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Part I

*Edited by Philip N. Jenner, Laurence C. Thompson,
and Stanley Starosta*

AUSTROASIATIC STUDIES

PART I

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Author's note

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It has become obvious that this paper could do with revision. Since it was written (1973), much new material has appeared in the field of Mon-Khmer studies, and my own ideas about how the Temiar language works have also changed. In the meantime, I have written several different studies (see the References below) that attempt to *explain* important features of Temiar grammar, rather than merely describe them.

Here, I would like to indicate something of the major revisions that the present paper needs. These concern two main areas: orthography (the spelling system), and verbal morphology (the system of prefixes and infixes on the verb. A few typographic corrections are also entered here.

Temiar orthography

The phonemic analysis of Temiar that I presented in this paper seems to be quite sound (with one exception, see below), and it corresponds exactly to the system worked out by Gérard Diffloth, the other linguist who has worked closely on Temiar. However, the orthography I employed in the 1960s must now be replaced by one that corresponds to the norm that has recently emerged in Mon-Khmer studies. That such a norm *has* emerged is evident from the writing system employed in most of the papers collected in Davidson 1991. (That volume was published several years after I presented my own set of recommendations on Aslian orthography – Benjamin 1985, 1986 – which were based on mechanical typewriting rather than computer-based methods. The current wide availability of computer typefaces means that those recommendations also need revision.)

The specific changes in Temiar orthography since ‘An outline of Temiar grammar’ was published concern the writing of the long and the nasal vowels. (The orthography of the consonants remains unchanged.)

The same basic vowel symbols are used as previously: *i, e, ε, u, ə, a, u, o, ɔ*. But where originally a macron was used to indicate long vowels, such vowels are now written as geminates – i.e., the vowel is written doubled. For example: *lɔɔy* instead of *lōy* ‘wade across’; *deek* instead of *dēk* ‘house’.

A subscript ‘Polish hook’ was originally used to indicate a nasal vowel, but this is now indicated by a superscript *tilde* symbol, in accordance with normal phonetic practice as well as Mon-Khmer linguistic conventions. For example: *hāãʹ* instead of *hq̣ʹ* ‘you’.

Temiar phonology

In the present study (p. 138), I described the minor-syllable vowel as containing a single ‘phoneme’, /ə/, with a variety of allophonic pronunciations. It would have been better simply to describe the various pronunciations of what is in fact a non-phonemic epenthetic transition. These vary between [ə], [i] and zero, depending on the following consonant and the vowel in the word-final major syllable. In a strictly phonemic transcription, therefore, these ‘minor vowels’ should be omitted.

Temiar verb morphology

The original account was correct morphologically, but not grammatically. The following tables show how the various inflected forms of the verb should be assigned to grammatical categories. In particular, the recognition of a productive middle voice inflection in *-a-*, which I had originally treated as a mode (the ‘simulfactive’), has allowed me to regularise the verb paradigm, as resulting from the systematic cross-cutting of voice and mode. Among other advantages, it is no longer necessary to list such impossible forms as ‘Simulfactive causative’ in filling out the paradigm.

The following three tables present, in condensed form, the necessary revisions to the verb morphology section of the original paper.

Monosyllabic: *gəl* ‘to sit’

VOICE	ASPECT			VERBAL NOUN
	Perfective	Imperfective	Progressive	
Base	<i>gəl</i>	<i>gəlɡəl</i>	<i>bar-gəlɡəl</i>	<i>gəlɲəl ~ ɲəlɡəl</i>
Middle		<i>gagəl</i>	<i>bar-gagəl</i>	<i>*gəɲagəl</i>
Causative	<i>tərgəl</i>	<i>tərelɡəl</i>	<i>bar-tərelɡəl</i>	<i>təreɲɡəl</i>

Sesquisyllabic: *səlɔɡ* ‘to sleep’ (also: ‘lie down’, ‘marry’)

VOICE	ASPECT			VERBAL NOUN
	Perfective	Imperfective	Progressive	
Base	<i>səlɔɡ</i>	<i>səɡlɔɡ</i>	<i>bar-səɡlɔɡ</i>	<i>sənɔɡ ~ sənəɡlɔɡ</i>
Middle		<i>salɔɡ</i>	<i>bar-salɔɡ</i>	<i>sənəlɔɡ</i>
Causative	<i>sərlɔɡ</i>	<i>sərəɡlɔɡ</i>	<i>bar-sərəɡlɔɡ</i>	<i>sərəɲɔɡ</i>

Deponent (non-inflecting): *halab* ‘to go downstream’

Perfective	ASPECT	VERBAL NOUN
	Imperfective, Progressive	
<i>halab</i>	<i>bar-halab</i>	<i>həɲalab</i>

Errata

Page 170, iii):

For: The causative perfective of /həwal/ ‘to emerge’, for example, is /*hərwal/.

