ raj°/ 'Sympathize!
What do you mean, sympathize?'; /'thî roŋ-ʔrian°/ 'At the
<u>school</u>, I tell you!'

A <u>reduplication</u> is a lexeme whose constituents occur in
discontinuous order: /'wǎt-'wa/ 'temples'; /'paj 'wǎt, 'paj
'wa./[3] 'They go around to the various temples.' (cf. /'paj 'wǎt/
'to go to a temple'). Most reduplications have some phonemic
resemblance between their constituents, ranging from near
identity in /'tjiŋ-'tjeŋ/ 'sincere' to a shared /a/ in
/'thjûaj-'lʲa/ 'to help' or a shared tone in /'bân-'thjâoŋ/
'houses'.

[3]/'paj/ here is in discontinuous and repetitive order with
itself.

3.1.5. <u>Syntax</u> is here defined as the system of combinations of lexemes with each other.

The broad classification of morphemes (3.1.1.) applies analagously to lexemes; i.e. lexemes are free, semi-bound and bound. Most analyzable lexemes are free, but a few are semi-bound: /'thjâa-'moŋ/ 'hour (duration)' (cf. /'moŋ/ 'o'clock').

Two empirical types of syntactic construction are defined as a step in establishing form-classes: predications and numerations.

A <u>predication</u> is a sentence consisting entirely of free lexemes: /'paj 'dâj./ '(You) can go.'

A <u>numeration</u> is a sentence containing a semi-bound lexeme as one of its immediate constituents: /'sǎoŋ 'moŋ./ 'It's two o'clock.' (Both lexemes are semi-bound.)

3.2. Major form-classes

3.2.1. A <u>substantive</u> is a free lexeme which occurs in predications consisting of two free lexemes only (hereafter called two-part predications) such that one of the lexemes can substitute for the whole.

Such a predication is <u>subjective</u> if the first lexeme can be substituted; it is <u>objective</u> if the second can be substituted. The test of substitution is made in a question-and-answer context, the question consisting of a predication plus the interrogative particle /mǎj/.[4]

[4] In many of the examples quoted below, a more usual answer is the repetition of both lexemes of the predication. The citing of a single lexeme as an answer means merely that such a thing occurs; it does not necessarily represent a prevailing pattern.

Subjective: Q. /'mi 'khâw mâj'/ 'Have you any rice?'

A. /'mi./ 'Yes; we have.'

Objective: Q. /'khâw 'mi mâj'/ 'Is there any rice?'

A. /'mi./ 'Yes, there is.'

All of the above stressed syllables are substantives.

A <u>subjective</u> is a substantive which can replace a subjective two-part predication.

Q. /'khayj 'hĕn mâj'/ 'Have you ever seen it?'

A. /'khayj./ 'Yes, I have.'

/'khayj/ 'to experience', and /'mi/ 'to have' in the previous examples, are subjectives.

An <u>objective</u> is a substantive which can replace an objective two-part predication.

Q. /'khâw 'di mâj'/ 'Is the rice good?'

A. /'di./ 'Yes, it is.'

/'di/ 'good' and /'mi/ are objectives.

A <u>modal</u> is a substantive which is only a subjective. The class meaning of modals is something like 'historical or mental factors involved.' The class of modals is not large; the important members are listed here:

/'khayj/ 'to experience, to have ever _____, to have been accustomed to.'

/'tâoŋ/ 'to be obligated to, to _____ invariably.'

/'àt/ and /'sǎ 'mât/ 'to be capable of.'

/'jaom/ 'to permit oneself to.'

/'jàk/ 'to want to.'

/'khuan/ 'ought to, to be obligated to.'

An <u>adjective</u> is a substantive which is only an objective: /'di/ 'good'. The class meaning of adjectives is something like 'descriptive abstraction.'

A <u>verb</u> is a substantive which is both a subjective and an objective: /'mi/ 'to have'.

A <u>noun</u> is any other substantive: /'khâw/ 'rice'.

The classes of nouns, verbs, and adjectives are all large. Together with modals, they exhaust the class of substantives ('a subjective' and 'an objective' were nonce terms).

Given the form-class of constituent substantives, it is nearly always possible to predict whether a two-part predication is objective or subjective, provided any substitution can be made.

A two-part predication with a modal as first constituent is always subjective. A verb or adjective fills the second position.

MV:	Q. /'khayj 'pɛj mãj'/	'Ever been there?'
	A. /'khayj./	'Yes, I have.'
MA:	Q. /'tŝoŋ 'di mãj'/	'Must it be a good one?'
	A. /'tŝoŋ./	'Yes, it must.'

A two-part predication with an adjective as second constituent is objective if the first constituent is anything but a modal. An adjective, verb or noun fills the first position.

AA:	Q. /'di 'mâk mãj'/	'Just how good is it?'
	A. /'mâk./	'Very good.'
VA:	Q. /'mi 'mâk mãj'/	'Are there a lot of them?'
	A. /'mâk./	'Yes, a lot.'
NA:	Q. /'bân 'jɛj mãj'/	'Is it a big house?'
	A. /'jɛj./	'Yes, it is.'

A few such predications are ambiguous, however, and have homonymous exocentric counterparts:

Q. /'thᶏm 'di mᾶj·/   'Does he make good ones?'

                  or   'Is he doing any good?'

A. /'di./   'Yes, he does.'

A. /'thᶏm 'di./   'Yes, he is.'

(/'thᶏm/ is a verb.)

Two-part predications consisting entirely of nouns and verbs are subjective if a verb occurs in the first position, otherwise objective (with one exception; see below).

VN: Q. /'hᶌn 'phᶀan mᾶj·/ 'Do you see your friend?'

      A. /'hᶌn./   'Yes, I do.'

NV: Q. /'phî 'hᶌn mᾶj·/   'Do you (husband) see it?'

      A. /'hᶌn./   'Yes, I do.'

VV: Q. /'mi 'khᾶj mᾶj·/   'Are there any for sale?'

      A. /'mi./   'Yes, there are.'

Cases of two verbs forming an objective predication involve a covert lexical relationship:

Q. /'maoŋ 'hᶌn mᾶj·/   'Can you see it?'

A. /'hᶌn./   'Yes, I can.'

/'maoŋ/ 'to look' has as its completive verb /'hᶌn/ 'to see'.

The following types of predication appear to be entirely exocentric (X is any kind of substantive): XM, AN, AV, NN. For example, /'tam 'khayj./ 'As usual.' (VM); /'thjᶀ 'woŋ./ 'His name is Wong.' (NN). Two-part predications of the type MN are not known to occur at all.

3.2.2. A numerative is any lexeme which occurs in numerations consisting of two lexemes only (hereafter called two-part numerations) such that one of the lexemes can be substituted for.

Such a numeration is cardinal if the first lexeme can be substituted for; it is ordinal if the second can be substituted for. The test of substitution is again made in a question-and-

answer context; here no interrogative particle is necessary and the test applies to both question and answer.

Cardinal: Q. /'kî 'thjɛ́n./   'How many classes?'

A. /'sǎoŋ 'thjɛ́n./   'Two classes.'

Ordinal: Q. /'thjɛ́n 'nɛ̌j./   'Which class?'

A. /'thjɛ́n 'sǎoŋ./[5]   'Second class.'

All of the above lexemes are numeratives. Most numeratives are semi-bound lexemes.

A <u>cardinal</u> is a numerative which can be substituted for in a cardinal numeration:

Q. /'kî 'thjɛ́n./   'How many classes?'

A. /'lǎj 'thjɛ́n./   'Quite a few.'

/'kî/ and /'lǎj/ 'several' here, and /'sǎoŋ/ in the previous example, are cardinals. The class meaning of cardinals is 'plurality.'

An <u>ordinal</u> is a numerative which can be substituted for in an ordinal numeration:

Q. /'thjɛ́n 'nɛ̌j./   'Which class?'

A. /'thjɛ́n 'ní./   'This class.'

/'nɛ̌j/ and /'ní/ here, and /'sǎoŋ/ above, are ordinals. The class meaning of ordinals is 'singled-out member or sub-category of a class.'

A <u>partitive</u> is a numerative which is only a cardinal: /'kî/ 'how many', /'lǎj/ 'several'. There are only three other common partitives: /'baŋ/ 'some', /'thɯ̂k/ 'all, every', and /'mɛ̂j-'kî/ 'a few'. All partitives are semi-bound lexemes;

[5]These are not compounds; cf. /'sìp kwǎ 'thjɛ́n/ 'More than ten classes' and /'thjɛ́n thî 'sǎoŋ/ 'The second class'.

they have suppletive phrase-final forms: /'bâŋ/ 'some',
/'kɪ̀-mǎ-'náoj/ 'how many', /'théŋ-'mɔ̀t/ 'all'.

A __demonstrative__ is a numerative which is only an ordinal:
/'nɪ́/ 'this'. The class of demonstratives is not large, if
lexemes which also serve as substantives are excluded. The
following is probably a complete list:

'nɪ́	'this (these), closer to me'
'nɛ́n	'that (those), closer to you'
'nón	'yon, distant from us'
'nǎj	'which, some one of limited possibilities'
'dɑj	'whatever, any one of limitless possibilities'
'nɔ̀ŋ[6]	'a, a certain, one that is not yet or not ever to be specified'
'diaw	'one, a single one, the same one'
'râek	'first (historically)'[6]
'dàym	'former'
'ɔ̀n	'other, additional one(s) not to be specified'

A __numeral__ is a numerative which is both a cardinal and an
ordinal. A complete list of numerals follows:

'sǎoŋ	'two'	'sɪ̀p	'ten'
'sǎm	'three'	'ráoj	'hundred'
'sɪ̀	'four'	'phɑn	'thousand'
'hâ	'five'	'mɔ̀n	'ten thousand'
'hɔ̀k	'six'	'sǎen	'hundred thousand'
'tjɛ̀t	'seven'	'lán	'million'
'pàet	'eight'		
'kâw	'nine'		

---

[6]/'nɔ̀ŋ/ 'first (in rank)' is analyzed as a numeral (below).

Numerals are further subdivided as follows. A metric
numeral (symbol M) is one which occurs in cardinal numerations
after partitives; e.g. /'lǎj 'ráoj/ 'several hundred'. A unit
numeral (symbol U) is any other numeral. The left-hand column
above contains only unit numerals, the right-hand column only
metric numerals.

The number 'one' is suppletive. A superfix, /'/, occurring
simultaneously with a classifier or other numeral, with or with-
out enclitic /nɏŋ/, corresponds to the cardinal form: /'tjan
'tàek pəj ≠ 'bəj./ 'One dish got broken.' (/'bəj/, classifier
for dishes); /'phən nɏŋ./ 'One thousand.' In formal speech a
cardinal /'nɏŋ/ is also used: /'nɏŋ 'ráoj/ 'one hundred', /'nɏŋ
'khǫn/ 'one person'. /'nɏŋ/ is also used in counting: /'nɏŋ ≠
'sǎoŋ ≠ 'sǎm ≠ 'sì ≠ 'hâ./ 'One, two, three, four, five.' The
ordinal form is split three ways, depending on the meaning:
/'thjén 'nɏŋ/ 'First class (as on a train)'; /'thjén 'ràek/
'The first such class (in history)'; /'thjén 'diaw/ 'The same
class, a single class.' The form after another numeral is
/'ə̀t/: /'sìp 'ə̀t/ 'eleven', /'ráoj 'ə̀t/ 'a hundred and one'.

/'sǎoŋ/ 'two' has a suppletive form /'jî/ before the
numeral /'sìp/ 'ten': /'jî 'sìp/ 'twenty'. All other numerals
are regular.

/'sǔn/ 'zero' is grammatically not a numeral.

A classifier is any other numerative; /'thjén/ 'class'.

Most classifiers are also substantives (usually nouns—a
few are verbs). The meaning of a given substantive as a classi-
fier is not always predictable from its meaning elsewhere, but
there is always some connection: /'khǫn/ means 'people' as a
noun in /'kə̀t 'khǫn/ '(it) bites people', and as a classifier

in /'sǎoŋ 'khǫn/ 'two people'; /'thÎaw/ means 'to have an outing'[7] as a verb in /'pəj 'thÎaw/ 'to go for a stroll', and 'trips, circuits' in /'sǎoŋ 'thÎaw/ 'two trips, two races'.

Those classifiers which are not also substantives are mainly measures of time, space, value, or instances of a repeated situation. One example from each category is given.

Time:	/'sǎoŋ 'moŋ./	'It's two o'clock.'
Space:	/'kì kÌ-lǒ-'mét./	'How many kilometers?'
Value:	/'lǎj 'bàt./	'Many ticals' worth.'
Instance:	/'thi 'nì:/	'In this instance,...'

The term **metric classifier** will be used for this class when it is necessary to make a distinction.

The remaining classifiers (neither substantive nor metric) are onomatopoetic: /'sǎoŋ 'kǽek/ 'two clattering sounds (as of something metallic falling).'

Partitives, demonstratives, numerals, and classifiers together exhaust the class of numeratives. As with substantives, it is possible to state substitution behavior in constructions of two lexemes, within limits.

A two-part numeration consisting of either a unit numeral or a partitive plus any other numerative is cardinal. A classifier or metric numeral fills the second position. All possible combinations are illustrated:

UC	/'hâ 'khǫn/	'five people'
UM	/'sì 'rǎoj/	'four hundred'
PC	/baŋ 'khǫn/	'some of the people'
PM	/'kì 'rǎoj/	'how many hundred'

---

[7] Like Russian <u>guljatj</u>, but can take a direct object: /'thÎaw 'myaŋ/ 'to do the town'.

A two-part numeration consisting of a classifier plus any other numerative is ordinal. A demonstrative or unit numeral usually fills the second position; metric numerals are rare. The common combinations are illustrated:

CD   /'khǫn 'nǯj/   'which person'

CU   /'thîaw 'hɔ̀k/   'the sixth race'

Other types of two-part numeration are exocentric. The most common one is MU: /'sǐp 'pàet/ 'eighteen'. The general meaning of this construction is that the numbers are to be added instead of multiplied, but there are ambiguous cases: /'phạn 'hâ/ can mean 'one thousand and five' or 'one thousand five hundred'.

The following combinations are not known to occur (X is any one kind of numerative): XX, XP, DX, PD, MD, UD, PU.

3.2.3. An isolative is a free lexeme other than a substantive. Isolatives are classified according to the intonations of their clauses.

A response is an isolative which occurs in clauses of both intonations /./ and /ˇ/. Most responses have semantic or morphological affiliations with other lexemes. The common responses:

1. /'khrǎp˚/ 'Yes, I hear you.' (man speaking respectfully)
   /'khrǎp./ 'Yes, that's right.' (the same)

2. /'khâ./ 'Yes, that's right.' (woman speaking respectfully)
   /!khâ˚/ 'Why, yes!. (the same)

3. /'plàw./ 'No (the question is inapplicable).'
             (cf. /'plǎw/ 'empty', an adjective)

   Q. /'paj 'nǯj hǎ˚/ 'Where are you going?'

   A1. /'paj 'bân./   'I'm going home.'

A2. /'plàw./ 'Nowhere.'

/!plàw: mâj dâj 'bàot ràok'/ 'Nah, <u>he</u>'s not blind!'

/'thjŝn 'plàw'/ 'Not <u>me</u>.'

4. /'jəŋ/ '(No,) not yet.' (cf. /jəŋ/ 'still, even')

Q. /'pəj 'láew rỹ jəŋ'/ 'Has he gone yet?'

A1. /'pəj 'láew./   'Yes, he has.'

A2. /'jəŋ./   'No, he hasn't.'

An <u>interjection</u> is an isolative which occurs only in clauses with high intonations. Interjections do not enter into construction with units smaller than clauses. Most interjections have loud stress on one or more syllables. Examples of some common ones follow:

/!âw'/ 'Well! (chiding)'

/!âo'/ 'Oh, now I understand.'

/!ô-!hô'/ or /!ỹ-!hỹ'/ or /!ây-!hây'/ 'Isn't that something!'

/!ę'/ or /!é'/   'What! (surprised)'

/!mǎe'/ or /'mǎe'/ 'Say! (showing real or mock admiration)'

/!ỷj'/ 'Ouch!'

3.3. Constructions

3.3.1. As we have seen in connection with two-part predications and numerations, it is possible to predict the substitution behavior of two lexemes in such constructions given only their form-class membership. This predictability holds good for larger constructions also, provided its constituents are endocentric.

It is impossible, however, to make any distinction between a 'predication'[8] and an 'endocentric construction,' when there

[8]From this point on, the term 'predication' is used in a broader sense than that defined in 3.1.5.

are only two free lexemes involved; /'bân 'jḛj./ translates either 'The house is big.' or '(It's) a big house.' This distinction is only apparent when the construction as a whole is an immediate constituent of a larger construction, or is broken up by the intrusion of another lexeme, bound or free: /'bân ⫽ mǎn 'jḛj./ 'The house, it's big.'; /'pḛn 'bân 'jḛj./ 'It's a <u>big</u> house.'

An endocentric construction is an immediate constituent of which the first lexeme is the head; headship is established if the relationship with the other immediate constituent is the same as it would presumably be if the first lexeme were by itself. Thus, in the first example above (where the phrase juncture happens to correspond to an immediate constituent cut), /mǎn 'jḛj/ is exocentric, since there is no predication type /'bân mǎn/. In the second example, /'bân 'jḛj/ is endocentric, since its relationship to /'pḛn/ 'is' is the same as obtains in /'pḛn 'bân./ 'It's a house.'

The term <u>expression</u>, preceded by the designation of a substantive lexeme class, is used to mean an endocentric construction headed by a lexeme of that class: verb expression, noun expression, etc. The term <u>numerative expression</u> is used to mean a constituent which corresponds to a numeration: /khŏn diaw/ 'one person' in /'paj khŏn 'diaw./ 'He's going alone.' Numerative expressions are of course not endocentric, since the first lexeme cannot occur alone.

3.3.2. <u>Verb expressions</u> usually consist of a verb and a noun: /'pḛj 'bân/ 'to go home'. Less frequent types are verb plus verb: /'pḛj 'thîaw/ 'to go for a walk'; and verb plus numerative expression: /'pḛj khŏn 'diaw ⫽ 'mâj sǎ 'nṵk./

'Going alone is no fun.' (The first three syllables are the
verb expression.) More often than not there is phrase juncture
between a verb expression and the other constituent:

/'phí ≠ 'pɐj 'bân./   'Brother went home.'

/'pɐj 'bân ≠ 'dâj./   'You can go home.'

/'tậoŋ 'pɐj 'bân./   'I have to go home.'

<u>Adjective expressions</u> consist of an adjective followed by
any other substantive, usually a noun: /'kàon 'náoŋ/ 'before my
younger brother'; /'kàe 'fɐj pɐj./ 'It got burned.', from
/'kàe/ 'dark' and /'fɐj/ 'fire' (neither is a predication).
Adjective expressions are rare.

The second constituent of a verb or adjective expression
is an <u>object</u>: /'bân/, /'náoŋ/ and /'fɐj/ above.

There are no modal expressions.

3.3.3. <u>Noun expressions</u> often consist of a noun plus
another noun or an adjective: /'bân 'phǒm/ 'my house' (NN);
/'bân 'jàj/ 'big house' (NA). Combinations of noun plus verb
are nearly always compounds: /'tǔa-'pɐj/ 'one-way (lit. 'going')
ticket'. The second constituent of a noun expression is its
<u>modifier</u>: /'phǒm/ and /'jàj/ above.

The most common type of noun expression consists of a
noun plus a numerative expression: /'thjaj 'sǎoŋ 'khọn/ 'two
men', /'thjaj khǒn nɐ́n/ 'that man'. Nouns and noun expressions
also occur in direct construction with demonstratives: /'bân 'ní/
'this house', /'thjaj 'sǎoŋ 'khọn nɐ́n/ 'those two men'. A noun
followed immediately by a syncopated /ní/ or /nǎn/ is a form of
hypostasis: /'bân ní/ 'The house in this instance; this word
"house".'