Read: The causative perfective of /həwal/ ‘to emerge’, for example, is not /*hərwal/ but /tərhəwal/.

Other errors, typographical or otherwise, are corrected in the margins below.

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AN OUTLINE OF TEMIAR GRAMMAR

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0. *Introduction*

Temiar is a member of the Central division (Diffloth's 'Senoic') of Aslian, a group of Austro-asiatic languages spoken in the Malay Peninsula by a variety of tribal peoples. The Temiar comprise some 10,000 swidden cultivators occupying a territory of about 2,000 square miles on the Kelantan-Perak watershed in the northern part of West Malaysia. The author has spent a total of nearly two years in close contact with them, carrying out ethnological and linguistic fieldwork, almost entirely in the Temiar language.

The purpose of this paper is to provide an overview of Temiar phonetics, phonology, morphology and (to a lesser extent) syntax sufficient to illustrate the main features of the language. A somewhat informal style of presentation has been followed, so as to remain more in keeping with the unfinished character of the analysis.

Temiar possesses two major dialects, Northern and Southern, the differences between which are mainly phonological. The dividing line between them runs between the Piah and Plus valleys in Perak; in Kelantan it continues between the Enching and upper Perolak valleys until it dips southwards at the point where the Perolak becomes raftable; it continues just westwards of the Kelaik river,

finally to cross the Brok river at Jeram Gajah. This means that each dialect has roughly the same number of speakers. The present account is based on the Northern dialect as spoken in the Betis and lower Perolak valleys of Ulu Kelantan. Occasional reference is made to the Southern dialect, and to other dialects, where the differences warrant mention.

1. *The Sound System*

1.1 *The Phonemes*

Only the segmental phonemes are dealt with here, as no analysis of the intonational system has yet been made. The phonemic norms are charted below.

1.1.1 *Consonants*

Consonants are non-syllabic vocoids and contoids, and are the only phonemes that occur word-initially or word-finally.

	labial	dental	palatal	velar	glottal	pharyngeal
Unvoiced						
stop	p	t	c	k		
Nasal	m	n	ɲ	ŋ		
Voiced						
stop	b	d	j	g		
Semi-						
vowel	w		y			
Lateral		l				
Flap		r				
Frica-						
tive			s			
Laryngeal					ʔ	h

The first four points of articulation should more precisely be labelled bilabial, apico-alveolar, lamino-alveolar and dorso-velar, respectively.

1.1.2 *Vowels*

Vowels are syllabic vocoids, and they occur only medially between consonants (*i.e.* not word-initially or word-finally). Vowels may be: oral or nasal; short or long; high, mid or low; front, central or back. In all there are 30 vowel phonemes:

<i>short oral</i>	<i>long oral</i>	<i>short nasal</i>	<i>long nasal</i>
i ɯ u	ɪ ʊ ū	ɨ ʉ ɣ	ɤ ʋ ɸ
e ə o	ē ā ō		
ɛ a ɔ	ē ā ɔ	ɛ ʌ ɔ	ē ā ɔ

On articulatory and distributional grounds the vowels may also be classified into two overall sets: the 'inner' vowels /e ə o/ and the 'outer' vowels /i ɯ u e a ɔ/, along with their long and nasal variants.

1.1.3 *The phonemes exemplified*

The following examples serve to justify the phonemes by minimal or semi-minimal contrasts.

1.1.3.1 *Consonants*

p	p̄p 'to lie on one's front'	d	d̄j 'to become accustomed'
t	t̄k 'to fear'	j	j̄b 'to tear (eyes)'
c	c̄s 'to select'	g	ḡb 'completely'
k	k̄s 'porcupine'	w	w̄l 'fireplace'
m	m̄s 'to pick up'	y	ȳj 'noise'
n	n̄h 'odour'	l	l̄n̄l̄āk 'sideways'
ɲ	ɲ̄h 'to set alight'	r	r̄n̄r̄āk 'senile'
ŋ	ŋ̄h 'to waver'	s	s̄n̄s̄āk '(place-name)'
b	b̄h 'father'	ʔ	ʔ̄p 'to brood (hen)'
		h	h̄h̄hak 'to heal'

1.1.3.2 *Vowels*

jɪ?	'sick'	sək	'cigarette- end'	tuh	'to tell'
pəcɪ?	'soft'	tɣy	'spring!' (expr.)	gatɣ?	'snail'
gagɪd	'middle'	t̄h	'to drop'	t̄y	'elsewhere'
gagɪd	'to rub hard'	l̄ɣd	'to get angry'	kat̄ɣd	'bark- fibre'
hɪs	'to swell'				
gej	'quickly'	bək	'rhizomorph'	do?	'to run'
gēj	'to burn'	tēh	'to rain'	dō?	'father'
tɛ?	'earth'	tab	'egg'	tɔs	'to pluck'
kɛ?	'fish'	t̄ɔb	'deaf'	lɔy	'to arrive'
tē?	'just now'	ba?	'to carry on back'	cɔs	'bird'
wēd	'bark- cloth'	bā?	'rice'	lɔy	'to wade'
wēd	'giddy'	wās	'branching'	sɔb	'hoarse'
		wā̄s	'childless'		

It is sometimes useful to treat length and nasality as co-vowels, combining, as illustrated above, with the basic short oral vowels.