There is a covert lexical relationship between a given

noun and the classifier of the numerative expression with which
it is in construction.[9] Thus, it is possible to say that /'láŋ/
'is the classifier for' /'bân/ 'house': /'bân 'hâ 'láŋ/ 'five
houses'. A single classifier may apply to a wide range of nouns:
/'baj/ serves for dishes, hats, fruit, and envelopes, along with
other things. The classifier /'an/ 'piece' is used with almost
any noun of which the denotatum occurs in units, including
abstractions: /pǎn-'hǎ ǎn 'ní/ 'this problem'. A given noun
may have several classifiers, all meaning 'item': /'sôm/
'orange' takes /'baj/, /'phón/, or /'lûk/, depending on the
speaker.

    A complex type of noun expression occurs in which a
modifier or modifiers are separated from the head noun by a
classifier. The meaning of this construction is that modifiers
so separated are distinctive or contrastive: /'mùak 'jàj bǎj
'sǐ-'daeŋ/ 'the big _red_ hat; of the big hats, the red one';
/'mùak sǐ-'daeŋ bǎj 'jàj/ 'the _big_ red hat; of the red hats,
the big one'.

    3.3.4. So far as objective and subjective predications
are concerned, no new constructions result from the combina-
tions of noun, verb and adjective expressions. One construc-
tion which was not used in the definitions of major form-classes
(3.2.) remains to be dealt with, however.

    A _noun predication_ is an exocentric construction of which
the immediate constituents are nouns or noun expressions.

[9]This relationship is best treated as a lexical matter,
by listing noun and classifier together, as is done by the authors
of Spoken Thai. Most grammars and dictionaries, however, seek
unsuccessfully to define the meanings of classifiers in such a
way that the relationship will be self-apparent.

In the most common type of noun predication, the <u>equation</u>, a single noun serves as the head of two noun expressions in succession. The meaning of the construction is 'A = B.' /ˈrʲaŋ ˈní ≠ ˈrʲaŋ ˈhĭn wĭ-ˈsèt./ 'This story is the story of the magic stone.' In a sub-type of equation, the same morpheme occurs in both constituents: /ˈwąn ˈní ≠ ˈwąn-ˈsǎw./ 'Today is Saturday.' Equations are negated with /mǎj-ˈthjôj / (3.5.2.)

A <u>description</u> is any other type of noun predication. In descriptions, two or even three nouns or noun expressions follow each other in an order which is not the normal order of modifiers. There is usually phrase juncture between the constituents: /ˈphǒm ≠ ˈthjʲ ≠ ˈwɔŋ./ 'My name is Wong.' (lit. 'I appelation Wong.'). An analysis of such descriptions into three equal constituents is indicated both by the juncture and by the negation, which has normal modifying order: /ˈthjʲ ˈphǒm ≠ mǎj-ˈthjôj ˈwoŋ°/ 'My name isn't <u>Wong</u>.' Descriptions always involve personal attributes not regarded as property, such as names, ages, and parts of the body.

Other exocentric constructions which occur as sentences are grouped together under the term <u>minor predications</u>: /ˈphǒm ˈplǎw./ 'Not me.'; /ˈjǎ ˈpąj./ 'Don't go there.'

3.3.5. For purposes of classifying bound lexemes, it is assumed that the predications and expressions described so far exhaust the major syntactic constructions of the language; i.e. that any bound form category can be described in terms of one or more of these constructions.

It is further assumed that if a lexeme which resembles one of the free lexemes in form and meaning occurs unstressed in a

structural set with bound morphemes, that lexeme is also bound; the free lexeme is its homonym. For example, /'thî/, a noun meaning 'place', has three bound homonyms with relatable meanings: a preposition meaning 'at, to', a relative conjunction, and a numerative expression attribute. If, however, a free lexeme occurs unstressed in structural sets only with other free lexemes, a sub-class of some major form-class is involved. (Section 3.4. 'Minor form-classes' describes such cases.)

Among bound lexemes, a dichotomy based on overall occurrence is made. <u>Pre-bound</u> lexemes (3.5.) occur in clause initial position; <u>post-bound</u> lexemes (3.6.) occur in clause final position. The two categories are not mutually exhaustive: a few bound lexemes apparently do not occur in either position.

3.4. Minor form-classes

3.4.1. A <u>pronoun</u> is a noun which occurs unstressed as the object of a verb or verb expression. The meaning of the construction is something like 'indirect object.' Most nouns which occur in this position are stressed.

/'tjào 'ru 'hîp wéj./ 'They had bored a hole in the box.' /'ru/ 'hole' and /'hîp/ 'box' are nouns.

/'phǒm 'hêj khųn ╫ 'hâ 'bàt./

/'phǒm 'hêj să-'taŋ khųn ╫ 'hâ 'bàt./

'I gave you five ticals.' (both sentences).

/'khųn 'hêj să-'taŋ phǒm ╫ 'hâ 'bàt./ 'You gave me five ticals.' /phǒm/ 'I' and /khųn/ 'you' are pronouns.

Pronouns are frequently unstressed in other positions alsó; they are even syncopated:

/'phî ╫ khǎw 'bàok 'wâ:/ 'And my brother, he said...'.

Some of the pronouns occur in pairs, with clear first and second person singular meanings, and are restricted to certain social situations.

	1.	2.
Vulgar	ku	mɣŋ
Less vulgar	khâ	ęŋ
Informal	thjə́n	thay
Polite	phǒm (m.)	khyn
	dǐ-thjə́n (f.)	

Other pronouns are used in all but the most formal situations, with both singular and plural meanings which fluctuate according to groupings of persons involved.

/thə̂n/ superior second or third person

/tjə̂w/ inferior second person

/mąn/ inferior third person, impersonal 'it':

    /'mąn mäj 'nâe./ 'It's not certain.'

/khə́w/ familiar third person, impersonal 'they':

    /'khə́w 'wâ jă 'ŋə́n./ 'So they say.'

/kae/ respected third person, equal second

/ręw/ inclusive 'we', superior first person, inferior second, impersonal 'you':

    /'ręw tǒŋ 'thàj 'rǿt thǐ 'nę̂n./ 'You have to change trains there.'

In formal situations, special nouns are used to designate persons.

There are few pronoun expressions: /'phǒm nǐ/ 'now, <u>I</u> (lit. 'this I')', /'ręw thäŋ 'săoŋ/ 'the two of us'. A numerative expression is always the modifier, as in the foregoing examples. The effect is that any pronoun followed by a verb, adjective, or modal signals a predication (as opposed to an endocentric

construction): /'bân mǎn 'jâj./ 'The house, it's big.'

3.4.2. An <u>interrogative noun</u> is a noun which occurs un-stressed as the second constituent of a two-part subjective predication expecting an answer: /jǎ-ŋəj/ in /'wâ jǎ-ŋəj./ 'What did he say?'

A <u>demonstrative noun</u> is a noun which occurs unstressed in the demonstrative position of numerative expressions: /nî/ in /'sǎoŋ 'khǫn nî/ 'these two people here'.

Lexemes of the above two classes have complicated morphology (3.7.2.).

3.4.3. <u>Pseudo-adjectives</u> are a sub-class of verbs which occur in objective-type predications with other verbs. The class meaning is 'intended action completed or possible to complete.'

Three pseudo-adjectives occur with many different verbs in the first position: /'dâj/ 'to succeed', /'wǎj/ 'to be physically able', and /'pǫn/ 'to have learned to'. They are illustrated and contrasted in connection with /'sùp/ 'to smoke':

/'sùp mǎj 'dâj./   '(One) can't smoke (it).'

/'sùp mǎj 'wǎj./   '(I) can't smoke (it makes me sick).'

/'sùp mǎj 'pǫn./   '(I) don't smoke.'

The pseudo-adjectives /'phǫ́n/ 'to get away, be clear of' and /'thǝn/ 'to get there in time' form a contrasting pair:

/'maew ≠ 'nî 'mǎ mǎj 'phǫ̀n./ 'The cat couldn't get away from the dog in time.' (/'nî/ 'to flee').

/'mǎ ≠ 'lâj 'maew mǎj 'thǝn./ 'The dog couldn't catch the cat.' (/'lâj/ 'to chase').

Other pseudo-adjectives have covert lexical relationships with certain verbs, in that they almost always replace the

more general terms: /'maoŋ mãj 'hɛ̌n./ 'I can't see it.' (lit.
'look not see').[10] Other such pairs are /'fəŋ/ 'to listen'
and /dãj-'jɨn/ 'to hear'; /'naon/ 'to lie down' and /'lɛ̀p/
'to sleep'; /'jɨŋ/ 'to shoot' and /'thùk/ 'to hit'.

The position of the logical object of such constructions
is after the first verb if the proposition isgeneral, after
the second verb if the proposition is specific:

/'maoŋ ǎ-rəj mãj 'hɛ̌n./ 'I can't see anything (no matter
what I look at, I can't see it).'

/'maoŋ mãj 'hɛ̌n a-rəj./ 'I can't see anything (whatever
it is, I don't see it).'

The position of the object is always after the first verb if
a general pseudo-adjective (e.g. /'dãj/) follows.

The verbs which belong to the class of pseudo-adjectives
also have one peculiar characteristic as verbs: they form
subjective predications with very long noun expressions:

/kɔ̆ 'hɛ̌n ⫽ 'khɔn kǎm-ləŋ 'tjɛ̀p hãj 'la 'jɨn 'sǎoŋ 'khǎ jù./
'And he saw some people making a donkey stand on two
legs.' (The object is /'khɔn ... jù./.)

3.4.4. Pseudo-modals are a sub-class of substantives,
mainly verbs, which occur unstressed in the typical modal
position, but do not substitute for their predications. The
class meaning is 'manner of action.' Like real modals, they
occur much more frequently before verb predications than before
adjective predications.

The common pseudo-modals:

1. /pəj/ 'to do something that affects an outside party, or

[10]/'hɛ̌n mãj 'dãj./ means something more like 'It's in-
visible' or 'I can't see anything.'

has no lasting effect.'   /'jà păj 'khĭan bŏn kră-'dan-'dąm./
'Don't write on the blackboard.'.

2. /ma/   'to do something that affects the speaker's
interests, or has a lasting effect.'   /'jà ma 'khĭan năj nĕŋ-'sў̆./
'Don't write in my book.'

3. /thў̆ŋ/ and /tjyŋ/   'to act on a reasoned basis.'
/'khǻw thў̆ŋ 'klàp 'bân./   'So (therefore) he went back home.'

4. /layj/   'to do something that is part of a sequence
of events.'   /'khǻw layj 'klàp 'bân./   'So he went on back home.'

5. /dâj/   'to do something self-benefitting.'   /tjă 'dâj
'àp 'nám ≠ thĭ 'nĕn./   'We'll be able to (get to) bathe there.'

6. /khў̆n/   'to do, or fail to do, something against one's
conscience, or deliberately against someone else's interests.'
/thă̆ 'khў̆n ≠ 'plàoj hă̆j 'thjaj khŏn 'nĕn ≠ 'lĕn tào pąj láew:/
'If he just stood by and let the man keep on playing [with the
mouse, the mouse would certainly die].'

7. /mua/   'to act blindly or stubbornly.'

8. /klàp/   'to do something which is the opposite of the
expected.'

9. /phlaoj/   'to act similarly or simultaneously.'

10. /klâeŋ/   'to do something on purpose, good or bad.'

Pseudo-modals are not negated, but are common after /'jà/
'don't': /'jà mua 'thĭaŋ kąn jù layj./ 'Let's stop this sense-
less arguing.'   (cf. also the examples for /pąj/ and /ma/).

One pseudo-modal, /thùk/ 'to suffer an adverse action',
can be followed by an objective-type predication beginning
with a noun: /'phŏm 'thùk 'phâo 'ti./ 'I was beaten by my
father.' (lit. 'I suffer father beats.').

3.4.5. <u>Verb expression attributes</u> are a sub-class of verbs

which occur unstressed after verbs and verb expressions and in the same phrase with them. The class meaning is 'verb aspect.' Verb expression attributes are often syncopated.

The most common members occur in pairs, with contrasting meanings.

1. /pəj/: after verbs of motion with no object, 'action toward a goal which is not the center of interest'; after verbs of motion with an object 'incidental or negative goal'; after other verbs: 'action not part of a historical context, or of irrelevant duration.' Examples: /'la 'wîŋ ≠ 'khâw păj năj 'pâ./ 'The donkey ran into the forest (which was his goal).' /'la 'wîŋ ≠ 'khâw 'pâ pəj./ 'The donkey ran off into the forest (to get away).' /'khə́w 'jâm 'na pǎj bâŋ./ 'One thing they do is trample the fields.' (We have no further interest in this field-trampling.)

2. /ma/: after verbs of motion 'action toward the center of interest'; after other verbs, and occasionally after verbs of motion also, 'action part of a historical context, or of relevant duration.' Examples: /'ŋəyn thî khăw 'dâj ma:/ 'The money which he got (for himself)...' /'pəj 'nǎj./ 'Where are you going?' /'pəj 'nǎj ma./ 'Where have you been?'

The contrast between /pəj/ and /ma/ is pointed up neatly by the following sentences: /'mŷa 'wan nî ≠ 'lym 'sŷ ma./ 'It's something I forgot to buy yesterday (I may still get it).' /'mŷa 'wan nî ≠ 'lym 'sŷ pəj./ 'I forgot to buy it yesterday (it's too late to get it now).'

3. /sǐa/ or /sǎ/: 'irrevocable or definitive action, action viewed as a unit.' /'kɨn si./ 'Go ahead and eat (at it).' /'kɨn sǎ si./ 'Eat it (get it eaten).' /'khə́w tjǎ 'pəj 'dûaj./

'He's going too (along with others).' /'khɤ́w tjă 'paj să ʳdûaj./
'He's going, too (along with other facts).'

4. /jù/: 'continuing or non-definitive action, action
viewed as divisible.' /kăm-lăŋ 'kĭn jù láew·/ 'I'm <u>already</u>
eating.' /'ŋayn thĭ phŏm 'mi jù:/ 'The money that I (happen to)
have...'

The contrast between /sĭa/ and /jù/ after the verb /'pen/
'to be, to become' translates clearly in English: /thă 'pen
să-'ma-'thjĭk sĭa láew:/ 'If you become a member...' /thă 'pen
să-'ma-'thjĭk jù láew:/ 'If you are already a member...'

A near-contrast among all four of these attributes is
provided by the following non-final clauses (the continuation
of the sentence being given in English only):

/'phŏm 'tham 'di ma 'mâk láew;/ 'I've <u>done</u> a lot of good,
(but I don't seem to have gotten anything good out of it myself).'

/'phŏm 'tham 'di ma sĭa 'mâk láew;/ 'I've already <u>done</u> a
lot of <u>good</u>, (now it's time to do a little <u>evil</u>).'

/'phŏm 'tham 'di jù 'mâk láew;/ 'I'm <u>already</u> doing a lot
of good, (you don't have to tell me how).'

/'phŏm 'tham 'di paj:/ 'I do some good, (and all it does
is encourage them to ask for more).'

There are two other common attributes which do not seem
to contrast in meaning:

5. /wáj, 'wáj/: 'with or for future reference.' /'tjam
'wáj ≠ hăj 'di nă·/ 'Remember it well, will you.' (/'tjam/
'to remember') /'ŋayn thĭ khăw 'dâj wáj:/ 'The money which he
had gotten...'

6. /aw/: (meaning something like middle voice) /'tàt aw
'dâj ≠ 'ŋâj-'ŋâj./ 'It can be cut easily, it cuts easily.'
/aw/ does not occur after an object.

3.4.6. <u>Adjective</u> <u>expression</u> <u>attributes</u> are a sub-class of substantives which occur unstressed after adjectives and adjective expressions and in the same phrase with them. The class meaning is 'to a relatively great degree.'

The common attributes:

1. /paj/ 'more than desirable' /'kàe 'faj paj./ 'It got burned.' (Lit. 'dark fire too-much'.) /'hǒn-tjǎ 'mâk paj lǎ-mǒn'/ 'Don't you think that's a little too much?'

2. /kwà/ 'more than some other specific member of the class' /'tua 'ní ≠ 'jǎj kwà./ 'This one (chair) is bigger.' If the thing compared is named, it follows immediately after the /kwà/: /'jǎj kwǎ 'nǎn ìk./ 'It's even bigger than that.'

3. /khǒn/ or /lon/ (in complementary distribution) 'more than formerly' /khâw 'ûan khǒn./ 'He's gotten fatter.' Most adjectives select /khǒn/, but a few whose meanings are associated with slackening or deterioration select /lon/ instead: /phao 'sǒn-'khram 'khǎoj sǎ-'nǒp lon:/ 'When the fighting finally quieted down...' /kǎm-lǎn 'kàe lon./ 'I'm getting old(er).'

4. /àok/ 'more than most members of the class' /'nǎn-'sǐ lǎm 'ní: 'nǎ àok./ 'This book is terribly heavy.'

5. /khâw/ 'closer to a desired degree' /phao 'thàj 'pen khâw láew:/ 'Once you get a little better at taking pictures...' This attribute is often restressed in commands: /'rew !khâw si'/ 'Faster! Hurry up!'

6. /nǒk/ 'to such a degree' This is the only attribute commonly used with negated adjectives: Q. 'Have you been waiting long?' A. /mâj 'nan nǒk dàok./ 'No, not so long.' Following an adjective phrase: /'nàoj 'khon nǒk: 'thî tja 'khâw-'tjaj pǎn-'hǎ ǎn 'ní./ 'There are so few people who understand this problem.'

7. /di/ 'to a desired degree' /láew 'lǫm jăŋ 'raeŋ di 'dûaj./ 'And the wind is still nice and strong.' (Said in reference to kite-flying.)

3.4.7. <u>Particles</u> <u>of</u> <u>address</u> are a sub-class of responses (3.2.3.) which occur unstressed in clause-final position. Certain post-bound lexemes which have obvious morphological resemblances to them are classed here also. The class meaning is 'speaker signals degree of respect.' At the more polite levels there are different forms for male and female speakers.

Normally, a particle of address can be followed in a clause only by the name or title of the person addressed, which is in a phrase by itself: /sǎ-'baj 'di rỹ khrǎp ≠ 'wǫŋ°/ 'How are you, Wong?' (/khrǎp/ is a particle of address.)

Each member of the class is a member of a set of three lexemes: a streaased response, an unstressed particle, and a syncopated particle.

The difference in meaning between the two particles is hard to state, but the syncopated particle occurs most often after sentences of which the English translations are punctuated as questions or exclamations (regardless of intonation), the other particle after statements. The selection of the syncopated particle, further, is determined by the occurrence of an interrogative particle (3.6.1.); likewise by an interrogative noun (3.4.3.), unless a negative is present. Both unstressed and syncopated particles occur with both types of intonation, however. Examples:

/sǎ-'baj 'di rỹ khrǎp°/   'How are you?'

/sǎ-'baj 'di khrǎp./   'I'm fine.'

/'khyn 'phût 'wâ a-'raj khrǎp./ 'What did you say (to that).' (English falling intonation.) The same sentence with

/·/ means 'How's that!')

/'mȇj mĭ ǎ-'rɐj khrɛ́p·/ 'There isn't anything!' (English rising intonation.)

The difference in meaning of the various sets is determined by social factors. Since one of the sets is suppletive, a tabulation is given:

	Response	Particle	Particle
Men's formal	'khrɛ́p	khrɛ́p	khrǎp
Men's polite	'hɛ́	hɛ́	hǎ
Women's formal	'khȇ	khȇ	khǎ
Women's polite	'hȇ	hȇ	hǎ
General familiar	·tjȇ	tjȇ	tjǎ
General vulgar	'y(.)	wȃyj	wǎ
	'hȇ(·) or wɔ́j		

3.5. Pre-bound classes

3.5.1. A <u>pre-subjective</u> is a pre-bound lexeme which occurs as a lone lexeme between the constituents of a possible subjective predication.

Only two pre-subjectives intrude before verbs: /tjǎ/ 'putative action or condition' and /tě/ 'exclusive action or condition'; neither has a stressed form.

/'jǎk tjǎ 'pɐj./ 'He'd like to go.'

/'ɐw tě 'kɨn./ 'All he wants to do is eat.' (Lit, 'chooses exclusively the eating'.)

/tě/ occurs also in the type VxN:

/'mi tě 'khȃw./ 'We have nothing but rice.'