1.2 *Phonetics*1.2.1 *Pronunciation of the segmental phonemes*1.2.1.1 *Consonants*a) *Unvoiced stops*

Before vowels, *i.e.* word-initially and -medially, /p t k/ are un-postaspirated stops: /pɔc/ 'to wait', /gapɪd/ '(place-name)', /teh/ 'above', /tat̄ā?/ 'old man', /kakɔw/ 'to call hard'. Before /ā/ they are slightly lip-rounded, [p^w] etc.: /pēw/ 'bang!', /t̄ā|/ 'to curse', /kēt/ 'to move up'. Before vowels /c/ is slightly affricated, [t^ʎʃ]: /cacɪb/ 'to go of a sudden'. Before /T̄ ē/, /k/ is

fronted to the centro-domal position: /kʈj/ 'to grate', /kēw/ '(personal name)'. Word-finally after non-front vowels /k/ is barely audible as a back dorso-velar stop [q]: /lāk/ 'side'.

Medially, unvoiced stops are slightly pre-aspirated: /gapid/ [ga^hpid] '(place-name)', /gatēʔ/ [ga^htēʔ] 'mite'.

Finally /p t c k/ are released nasally, audible phrase-finally as a long voiceless nasal, [P̄ṃ] etc.: /ʔōp/ 'to hug', /cēt/ 'to be fully cooked', /tāc/ 'to plait', /lɛk/ 'to know'.

b) *Nasals*

Initially and medially /m n ŋ/ are voiced nasal obstruents: /mōŋ/ 'tooth', /na-nūy/ 'he copulates', /ŋob/ 'you plural', /ŋāw/ 'silly'. Medially before homorganic stops they are unreleased: /ʔempēd/ '(place-name)', /ʔɛn-tūy/ 'over there', /ʔɛŋcʈk/ 'Enching River', /ʔɛŋkūʔ/ 'thunder deity'. Before /ē/ the nasals are slightly lip-rounded, especially /m/ [m^w]: /mēh/ 'nose'. Before vowels /ŋ/ has a slight i-offglide.

Finally, the nasals have a non-oral release, and they exhibit a modification, noticeably audible phrase-finally, whereby the oral closure occurs before the velic opening, effectively producing a very short voiced stop with a long voiced homorganic nasal release, [b̄ṃ] etc.: /ram/ 'to sit (hen)', /koman/ 'nibbling', /ʔāp/ 'to be stupid', /lanɛŋ/ 'knowledge'. After vowels, *i.e.* as syllable coda, /ŋ/ has no offglide.

Before /r/ the nasals have a voiced homorganic stop transition, [m^br] etc.: /ʔɛm-rōʔ/ 'we shall say', /ʔɛnrōs/ 'kidney', /rɛŋrɛc/ 'to eat

flesh', /gɛŋrak/ 'pleasant'.

In the same syllable as /s/ in fast tempo speech /m n/ sometimes become devoiced and syllabic: /mestīʔ/ ~ [m̥tīʔ] 'needs must', /sɛnʔɔy/ ~ [ŋʔɔy] 'human being'.

c) *Voiced stops*

Initially and medially /b d j g/ are unaspirated voiced stops: /bɔj/ 'to lick', /dɛŋdɛk/ 'to storm', /jɔb/ 'to roast tubers', /gagəl/ 'to sit down of a sudden'. Before /ə/ they are slightly lip-rounded, especially /b/ [bʷ]: /bəh/ 'father'. Before vowels /j/ is slightly affricated, [dʲʒ].

Word-finally /b d j g/ are unexploded, having a nasal release which is audible phrase-finally as the short voiced homorganic nasal, [b^m] etc.: /ʔāb/ 'tiger', /ʔād/ 'stick, rod', /bəhuʒ/ 'guilty', /bəʔāg/ 'to flood'.

d) *Semivowels*

Initially and syllable-finally /w/ is the mid-high back rounded vocoid [ɔ]: /wā/ 'fireplace', /yēw/ 'to stay awake'. Between vowels it has very slight bilabial friction, especially before /ɛ/: /ʔawɛn/ 'bamboo.'

/y/ is everywhere the mid-high centralised-front half-spread vocoid [ɪ]: /yayāp/ 'to cry suddenly', /mənəy/ 'sister-in-law'.

e) *Lateral*

/l/ is the 'clear' voiced apico-alveolar lateral continuant in all positions: /lɛk/ 'to know', /pəlud/ 'to explode', /wɛl/ 'again'. Finally /l/ is unexploded.

f) *Flap*

/r/ is the voiced apico-alveolar flap in all positions: /rōp/ 'to tickle fish', /marēk/ 'weir', /sɔ̄r/ 'cockroach'. In the Ber and Plus valleys many speakers pronounce /r/ as a labialised retroflex vocoid.

g) *Fricative*

/s/ is the voiceless lamino-alveolar rill spirant in all positions: /səloɔ̄g/ 'to lie down', /gasēp/ 'bamboo sliver', /gēs/ 'incest'.

h) *Laryngals*

Word-finally following a long vowel, /h/ represents simple aspiration, hardly more than prolongation of the preceding vowel: /mēh/ 'nose'. Elsewhere, /h/ is an unvoiced vocoid taking on the coloration of the adjacent vowel(s): /hup/ 'feelings', /hahēr/ 'to heave'. Following /u/ there is considerable bilabial friction: /tuh/ 'to speak'.

Following a long vowel, /ʔ/ represents a lenis closure of the vocal cords: /tāʔ/ 'sir'. Word-finally after short vowels /ʔ/ is somewhat more fortis, consisting of a sudden interruption of the airstream: /bəʔ/ 'to carry'. Elsewhere, /ʔ/ is a rapid closure-and-opening of the vocal cords, more lenis word-initially than -medially: /ʔaʔēʔ/ '(personal name)'.

i) *Geminates*

Phonemic geminates are pronounced as single consonants: /lɛllɛd/ '(bird sp.)', /rɛnnon/ 'catching'. This holds wherever there occurs the phonetic sequence [-ɛCV-], which in all cases is the phonemic sequence /-ɛCCV-/. (The rationale for this solution is given in section 1.3.3.lb.)

1.2.1.2 *Vowels*a) *Covowels*

Nasality, written with a subscript hook, has no effect on either the quality or length of the vowel, and no special discussion of the pronunciation of the nasal vowels is necessary: in all cases they are pronounced in exactly the same way as the equivalent oral vowels except for the added feature that the velic is open. It must be remarked, however, that all vowels may become freely and non-significantly nasalised in the environment of nasal consonants; this applies equally to the 'inner' vowels /e e o/ which do not possess independent phonemically nasal forms. In other words, for vowels the contrast oral/nasal is neutralised in the environment of nasal consonants.

Specifically, non-significant nasalisation of vowels occurs in the following circumstances:

- i) Vowels are usually pronounced nasal immediately preceding nasal consonants: /sə_lantab/ 'ritual generosity' = [sə_lə_ŋantab], /ʔū_ŋ/ 'to smell' = [ʔū_ŋ].
- ii) Vowels preceded by nasal consonants and followed by non-nasal pronunciations, even in the same speaker: /ŋə_ŋ?/ 'mother' = [ŋə_ŋ? ~ ŋə_ŋ?], with a range of intermediate degrees of nasalisation.
- iii) Between two nasal consonants vowels are almost always pronounced nasally: /mɔ_ŋ/ 'tooth' = [mɔ_ŋ].

- iv) A nasal consonant in an adjacent syllable allows a vowel to vary freely between oral and nasal pronunciations: /senʔɔ̃y/ 'human being' = [sɛnʔɔ̃y ~ sɛnʔɔ̃ỹ].
- v) Phonemically nasal vowels in the absence of nasal consonants may also cause non-significant nasalisation in adjacent syllables: /catʏd/ 'to crash into' = [cætʏd ~ cætʏd̃].

Length, written as a macron, increases the duration to between 1½ and 2 moras, while making the vowel more lenis in enunciation. Since long vowels often have rather different qualities than the equivalent short vowels, their pronunciation is described below separately for each vowel.

b) *Vowels*

/i/ is the short mid-high centralised-front spread vocoid [ɪ]: /git/ 'to fetch water'. Long, /ɪ̃/, it is higher, fronter and twice as long: /baɪ̃k/ 'sky'.

/e/ is the short mid-front unrounded vocoid [eʷ]; /teh/ 'above'. Long, /ē/, it is higher, about Cardinal /e/, and twice as long: /yē̃/ 'I'. Before /c j ɲ s/ both /e/ and /ē/ have an i-offglide: /rec/ 'to eat flesh', /ʔadēs/ 'to take exercise'.

/ɛ/ is the short mid-low centralised-front unrounded vocoid [ɛ̂]: /reh/ 'below'. Long, /ē̃/, it is low, front and twice as long: /tē̃/ 'just now'.

/ʊ/ is the short high central half-rounded vocoid [ʊ]: /mʊn/ 'true'. Long, /ū̃/, it

is more back and twice as long, [ʉ:˘]: /kən̄h/ 'name'.