/tjǎ/ does not so occur, but is an inceptive (3.5.4.).

A <u>preposition</u> is any other pre-subjective. The class meaning of prepositions is 'relative location.' Their definitive position is VxN:

/'jù 'nôn./ 'It's over yonder.' (a subjective predication)

/'jù thî 'nôn./ 'It's way over there.'

/'jù bŏn 'nôn./ (or /'jù bŏn 'nón./) 'It's way up there.'

/'jù 'bân./ 'He's at home.'

/'jù nǎj 'bân./ 'He's in the house.'

The unstressed lexemes here, /thî/, /bŏn/, and /nǎj/, and /tĕ/ above are all prepositions. Prepositions are almost invariably followed by a noun or noun expression, but a verb does not always precede: /bŏn 'bân./ 'In the upper part of the house.' Only the prepositions /thî/ and /tĕ/ seem to occur before other prepositions: /thî nǎj 'hìp/ 'over there in the box'; /tĕ nǎj 'hìp/ 'nowhere but in the box.'

The most common prepositions, listed in their stressed forms, are the following:

1. /'thî/ 'at or to that which is either a distant, unusual, or former location.' /thî ǎ-'me-rî-'ka/ 'In America.'

2. /'nǎj/ 'inside a confined space or time, or at a customary location.' /'nǎj myaŋ-'thǎj/ '(Here) in Siam'

3. /'tàe/ 'from a point in time'; otherwise, 'exclusively' /'tàe wǎn 'nǎn ma/ 'from that day on'

4. /'kǎp, (kǎ)/ 'with, and'; signals any relationship which works both ways. /'la kǎ 'mî/ 'the donkey and the bear'; /'khǎo phû-'jǐŋ kǎ 'phâo-'mâe/ 'to ask a daughter's hand in marriage' (lit. 'beg woman with parents'.)

(Other prepositions are noted in 3.7.1.)

A preposition and the noun expression which follows it constitute a __prepositional phrase__. Some prepositional phrases are negatable: /'mə̂j nǎj 'tû/ 'elsewhere than in the cabinet' (/nǎj 'tû/ 'in the cabinet'.)

3.5.2. A __pre-objective__ is a pre-bound lexeme which occurs as a lone lexeme between the constituents of an objective pre-dication. The class meaning of pre-objectives is 'limitation on the applicability of a proposition.'

A __negative__ is a pre-objective which occurs in both types of objective predication: NxV and VxA. The most common negative is /'mə̂j/ 'not' (usually in syncopated form, /mǎj/):

NxV /'khâw mǎj 'mi./ 'There isn't any rice.'

VxA /'thəm mǎj 'sə̀t./ 'It isn't finished.' (Lit. 'do not completed.')

Negatives fill other positions as well. Before subjective predications: /mǎj 'mi 'khâw./ '(We) have no rice'; /mǎj 'tɕ̂oŋ 'pəj./ '(You) don't have to go.' Before numerations: /'mə̂j 'sǎoŋ 'moŋ; 'sǎm 'moŋ./ 'Not two o'clock, three o'clock.' Before prepositional phrases: /'mə̂j jǎŋ 'nə́n˙/ 'Not like that!'

The other negatives are derivatives of /mǎj/:

1. /mǎj-dǎj/ 'never, as a matter of fact not'[11] /'nə́k-rian 'triam ≠ mǎj-dǎj khɕ̀eŋ./ 'The preparatory students don't enter the competition.' (i.e. things are so arranged that they don't.)

Before a subjective predication, /mǎj-dǎj/ has definitely contrastive meaning: /mǎj-dǎj 'pəj 'bân˙/ 'He didn't go __home__ (he went elsewhere).' Before a single verb, it negates an implicit subjective predication, whereas /mǎj/ normally negates

___

[11]This negative is so often translatable by 'didn't' that it is easily mistaken for a past-tense signal.

no more than is explicit:

Q. /'khrŷaŋ 'ŷn 'láew rŷ 'jəŋ˙/ 'Is the engine warm yet?' (objective)

A. /'jəŋ mãj 'ŷn./ 'No, not yet.'

Q. /'ŷn 'khrŷaŋ 'láew rŷ 'jəŋ˙/ 'Have you warmed up the engine yet?' (subjective)

A. /'jəŋ mãj-dãj 'ŷn./ 'Not, not yet.'

/mãj-dãj/ is not known to occur before modals, numerations, or prepositional phrases.

2. /mãj-'thjâj, (-thjãj)/ 'is not a case of' /mãj-thjãj 'sáom./ '"To practice" is not the right word for it.' This is the only negative which occurs before noun expressions: /mãj-thjãj 'bân; 'tŷk./ 'It's not a house, it's a building.' Rarely occurs in the definitive position of negatives.

3. /mãj-'khŝoj, (-khõj, -khãj)/ 'hardly' /'khâw mãj-khõj 'mi./ 'There's hardly any rice.'

4. /mãj-'jŝk, (-jãk)/ 'never, against expectations not' /tŝ khŝw mãj-'jŝk 'ma./ 'But he never came.'

3.5.3. The pre-objective /'kâo/, with syncopated form /kõ/, is in a class by itself. The typical position is immediately after the first constituent of the objective predication, and any other bound form follows it:

/'pəj kõ mãj 'dâj./ 'You can't go, though.'

/'thjŝn kõ mãj pəj./ 'I'm not going either.'

This bound lexeme is perhaps the most frequent lexeme in the entire language. In descriptive contexts the meaning is something like 'The proposition offered here has something in common with what has just been said, either by you or me, and I am calling your attention either to a similarity or a difference based on it.' (Examples above.)

In a narrative context, the meaning is 'no break in the sequence of events; so, then': /kh$\acute{\text{e}}$w k$\breve{\text{o}}$ 'b$\grave{\text{a}}$ok 'w$\hat{\text{a}}$:/ 'And so he said...'

Repeated in predications which are in parallel juncture, /k$\breve{\text{o}}$/ simply reinforces the parallelism: /'pej k$\breve{\text{o}}$ 'd$\hat{\text{a}}$j, 'j$\grave{\text{u}}$ k$\breve{\text{o}}$ 'd$\hat{\text{a}}$j./ 'You can go, or you can stay.'

Anywhere after an interrogative noun in the same sentence, it changes the 'what' meaning of the interrogative to a !whatever' meaning: /'pej 'n$\breve{\text{e}}$j k$\breve{\text{o}}$ 'd$\hat{\text{a}}$j./ 'You can go anywhere.' (Lit, 'go wherever then possible.')

As absolute initial in a sentence, /k$\breve{\text{o}}$/ takes issue with the logic of an immediately preceding proposition: /k$\breve{\text{o}}$ m$\breve{\text{a}}$j 'h$\breve{\text{e}}$n thay $\neq$ 'n$\hat{\text{i}}$'/ 'Well, I didn't see you.' (the other speaker having claimed to have been present.)

3.5.4. An <u>inceptive</u> is any other pre-objective. The characteristic position of inceptives is NxV or NxA: /k$\breve{\text{y}}$ap/ 'almost' in /'n$\acute{\text{a}}$m k$\breve{\text{y}}$ap 'm$\grave{\text{o}}$t./ 'The water's almost all gone.' Some also occur before numerations: /k$\breve{\text{y}}$ap 's$\breve{\text{a}}$m 'moη./ 'It's almost three o'clock.'

The most common of all inceptives is /tj$\breve{\text{a}}$/ 'putative action': /'kh$\acute{\text{e}}$w tj$\breve{\text{a}}$ 'pej, r$\breve{\text{y}}$ m$\breve{\text{a}}$j 'pej: k$\breve{\text{o}}$ 'm$\hat{\text{e}}$j-p$\breve{\text{e}}$n-'rej./ 'It doesn't make any difference whether he goes or not.' (Lit, 'He [putative] go, or not go, then never mind.') It occurs before modals, adjectives, and verbs of all ranges of meaning, and before numerations; it may precede the negative /'m$\hat{\text{e}}$j/ and follow the negative /m$\breve{\text{a}}$j 'kh$\hat{\text{e}}$oj/ (which then have their stressed allomorphs); it follows other inceptives, either distinctively, optionally, or as part of a compound lexeme (written, respectively, separate, in parentheses, and with hyphen, in the examples that follow).

The other frequently-occurring inceptives:

/kăm-'lᾳŋ/ 'in the process of'

/kăm-'lᾳŋ tjă/ 'about to, preparing to, on the way to'

/'kǰap (tjă)/,/'thâep (tjă)/,/'tjuan (tjă)/ 'almost'

/'khậoj, 'khậon-'khậŋ (tjă)/ 'rather'

/'thâ-tjă/,/'hĕn-tjă/ 'apparently'

/'mḗk/ 'usually'

/'mḗk (tjă)/ 'apt to'

/'phỷŋ (tjă)/ 'only recently'

After /'jà/ 'don't' /'phỷŋ/ means 'this soon, so quickly':

/'jà phỷŋ 'pᾳj nã·/ 'Don't go right away.'

3.5.5. A pre-numerative is any (as yet unclassified) pre-bound lexeme which occurs between a noun expression and a numerative expression without phrase juncture between it and the following numerative expression. The class meaning of pre-numeratives is 'attitude of the speaker toward the exact-ness of a numerative expression.' /sãk/ 'inexact numerative' is a common member of this class:

/'phǒm tjă 'pᾳj 'sỷ 'mùak ≠ 'bᾳj nỹŋ./ 'I'm on my way to buy a hat (a certain hat).'

/'phǒm tjă 'pᾳj 'sỷ 'mùak ≠ sãk 'bᾳj nỹŋ./ 'I'm on my way to buy a hat (any hat is a possibility).' (/'mùak/ 'hat'; /'bᾳj/, its classifier.) /'mùak 'săoŋ 'bᾳj/ 'two hats'; /'mùak sãk 'săoŋ 'bᾳj/ 'perhaps-two hats'.

The class is a small one. Members are listed in their stressed allomorphs, which are rare:

/'sᾲk/ 'inexact numerative' (syncopated form irregular: /sãk/)

/'tậŋ/ 'quantity considered large, all of' /tãŋ 'hâ 'khǫn/ 'as many as five people'

/'phiaŋ/   'quantity considered small or insufficient, only'

                /phiaŋ 'hâ 'khǫn/ 'only five people'

/'thə́ŋ/   'inclusive previously known quantity' /thə̆ŋ 'hâ

                'khǫn/ 'all five of them'

/'thy̌ŋ/   'inclusive previously unknown quantity' /thy̌ŋ

                'hâ 'khǫn/ 'up to five people'

/'raw, rǎw-rǎw/,/prǎ-'man/   'approximately'

The first three pre-numeratives occur before prepositional phrases introduced by /tě/: /'tə̂ŋ tě 'thjáw/ 'ever since this morning' (lit. 'all of from morning'). /'thə́ŋ/ occurs before noun expressions, in the meaning 'including': /'wâj 'nám ≠ thə̆ŋ 'khry̌aŋ-těŋ-'tua/ 'to go swimming with ones clothes on' ('including clothes').

Two bound lexemes occur between the constituents of numerative expressions. They have no stressed forms.

/kwǎ/   'plus'   splits a numeral and its classifier:

        /'ráoj kwǎ 'bàt/ 'more than a hundred ticals,

        a hundred-odd ticals'.

/thɪ̄/   'ordinal sign'   splits a classifier and a unit

        numeral or numeral expression: /'thjə́n thɪ̄ 'sɪ̀/

        'the fourth class'.

In general, the members of an ordinal series not well eⳇtablished as such are signaled by /thɪ̄/.

Two other bound lexemes occur between numerative eⳇpressions, joining them in a distributive construction.

/'tào/   'per'   means that the first numerative expression

        gives quantitative information in terms of a

        standard unit which is designated by the second

        numerative expression: /'ráoj kɪ̄-lŏ-mə́t ≠ 'tào

        'thjûa-'moŋ./ 'A hundred kilometers per hour.'

/lã/ 'per' works the opposite way: /'bąj lã 'bàt./ '(The hats are) one tical each.'

3.5.6. A <u>conjunction</u> is any pre-bound lexeme so far unclassified. The class meaning of conjunctions is 'clarification of otherwise ambiguous relationship between major elements.'

Conjunctions are here sub-classified according to semantic categories.

<u>Relative conjunctions</u> introduce displaced or lengthy modifiers, usually one phrase or clause in length. There are four relative conjunctions, with slightly different meanings.

1. /'thî/ 'which or who distinctively, that which'

2. /'sỹŋ/ 'which or who among other things, one that'

3. /'ąn/ 'which, about which it can be said that'

4. /'hâj/ 'who should, which should, so that' (marks change of subject).

Examples (all with unstressed forms):

1. /'ŋąyn ≠ thî 'phǒm 'hâj pęj ≠ 'jęŋ mãj 'phao ìk rỹ'/ 'Isn't the money I gave you enough?'

2. /'pla ≠ 'lǫŋ pǎj nǎj 'bào ≠ sỹŋ khãw 'lâo wǿj./ 'The fish go down into a well which has been filled by damming.' (this being the first mention of such a well).

3. /nǎj 'lǒk ǎn 'khâep ní:/ 'In this narrow world...' (narrowness does not distinguish it from other worlds, however).

4. /'khǒn 'hǐn khỹn ma; hãj 'mǒt thõŋ-'nãm nǽn layj./ 'Bring up all the stones that are in the river.' (Lit, 'Carry stones up to-me, which-should exhaust river-bed that-one completely.')

/'thî/ is obligatory even before short modifiers, when a desired noun expression would otherwise be a predication: /'bân 'jǎj./ 'The house is big.' or 'It's a big house.'; but /'bân thî 'jǎj./ 'Those houses that are big.' or 'The <u>big</u> house.'

/'hâj/ is obligatory before adjectives which complete an objective predication, if there is a hypothetical proposition involved: /'thɛm 'di/ 'It's well made', but /'thɛm hâj 'di nâ°/ 'Make it well, will you?' (lit. 'make so-that good, huh?'); it is obligatory before verbs when there is a change of actor /'wan 'dᵉk hâj 'pɛj./ 'I asked the boy to go.' (lit. 'requested boy who-should go.') Only /'hâj/ and /'thî/ seem to occur without antecedent, and only /'hâj/ is negatable.

When a new actor is mentioned for the first time, it follows the /'hâj/: /'plàoj ╪ hâj 'nù mǎ 'kᵃ̀t tjǎ-'mùk ╪ 'dâj°/ 'You allow a mouse to come and bite my nose!' /lit. 'permit so-that mouse come bite nose can.')

3.5.7. _Temporal conjunctions_ relate the time of one element to another. They are usually stressed. Their clauses are to a certain extent moveable within the framework of a sentence.

The principal temporal conjunctions occur in pairs. One member of the pair merely establishes a historical or logical sequence; the other member distinctively marks one event as determining another. Both members are used in both general and specific propositions. The pairs:

Sequential	Determining
1. /mŷa/ 'when, after'	2. /phao/ 'when, as soon as'
3. /kàon/ 'before, in anticipation of'	4. /kwà/ 'before, until'
5. /'tjɔn-kǎ-'thâŋ/ 'until, to such an extent that'	6. /'tjɔn-kwâ/ 'until such time as'

1. /'mŷa 'than ǎ-'hǎn sᵉ̀t láew: kᵒ̌ pǎj 'ân nāŋ-'sŷ nâj 'hâoŋ-sǎ-'mùt./ 'When we get through eating, we go read in the library.'

2. /'phao pǎj 'thŷ̃ŋ ǎ-'jú-thǎ-'ja láew: wᵉ̌-'la 'sǎm 'moŋ./ 'By the time we got to Ayuthya, it was three o'clock.'

3. /'kàon tjă 'lên ă-'rɛj: 'jŷt 'sên, jŷt 'săj ⧸ să 'kàon./
'Before you play anything, loosen up first.'

4. /'nan măj; 'kwà tjă 'phɔ́p khăm 'nɛ́n./ 'Was it long
before (until) you found that word?'

5. /'khɛ́w 'hâj ⧸ 'sĭŋ-'khăoŋ tăŋ-tăŋ ⧸ kĕ 'khoŋ thŦ
'khât-'sɔ̌n nĭa: 'tjɔn-kă-'thâŋ 'tua 'khɛ́w ⧸ 'mâj mĭ ă-'rɛj
'lŷa jŭ layj./ 'He gave away various things to the poor like
this until (to such an extent that) he himself didn't have any-
thing left.'

6. /'pầw 'nɔ́k-'wĭt 'rŷaj ⧸ tjŏn-'kwà tjă 'bàok hăj 'jầt./
'The whistle (for keeping rhythm in calisthenics) is blown
continually until the order to stop is given.'

3.5.8. **Conditional conjunctions** introduce predications
setting up hypothetical circumstances. The principal ones
are listed:

/'thâ/ and /'thâ-phŷa/	'if, supposing'
/'thâ-hầk/	'if on the contrary'
/'thŷŋ/ and /'thŷŋ-hầk/	'even if, granting the possi- bility that'
/'thɛ́ŋ-'thɛ́ŋ (thŦ)/	'although, in spite of the fact that'

Co-ordinating conjunctions join constructions of equal
rank. They are usually unstressed. Clauses introduced by
these conjunctions are not movable within the framework of a
sentence; their order with respect to prior clauses and sen-
tences is highly relevant. The common co-ordinating conjunctions:

/láew/ and /lăw-kâo/	'then, and then'
/rŷ/ and /rŷ-wâ/	'or alternatively'
/khy/ and /khŷ-wâ/	'or equivalently'

/tàe/ and /tĕ-wâ/   'but, on the other hand'

/tĕ-kŏ/   'but all the same'

/lĕ/   'and also'

Certain prepositions introduce predications. These are listed here because they are semantically close to the class of conjunctions, and because one of them has an alternate compound form which is not a preposition:

/phrǿa/ and /phŏ-wâ/   'because'

/phŷa/   'in order to, for the ad-hoc purpose of'

/săm-'rὰp/   'for the general or non-immediate purpose of'

There are two conjunctions which occur repeated in successive clauses which are in parallel clause juncture: /'jîŋ/ 'the more' and /'tὰŋ/ 'separately':

/'jîŋ'rǫw, 'jîŋ 'di./ 'The faster the better.'

/'tὰŋ 'khǫn, 'tὰŋ 'dayn-'thaŋ./ 'Each person goes his own way.'

3.6. Post-bound classes

3.6.1. A <u>sentence particle</u> is a post-bound lexeme which determines the selection of the syncopated forms of particles of address (3.4.7.) when these occur after it.

Sentence particles typically occur at the end of the last clause of a sentence, and are followed only by a particle of address. They also occur, however, at the end of internal clauses, especially those which have juncture of the types /;/ or /,/.

Sentence particles have exceedingly complex morphology and syntax. For example, the interrogative particle /rŷ/ has at least four forms, the conditioning factors and/or semantic

distinctions of which are not clear. It is probable that suppletive patterns exist among the class, but meanings have not yet been well enough established. Relationships with particles of address are also insufficiently studied. For these reasons, a complete description of the class is not attempted here.

The principal members, quoted in their most common forms, are classed semantically:

Interrogative particles: /mãj/, /rỹ/, /lậ/

Declarative particles: /nî/, /nã-si/, /lã-si/, /lã-mãǰ/, /ŋəj/

Topical particles: /nậ/, /lậ/, /ǎ/, /lǒ/

Other particles: /nã/, /si/

Two of the interrogative particles show meaning contrasts which may be found applicable to other pairs in the class upon further investigation.

/mãj/ 'question not involving any special assumptions.'

/rỹ/ 'question involving some kind of assumption on the part of the speaker.'

/'kǫt-'mãj ≠ 'wẹn 'hậj 'baŋ 'khǫn mãj°/ 'Does the law make exceptions for some people? (If so, I want you to tell me who they are.)'

/'kǫt-'mãj ≠ 'wẹn 'hậj 'baŋ 'khǫn rỹ°/ 'Does the law make exceptions for some people? (Is it true or not?)'

Normally, a form of /rỹ/ is used if a unique event is referred to, or if a situation not regarded as capable of change is being examined; /mãj/ is used for a class of events or a situation not regarded as final.

/'ǫw kǎ-'fae mãj°/ 'Will you have some coffee?'