/ə/ is normally the short high-mid central unrounded vocoid [ə˘]: /gəl/ 'to sit'. Before /-Cɛ-/ it is fronted [ə˘], probably overlapping with /i/: /səkɛʔ/ 'screwpine'. Between /s/ and /l/ or /r/ in prefinal syllables /ə/ is very short, sometimes disappearing altogether: /səluh/ 'to shoot blowgun', /sərāw/ '(place-name)'. Long, /ē/, it is high-mid back unrounded [i:], causing some lip-rounding and velarisation of adjacent consonants: /cēy/ 'to nose-kiss', /mēh/ 'nose'.

/a/ is normally the short low back-central unrounded vocoid [a˘]: /galag/ 'greedy'. Long, /ā/, it is more back, sometimes slightly rounded, and about half as long again as the short vowel, [ɑ:]: /ʔāi/ 'to swear'. Both /a/ and /ā/ have clearly audible i-offglides before /c j ɲ s/: /laj/ 'to arrive unexpectedly', /tāc/ 'to plait'.

/u/ is the short high slightly centralised back rounded vocoid [ɔ]: /lɛpud/ 'caudal fin'. Long, /ū/, it is higher, more back and twice as long, about Cardinal /u/: /gūl/ 'mortar'. When bearing a sentence-stress /ū/ is slightly labialised, [uʷə]. Before /c j ɲ s/ both /u/ and /ū/ have i-offglides: /huj/ 'to sip', /ʔūɲ/ 'to smell'.

/o/ is normally the short mid-high back rounded vocoid, about Cardinal /o/: /bəlɔʔ/ 'thigh'. In open prefinal syllables it is higher, and probably overlaps the area of /u/, which does not occur in that position within the morpheme: /golap/ 'to carry on shoulder'. Long, /ō/, it is also about Cardinal /o/, but tends to be

labialised in positions of sentence-stress: /gōl/ 'deep pool'. Both /o/ and /ō/ have i-offglides before /c j n s/: /ʔōj/ 'to request'.

/ɔ/ is the short mid-low centralised-back rounded vocoid [ɔ̣]: /bəlɔʔ/ 'parent-in-law'. Long, /ō/, it is the back vocoid about Cardinal /ɔ/ and about twice as long: /gōl/ 'Batang Padang River'.

1.2.2 *Overall speech features*

1.2.2.1 *Rhythm*

Temiar speech-rhythm is 'syllable-timed', *i.e.* syllabic peaks succeed each other at approximately equal intervals of time.

1.2.2.2 *Stress*

Word-stress is not significant, falling regularly on the final syllable. Sentence-stress forms part of the suprasegmental accentual system and is accordingly not discussed here, except insofar as it affects allomorphic alternations.

1.2.2.3 *Articulatory setting*

In speaking Temiar the jaws are held fairly open and are active. The lips too are active, but are held neutral. The overall state of the oral cavity is rather tensed, and the pharynx is contracted (due perhaps to the frequent occurrence of /ʔ/). The main consonantal articulation is apico-alveolar, with the lingual contact made slightly more towards the blade than in English. Articulation throughout is by the application of firm pressure. The tongue is anchored centrally to the floor of the mouth, with the body held (so far as it is possible to tell) slightly concave to the roof. The tip is tapered.

The foregoing description applies to the state of the articulatory organs in 'neutral gear', and does not necessarily apply to the production of all Temiar speech sounds. Nevertheless, the more striking features of Temiar 'accent' may be accounted for in this way.

1.2.2.4 *Phonological differences between dialects*

One important difference between Northern and Southern Temiar should be discussed here, as it is a prerequisite for understanding some of the morphophonemic alternations to be described in section 1.3.3:

Words that in Northern Temiar (NT) end in an unvoiced stop, in Southern Temiar (ST) end in the equivalent voiced stop: NT /bɔt/ 'to suckle' = ST /bɔd/; NT /bɛcuc/ 'sour' = ST /bɛcuɟ/.

Words that in Northern Temiar end in a voiced stop, in Southern Temiar end in the equivalent unvoiced stop: NT /bɔd/ 'to wear in belt' = ST /bɔt/; NT /gabag/ 'to sing' = ST /gabak/.

It might seem from these examples that confusion could result between speakers of the different dialects (who do in fact often meet). But the context always makes the meaning clear. And since these sound-changes apply to all words with final stops, the Temiar can continue to regard the difference as merely a matter of regional accent (though sometimes a cause of amusement). However, the effect of this difference is to make morphophonemics rather more complex in Northern than in Southern Temiar.

1.3 *Phonology*

1.3.1 *Canonic structures*

1.3.1.1 *The syllable*

Only two types of syllable occur: *open syllables* of canonic form CV, and *closed syllables* of canonic form CVC. Hence every syllable has a consonant as onset. (The reasons for not admitting syllables of canonic form CCVC are given in section 1.3.4.1; in this analysis such structures are written as CəCVC, and are regarded as bi-syllabic.)

1.3.1.2 *The word*

Words are potentially free-standing forms which always begin and end with a consonant. Hence word-final syllables are always closed, while prefinal syllables may be either open or closed. There appears to be no restriction on the permitted sequence of closed and open syllables in the prefinal parts of the word. In general, word-building proceeds by *infixation*, *prefixation* and *proclisis*: suffixation never occurs. The final syllable is therefore in whole or part always the root of the word.

The minimal canonic structure of the word is CVC: /dēk/ 'house'. The maximal structure is perhaps CV.CVC.CVC.CV.CVC.CV.CVC: /kəʔam-bar-tərlhəwal/ 'you-two shall make (it) emerge'. (Note: the hyphen marks an enclitic linkage between units one or both of which are bound forms; it is written therefore only within the word or when identifying units as bound forms in the course of grammatical analysis.) All possible combinations of syllables may occur in words intermediate in

size between the two just quoted.

1.3.2 *Distribution of phonemes*

1.3.2.1 *Consonants*

a) *Unvoiced stops*

These may not occur as the first element in medial consonantal clusters, nor immediately following nasal or nasalised vowels (1.2.1.2a) in the same syllable. (Such very rare forms as /kenōp/ 'fleshy pericarp' -- they are almost all botanical terms! -- must therefore be assumed to have phonetically oral vowels in the final syllable. Words of this type probably derive from earlier forms with medial prenasalised stops (*cf.* section 1.3.3. 3c.iii).) Some partial exceptions to this rule are noted in section 1.3.3.1a.

b) *All other consonants*

These may occur in all possible canonic C positions. (There may, however, be some hitherto unrecognised restrictions on the co-occurrence of the first two consonants in words (? morphemes) of the schewa form CəCVC.)

1.3.2.2 *Vowels*

a) In final (tonic) syllables, all vowels may occur, with the exception that nasal vowels do not occur in syllables with final unvoiced stops.

b) In prefinal (atonic) syllables, only short oral vowels may occur, with the following further restrictions:

i) In open syllables, /ε u ɔ/ do not occur (with the exception of the bound allomorphs of the pronouns /kane-/ 'we (exclusive)', /ɲɔ-/ 'you (plural)', and /wε-/ 'they two', which are in any

case usually pronounced /kani-/ , /nə-/ and /we-/))

ii) In closed syllables, /e ə u o/ do not occur.

iii) Therefore, /u/ occurs only in final syllables.

1.3.3 Morphophonemic alternations

1.3.3.1 Obligatory alternations

These ensue from the restrictions on distribution outlined in section 1.3.2, and they come into operation as the result of certain common morphological processes.

a) Consonants

i) If the first element of a medial consonantal cluster is an unvoiced stop, it undergoes voicing to the equivalent nasal in Northern Temiar, and to the equivalent voiced stop in Southern Temiar (*cf.* 1.3.2.1a):

NT: *yəɛpyāp → yəmyāp 'to cry' (root: yāp)

ST: *ʔətʔṽt → ʔedʔṽt 'to fast' (root: ʔṽt)

NT: *hup-bṽʔ → hum-bṽʔ 'normally' (roots: hup, bṽʔ)

This alternation most commonly occurs in verbal reduplication processes (2.2.2.1) and in the bound allomorphs of certain nouns (2.1.2.3).

ii) A word-final unvoiced stop in a syllable with a nasal consonant as onset undergoes nasalisation:

*lanək → lanəŋ 'knowledge' (root: lək)

*kəmnəp → kəmnəm 'burying' (root: kəp)

This alternation most commonly occurs as a result

of verbal nominalisation by infixation of /-n-/ (2.2.2.3a).

In some variants of Northern Temiar, however, when a final unvoiced stop follows a medial sequence of two nasal consonants, as in the second example above, it remains unassimilated. Such forms as /bennɔt/ and /tɛpn̄āc/ may then be heard where other speakers say /bennɔn/ 'giving suck' (root: /bɔt/) and /tɛpn̄āj/ 'plaiting' (root: /tāc/). In cases where adults make the assimilation, their children frequently fail to do so. (It may well be that this alternation should strictly be considered a non-obligatory one; it has much in common with alternations described in sections 1.3.3.2 and 1.3.3.3.)

In Southern Temiar these complications do not arise, as in that dialect, following from rules 1.2.2.4 and 1.3.3.1, medial nasal clusters are rare. In place of the Northern Temiar forms /bennɔn/ and /tɛpn̄āj/, Southern Temiar has /bednɔd/ and /tejn̄āj/, which involve no morphophonemic changes.

b) *Vowels*

i) In prefinal closed syllables the inner vowels /e ə o/ are replaced by the outer vowels /i ɛ u/ respectively:

*deŋ-rəb → diŋ-rəb 'shelter'

*səglɔg → siŋglɔg 'to lie down'

*bon-mɔŋ → biŋ-mɔŋ 'bug-flower'

This alternation most commonly occurs as the result of verb reduplication (2.2.2.1a) and in bound allomorphs of certain nouns (2.1.2.3).