/'ǫw kǎ-'fae rỹ./ 'You're having coffee, then?'

/mɣa 'pəj 'nɨw-'jɛ́ok: 'pəj dǔ 'nɤ̌ŋ mɛ̂j˙/ 'When you go to New York, do you see movies (or what)?' or 'When we go to New York, shall we see a movie?'

/mɣa 'pəj 'nɨw-'jɛ́ok: 'pəj dǔ 'nɤ̌ŋ rɣ̌˙/ 'When you went to New York, did you see a movie?'

Questions about simple events in the past are almost always asked with /rɣ̌/ (as in the last example), except in the case of an objective predication of which the second constituent is a pseudo-adjective (3.4.3.); here /mɛ̂j/ is selected:

/khǎ-'moj 'nɨ tǎm-'rùat 'phɔ́n mɛ̂j˙/ 'Did (could) the thief get away from the police?'

In a clause containing any negative, the selection of /rɣ̌/ is mandantory: /'mɛ̂j 'mi rɣ̌./ 'Aren't there any?' /rɣ̌/ is likewise selected if the node of a clause is a lexeme which is one of a semantic pair: /'pəj 'lǽew rɣ̌˙/ 'Is he gone already?' (cf. /'pəj 'lǽew rɣ̌ 'jəŋ˙/ lit. 'go already or not-yet?')

3.6.2. Other post-bound lexemes are irregularly patterned, and no sub-classification is attempted. The most common ones are listed, together with their meanings and statements of distribution.

1. /kən/ 'mutual, shared, or reciprocal action' occurs immediately after verbs and verb expressions. Any verb expression attribute follows it. It is never stressed. /'thjɨŋ rǎŋ-'wən kən./ 'They compete for prizes.' (lit. 'snatch prizes together.')

After an interrogative noun, /kən/ implies that the speaker cannot imagine any answer to his question: /'pəj 'nɤ̌j kən˙/ 'Where do you think you're going?'; /ǎ-'rəj kən˙/ 'What on earth?'

2. /'eŋ/ 'unshared or simple action' occurs stressed and unstressed after verbs and verb expressions. Despite its meaning, /'eŋ/ can occur in the same clause with /kạn/, which it follows. Any verb expression attribute precedes it. /'ma 'eŋ./ '(The cat) came by itself (no-one brought it.)' /'ma kạn 'eŋ./ 'They came by themselves.' /'pẹn 'thạm-ǎ-'da jǜ 'eŋ./ 'It's only natural.'

After pronouns and demonstratives, /'eŋ/ emphasizes the preceding lexeme: /'dǐaw 'ní 'eŋ·/ 'This very minute!' /kɔ̌ 'khụn 'eŋ nǎ-si·/ 'Well it was you yourself (that did it)!'

3. /dǎok/ or /rǎok/ 'though, instead of what is expected' occurs after the last constituent of any predication. It is never stressed, but has a special form /rǎok/ in clauses with high intonation. It normally occurs only in negated state-ments (and never after /'jǎ/ 'don't').

Q. /'hẹ̌n phǖ-jǐŋ khɔ̌n 'ní mǎj·/ 'Do you see the woman I mean?'

A. /mǎj 'hẹ̌n rǎok./ 'No, I don't at all.'
/dǎok/ determines the selection of a non-syncopated address particle: /mǎj 'rú dǎok khậ./ 'No, I <u>don't</u> know.' (woman speaking).

4. /layj/ 'completely, to any extent at all' has the same position as /dǎok/, but follows it if both occur in the same clause. There is likewise a special form, /lǎyj/, for high-intonation clauses. /layj/ occurs frequently in negated statements, questions and prohibitions, and less frequently in positive ones. /'jǎ 'pạj 'nǎj layj nǎ·/ 'Don't go any-where, now.' /'nám 'mǒt layj./ 'The water is all gone.'

The meanings of /layj/ and /dǎok/ are contrasted in the

following two answers to identical questions:

Q. /thî 'bân thay ≠ 'mi sǔ-'nák mãj`/ 'Do you have any dogs at your house?'

A1. /mãj 'mi layj ≠ sãk 'tua diaw./ 'No we don't, not even one.'

A2. /mãj 'mi (dǿok· 'pɐj 'thîaw thî 'si./ 'Certainly not! Go jump in the lake.'[12]

5. /láew/ 'already' occurs after the last constituent of any predication, and follows any other post-bound lexeme mentioned in this section. After a single verb or adjective, it usually is stressed: /'pɐj 'láew./ 'He's gone.' /'di 'láew./ 'That's fine.' Elsewhere, it is usually unstressed: /'phǒm 'thɐm 'di ma 'mãk láew:/ 'I've done a lot of good...'

The contrast in meaning with the response /'jɐŋ/ 'not yet' is so strong that the two seldom occur in the same clause.

6. /ìk/ 'still, again' has a similar post-predicate position, but precedes /dàok/, /layj/, or /láew/. It is never stressed. /'phǒm kǒ layj ≠ 'wíŋ klàp ma ≠ 'sɤ 'tǔa ìk./ 'So I ran right back and bought another ticket.' /'khɐ́w 'jɐŋ mãj 'ma ìk rɤ̌·/ 'Hasn't he come yet?'

A related pre-bound lexeme /'ìk/ occurs, stressed or unstressed, before numerative expressions, in the meaning 'another': /'ìk 'sǎoŋ 'khɒn/ 'two more people, another (set of) two people.'

7. /bâŋ/ 'some of it, some of the time, in part' substitutes semantically for any numeration containing the partitive

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[12]The responder in the second case takes the question as meaning that some members of the household might be dogs instead of people—a slight, considering the role of dogs in the culture.

/baŋ/ 'some' and occurs in the typical positions of numerative expressions: /păj 'khuj kă 'phrá·bâŋ./ 'We did some talking with the priests.' /'má kŏ 'mi bâŋ./ 'There are some horses, too.' (lit. 'horses then exist some.')

/bâŋ/ pluralizes an interrogative noun: /'pɛj 'năj bâŋ./ 'Where all did you go?'; /'sɣ ă-rɛj 'bâŋ./ 'What (kinds of) things did you buy?'

8. /thi/ 'just this once', and

9. /nàoj/ 'a little' occur unstressed in the positions of numerative expressions with the meaning of a polite (or sarcastically polite) request: /'khăo 'thôt thi'/ 'I beg your pardon.' (/'khăo 'thôt/ alone is simply a polite formula for 'Excuse me.') /'pɛj hăj 'phɔ́n să thi'/ 'Will you please get out of here?' /'wan nàoj thăy/ 'Will you do something for me?'

This same lexeme /nàoj/ 'a little' and

10. /thiaw/ or /thjiaw/ 'quite' occur unstressed after adjectives and adjective expressions, and occasionally else⁺where, as attributes: /'kaeŋ 'ní ≠ 'phɛt nàoj./ 'This curry is rather hot.' /'sɛ̀oŋ 'săeŋ 'waew-'waw thjiaw; 'hĭn 'nɛ́n ă./ 'It reflected the light most brilliantly, that stone did.'

3.7. Morphology

3.7.1. There are a number of prefixes which form substantive derivatives from other substantives.— Only the most productive ones are listed.

1. /'kan/ makes nouns describing formalized activity from verbs, verb expressions, and nouns:

'wĭŋ	'to run'	'kan-'wĭŋ	'running, race'
'tăt 'sɣa	'to cut clothes'	'kan-'tăt-'sɣa	'tailoring'
'bân	'house'	'kan-'bân	'domestic affairs'

2. /'khwam/ makes nouns describing qualities, from adjectives, and nouns describing the results of action, from verbs and verb expressions:

'ŋô	'stupid'	'khwam-'ŋô	'stupidity'
ʾrú	'to know'	'khwam-'rú	'knowledge'
'khăw-'rɔ́p 'thoŋ		'khwam-khăw-'rɔ́p-'thoŋ	
'to do homage to a flag'		'allegiance to the flag'	

3. /'nâ/ makes adjectives meaning 'capable of being ____, worthy of ____' from verbs:

'rɛ́k	'to love'	'nâ-'rɛ́k	'lovable, cute'
'du	'to look at'	'nâ-'du	'visually interesting'
'faŋ	'to listen to'	'nâ-'faŋ	'interesting to hear'

Derivatives containing both /'khwam/ and /'nâ/ are by no means rare: /'khwam-'nâ-'du/ 'interestingness'.

A whole class of noun derivatives is made from a non-productive prefix /'khâŋ/ (syncopated /khăŋ/) from prepositions. The class meaning is 'noun substituting for a prepositional phrase of which the object is taken for granted.'

/'jù năj 'tû./ 'It's in the cabinet.'

/'jù khăŋ-'naj./ 'It's inside.'

A few prepositions make such a derivative with /'phaj/ (/phăj/) instead of /'khâŋ/; three of them make both derivatives, with a difference in meaning. The following list is probably complete:

'naj	'in'	khăŋ-'naj	'inside'
'nâok	'outside of'	khăŋ-'nâok	'outside'
'bon	'on'	khăŋ-'bon	'on top, upstairs'
'lâŋ	'below'	khăŋ-'lâŋ	'below, downstairs'
'nâ	'in front of'	khăŋ-'nâ	'in front'
		phăj-'nâ	'the future'

'lə̌ŋ	'behind'	khāŋ-'lə̌ŋ	'in back'
		phǎj-'lə̌ŋ	'the future'
'nỹa	'over'	phǎj-'nỹa	'above'
'tə̂j	'under'	phǎj-'tə̂j	'beneath'

The last two derivatives also serve as prepositions, with more figurative meanings than their bases (e.g. 'beneath someone's authority'). /'naj/ has a derivative /phǎj-'naj/ 'within', which is only a preposition: /phǎj-nǎj 'sǎoŋ 'dyan/ 'within two months.'

The preposition /khāŋ-'khāŋ/ 'close to' is a reduplication rather than a derivative of /'khâŋ/ 'beside.'

3.7.2. The class of interrogative nouns is made up entirely of analyzable lexemes which have as their second element a bound morpheme of which the principal allomorph is /raj/. The first element in each case is identifiable. In the following table the morphological information is presented in this order: base morpheme, meaning, form-class, allomorph; allomorph of /raj/, result, meaning of derivative.

'an	'thing'	clf.	ǎ	raj	ǎ-'raj	'what'
'khǫn	'person'	clf.	kh	raj	'khraj	'who'
'thə̂w	'degree'	clf.	thāw	raj	thāw-'raj	'how much'
'jə̀ŋ	'like'	prep.	jǎ	ŋaj	jǎ-'ŋaj	'how'
'them	'do'	vb.	thǎ	maj	thǎ-'maj	'why'
'mỹa	'when'	conj.	mỹa	raj	mỹa-'raj	'when'
					or mǎ-'raj	

There is also a pair of derivatives /'thi-raj/ and /thi-'raj/, containing the metric classifier /'thi/ 'instance', and meaning respectively 'no matter when' and 'whenever'.

The following table shows the patterning of demonstratives
(left column) and demonstrative nouns, in sets:

'ní	'this'	'nî	'here'	'ŋí	'thus'
'nę́n	'that'	'n**ŝ**n	'there'	'ŋę́n	'so'
'nón	'yon'	'nôn	'yonder'		
'nX̌j	'which'	'nX̌j	'where'		

The six morphemes involved are the four syllables at left,
plus /ˆ/ 'place', and /ŋ/ 'manner.' /'ní/ and /'nę́n/ have
allomorphs without /n/ when preceded by /ŋ/. /ˆ/ has an allo-
morph /˜/ when it occurs simultaneously with /'nX̌j/, which then
has a toneless allomorph /naj/.

3.7.3. Derivatives from all types of substantives are made
with infixes, and with prefixes which have subsyllabic allomorphs.[13]

Both types of affixation involve the same system of tone
correspondences between allomorphs of base morphemes. Ifthe
free base morpheme has rising tone, the first syllable of a
two-syllable derivative has rising tone if stressed, and the
second or only syllable of a derivative has mid tone. If the
base morpheme has falling or constricted high tone with a stop
final, the second or only syllable of a derivative has low tone.
Other tone correspondences are either morphophonemically pre-
dictable or irregular. Examples are given under the headings
of the individual affixes.

1. An infix with principal allomorph /ǝmn/ gives a sugges-
tion of dignity, formality, or technicality to a commonplace
verb, noun, adjective or modal. If the base morpheme has one
syllable and the initial is one phoneme, or a cluster with /j/

[13]Some of the infixes are said to be productive, but for
lack of evidence they are classed here as non-productive.

as sonant, or zero, the principal allomorph is selected; the
order is initial of base, /ǝm/, stress, /n/, remainder of base.
If the base morpheme has one syllable and the initial is any
other cluster, the allomorph /ǝm/ is selected; the order is
initial stop of base, /ǝm/, stress, remainder of base (including
sonant of cluster). If the base morpheme is already two sylla-
bles, the allomorph /m/ is selected and becomes the final of
the first syllable; the second syllable is unchanged.

The examples are quoted as if in slow speech, to reduce
the number of irrelevant factors:

'dayn	'to walk'	'dǝm-'nayn	'to parade'
'tjàj	'to pay'	'tjǝm-'nàj	'to disburse'
'sɪaŋ	'sound, voice'	'sǝ̌m-'niaŋ	'tone, accent'
'uaj	'to give'	'ǝm-'nuaj	'to administer'
'tra	'stamp, seal'	'tǝm-'ra	'textbook'
thǎ-'laj	'to destroy'	'thǝm-'laj	'to ruin'

Other examples involve irregularities of tone correspon-
dence, changes of base phonemes, unpredictable orders, and
irregular allomorphs of the infix:

'ât	'to be capable of'	'ǝm-'nât	'power'
'nàk	'heavy'	'nǝ́m-'nàk	'weight'
'trɔŋ	'to go straight'	'dǝm-'rɔŋ	'to continue (as a lineage)'
'thaŋ	'way, road'	'thǝm-'naoŋ	'method'
'la	'to take leave'	'ǝm-'la	'to resign'
'sǎoŋ	'two, second'	'sǝ̌m-'raoŋ	'reserves'
'sèt	'finished'	'sǝ̌m-'rèt	'successful'

2. An infix /ǎb/ has similar meaning and order.

Regular:

'rąm   'to dance'   ră-'bąm   'to perform a dance'

'rîap   'lined up'   ră-'bîap   'system'

Irregular:

'ly   'to spread hearsay'   ră-'by   'rumor'

      3. A. prefix with principal allomorph /pră/ gives a causative meaning to verbs and adjectives, the derivative being a verb. An allomorph /p/ occurs only if the base morpheme has one syllable beginning with /r/ or /l/. An allomorph /pă/ occurs in free variation with /pră/. Regular examples:

'lǫŋ   ᵗto go down'   'plǫŋ   'to bury
                                                  (a corpse)'

'râp   'level'   'prăp   'to subdue'

'thjym   'to swarm'   pră-'thjym   'to assemble'

'lýk   'to get up'   'plýk   'to waken'

'rẹp   'to receive'   'prẹp   'to inflict'

'sǒm   'fitting'   pă-'sǒm   'to mix'

Irregular:

'laoj   'to float'   'plăoj   'to release'

     4. A prefix /băŋ/ has similar meaning, but there are no tone changes in the base morpheme:

'khẹp   'tight'   băŋ-'khẹp   'to regulate'

      5. A prefix with principal allomorph /kră/ gives a middle-voice or reflexive meaning to verbs and adjectives, the derivative being a verb. (In some cases, there is no discernible difference in meaning between the base and the derivative; in other cases the semantic connection is obscure.) An allomorph /k/ occurs only if the base morpheme has one syllable beginning with /r/ or /l/. An allomorph /kă/ occurs in free variation with /kră/.

Regular examples:

'thạm	'to do'	kră-'thạm	'to be doing'
'râp	'level'	'krâp	'to prostrate oneself'
'dôt	'to jump'	kă-'dôt	'to jump'
'lặp	'hidden, out of sight'	'klặp	'to return'

Irregular:

'wâŋ	'free, unimpeded'	'kwâŋ	'wide, spacious' (an adjective)

3.7.4. Reduplications are of five types: non-productive, simple, syncopating, raised, and altered. (Repetitive orders of the type /'dayn 'dayn/ are a syntactic matter.)

Non-productive reduplications are exemplified by /'wặt-'wa/ 'temples' (3.1.4.). Morphological analysis of the relationships between the two constituent morphemes of such reduplications is not attempted here, although the large number of examples of the type /'waew-'waw/ 'brilliant', where the second morpheme differs from the first by a nucleus /a/, are certainly analyzable.[14] For the bulk of the cases, however, a listing of hundreds of allomorphs is the only solution.

Simple reduplications consist of two instances of the same allomorph of a given morpheme occurring as one lexeme: /kỳap-kỳap/ 'almost'; /'dềk-'dềk/ 'children, child'. The effect is a generalization or softening (rather than emphasis) of the meaning of a lexeme. Applied to verbs, this reduplication often changes the English translation from verb to adjective: /'lỳn/ 'to slip', /'lỳn-'lỳn/ 'slippery'.

[14]And are analyzed by M. R. Haas in 'Techniques of Intensification in Thai' (Word 2.127-30).

<u>Syncopating</u> <u>reduplications</u> are a function of adjectives only. The form is the same as for a simple reduplication, with the exception that the first syllable is capable of syncopation after a stressed syllable.

Such reduplications have the meaning 'non-predicate' and are usually translatable by English adverbs and relative clauses: cf. /'tjiŋ rỹ°/ 'Is that <u>true</u>?' and /'tjiŋ-'tjiŋ rỹ°/ 'Really?' They are not negatable: cf. /'khǎo 'nám jěn-'jᶒn./ 'Give me some water that's cold.' and /'nám 'ní mǎj khǒj 'jᶒn./ 'This water is hardly cold.' A variation of the non-predicate meaning is 'non-distinctive attribute': cf. /pᶒn 'nǿk 'jǎj/ 'It's a <u>big</u> bird' (implies a class of big birds) and /'pᶒn 'nǿk jǎj-'jǎj/ 'It's a big bird' (implies no such class); /khǎw 'lᶒn kĭ-'la 'mǎk./ 'They play a lot of sports.' and /khǎw 'lᶒn kĭ-'la mǎk-'mǎk./ 'They play sports a lot.' Adjectives of more than a syllable have simple reduplications with similar meaning, but are not common: /sǎ-'baj-sǎ-'baj/ 'comfortably'.

<u>Raised</u> <u>reduplications</u> are also a peculiar function of adjectives. Regardless of the tone of the base adjective, the first syllable of the reduplication has plain high tone (a special allophone of it--cf. 1.4.2.), and the two syllables are separated by close clause juncture:

'di:'di	('good')	'rǎon:'ráon	('hot')
'kǎw:'kǎw	('old')	'nǎw:'nǎw	('cold')
'mǎk:'mǎk	('much')		

Raised reduplications have the meaning 'emphatic predicate': /!mǎe: wǎn 'ní 'rǎon:'ráon°/ 'Gosh, it certainly is hot today!' Compound adjectives have only their second syllable ~~reduplicated~~ ^{raised}: /dĭ-'tjǎj:dĭ-'tjᶒj°/ 'I'm <u>so</u> glad!'

The construction is typical of women's speech rather than men's.

Altered <u>reduplications</u> are a function of substantives. The form is a simple reduplication with the infix /ay/ or /ae/ in the second instance of the base morpheme, which has an allomorph without nucleus. Selection of the infix allomorph is apparently not statable except in negative terms: if the base morpheme has a nucleus /ay/ or a final /w/, the allomorph /ay/ is not selected; if the base has a nucleus /ae/ or a final /j/, the allomorph /ae/ is not selected. The meaning is a mild disparagement of the semantic content of the base lexeme, or a generalization of that content, in either case translatable by '-- and that sort of thing.' Examples:

'kịn	'to eat'	'kịn 'kaen	'wining and dining'
'mâo	'pot'	'mâo 'mây	'pots and pans'
'fẹj	'electricity'	'fẹj 'fayj	'the electrical system'

This type of reduplication is quite often in discontinuous order: /mãj 'pẹj, mãj 'payj lã˙/ 'I'm not going to go (the whole idea bores me).'