Conversely, in prefinal open syllables the outer vowel /ε/ is replaced by the inner vowel /ə/:

*tərəjʔɔj → tərəjʔɔj 'to raise'

*sərəglɔg → sərəglɔg 'to lay down'

This alternation most commonly occurs in the causative voice of the verb when deriving the continuative aspect from the perfective (2.2.2.1a).

ii) In prefinal syllables long vowels are replaced by the equivalent short vowels:

*kanē-cṬb → kanε-cṬb 'we go'

*lāŋ-tiw → laŋ-tiw 'opposite side of river'

*kərōp-dēk → *kərop-dēk → kərum-dēk 'under-house'

This alternation most commonly occurs in bound allomorphs of certain nouns (2.1.2.3) and pronouns (2.1.3.3).

iii) In prefinal syllables nasal vowels are denasalised to the equivalent oral vowel (in the absence of any adjacent nasal consonant, that is):

*hə-cṬb → ha-cṬb 'you go'

*jəhuʔ-cah → jəhuʔ-cah 'cah-tree'

1.3.3.2 *Non-obligatory alternations*

a) *Nasal consonants*

i) Final nasal consonants in prefinal syllables tend to undergo partial regressive assimilation to a following stop or nasal consonant, especially in fast tempo speech:

kərum-dēk ~ kərun-dēk 'under-house'

ʔun-bəʔ ~ ʔum-bəʔ 'they carry'

cənkəb ~ cəŋkəb 'lid'

This assimilation does *not* occur, however, with nasal consonants in the reduplicated syllable of verbs in the continuative aspect (2.2.2.1a): /pənɸət/ not /*pəmpət/ 'to long for'. This sometimes allows a distinction to be made between the continuative aspect of the verb and the verbal noun derived from it (2.2.2.3a.1):

səŋlɔ̄k 'to hunt successfully' (səlɔ̄k reduplicated)

sənɔ̄k 'success at hunting' (səlɔ̄k + -n-)

ii) Initial voiced stops in prefinal closed syllables with a nasal coda freely alternate with the equivalent nasal consonant (but *cf.* 1.3.3.3b):

bəŋ-dēk ~ məŋ-dēk 'space around house'

jənɸap ~ ɸənɸap 'waning of moon'

gəntək ~ ŋəntək 'ear'

bʊŋ-lay ~ muŋ-lay '(a leafy plant sp.)'

jəmɸəm ~ ɸəmɸəm 'birth'

Presumably, those speakers who use the assimilated nasal form are those who also make the nasal assimilation mentioned in section 1.3.3.1a.ii.

b) *Proclitics*

Proclitics of the highest order within the word tend in fast tempo speech to undergo progressive weakening by centralisation of the vowel and/or loss of the final consonant:

bar-halab → ba-halab → bə-halab 'to go down-
river'

mu-cTb → mə-cTb 'they shall go'

The proclitics affected in this way are primarily the morpheme /-bar-/ (2.2.4) and the bound forms of the pronouns (2.1.3.3).

1.3.3.3 *Loanwords*

Most loanwords in Temiar come from or *via* Malay, and in most cases the form they take is understandable (though not always entirely predictable) in terms of the alternations described in the preceding sections. However, there are a few classes of Malay loanwords which in Temiar undergo certain consonantal substitutions the rationale for which is not covered by the morphophonemic and distributional rules so far presented. The fact that the consonantal systems of Malay and Temiar are very similar in structure strongly suggests that the rationale for these substitutions lies simply in the fact that they *are* loanwords (*cf.* Henderson 1951). Insofar as nothing has yet been discovered in the phonology of either language which would require such substitutions, the alternations may best be regarded as a kind of morphophonemic process, applicable only to those morphemes marked as 'Malay loans'. The Temiar are acutely aware of the distinctiveness of this class of word and that they treat them in a phonologically special manner. The processes involved are still fully productive and may be applied to any suitable word.

a) *Malay final nasals*

Final nasal consonants of Malay words are changed in Temiar to the equivalent unvoiced stops, whatever classes of vowels and consonants constitute the remainder of the word. (In the following examples the Malay forms are on the left, the Temiar on the right.):

kəbun	→	kəbut 'orchard'
tuhan	→	tohāt 'God'
raŋcaŋ	→	raŋcak 'programme'
kucin	→	kucik 'cat'
lobaŋ	→	lobak 'hole'
bilan	→	bilak 'to count'
kambiŋ	→	kambik 'goat'

b) *Malay initial nasals*

The initial consonants of Malay words with medial nasal consonants are optionally changed in Temiar to the equivalent voiced stops, even though Temiar phonology does permit words to contain several nasal consonants in succession (*e.g.* /ŋempŋm/ 'stamen'):

naŋka	→	daŋkā? 'jackfruit'
naŋmo?	→	jaŋmo? 'mosquito'
nama	→	daŋmēh 'name'
naŋbor	→	daŋbōh 'number'
naga	→	naḡā ~ daŋḡā? 'dragon'

Note that the final example illustrates clearly the influence of the medial nasal consonant; furthermore, the intrusive nasal seems to have been deliberately

added in order to allow the denasalising of the initial consonant so that the word may be better marked as a Malay loan.

c) *An attempted explanation*

Though the purpose of this paper is to provide a synchronic description, the alternations just described are clearly cases where phonological history and the present-day cultural context are both immediately relevant. Once this is acknowledged, at least three mutually inclusive explanations seem possible.

i) The alternations described in section 1.3.3.3a: The earliest Malay loans were probably borrowed at a time when Temiar was undergoing a sound-shift (Diffloth, personal communication) in which some word-final nasal consonants became devoiced to the equivalent unvoiced stop. If this was the case then the Malay loans could well have been swept along analogically in the process. Later loans (the alternation is still 'productive') would then have continued the pattern thus established simply because they were loans, in keeping with the desire of the Temiar to keep the distinction between Malay and indigenous culture elements well marked (*cf.* Benjamin 1966:6).

ii) The alternations described in section 1.3.3.3b are all the more striking because they appear at first sight to be the exact reverse of the more normal morphophonemic processes described in section 1.3.3.2a.ii. However, the problem eases somewhat when it is noted that both of these alternations are non-obligatory: the words remain well-formed even if the assimilation is not

carried out. This suggests that in the environment #-VNC... (where N is any nasal consonant) the opposition between voiced stop and nasal is neutralised to a degree sufficient to allow of either pronunciation without change of meaning. Nevertheless, the degree of neutralisation is not so complete as to prevent speakers expressing a stylistically-based preference for the one pronunciation over the other. Temiar culture, as we have seen, makes it desirable that Malay loanwords should be specially marked, and in such cases the voiced-stop form is the standard one. With 'pure' Temiar words, however, the choice is strictly a personal matter.

iii) A third explanation² is one which would treat both of the above alternations as reflexes of a single set of pro-phonemes. This is to posit the existence for both Temiar and Malay of some sort of pro-phonemic series of pre-nasalised stops in addition to the normal stop and nasal consonants (leaving undiscussed here the status of such pro-phonemes as possibly a feature of an earlier stage of the history of these languages or of their generative grammars). Taking the labial pro-phoneme */^mb/ as an example, we can posit the following series of allophones and developments in each language according as they occur word-initially, -medially or -finally, and in nasal or oral syllables. (Nasal syllables are those with nasal consonants as onset or coda, or with phonemically nasal vowels, or any combination of these.)

Derived Phonemes

Pro-allophones	Oral Syllables			Nasal Syllables		
	initial	medial	final	initial	medial	final
<i>Malay:</i> all positions: ^m b	b-	-mb-	-m	m-	-mb-	-m
<i>Temiar:</i> initial or medial: (-) ^m b-	b-	-m-		m-	-m-	
finally after oral vowels: - ^m p			-p			
finally after nasal vowels: -mb						-m

In addition to explaining the alternations described in section 1.4.3.1, this interpretation would have the merit of also explaining the following phenomena:

1) The lack of simultaneity in the velic, velar and oral closures described in section 1.2.1.1 for the pronunciation of medial unvoiced stops, final unvoiced stops, final voiced stops and final nasals.

2) Certain (not widely accepted) interpretations of Malay phonological history which also posit a series of prenasalised stop phonemes (*e.g.* Verguin 1964).

This whole argument would, of course, be better presented in terms of distinctive feature analysis, but such a discussion would wander too far from the

main lines of this paper.

1.3.4 *Orthography*

This is not the place to make suggestions for a practical orthography, especially as young Temiars seem to have little difficulty in gaining their basic literacy directly in Bahasa Malaysia. From a scientific point of view, however, two features of the orthography used here need discussion.

1.3.4.1 *Schewa-forms*

Many linguists working on Austroasiatic languages prefer not to write the *schěwa* vowel in words of the form CəCVC, as they regard the first two consonants as constituting a single cluster and the whole structure a monosyllable. Nevertheless I have decided to retain this orthography even though it is clear that the occurrence of /ə/ in such a position is wholly determined by the absence of any other vowel. (The same, of course, applies to the writing of /ɛ/ in words of the form CɛCCVC.) The reasons for this are:

a) It increases the ease of reading of many words that would otherwise look very clumsy on paper, especially in the case of such reduplicated forms as /sɛg|ɔg/ 'to lie down', which in a strictly phonemic orthography would be written /sg|ɔg/.

b) The initial and medial consonants of roots of the form CəCVC do not hold together as a cluster when the word is altered by morphological processes: the reduplicated form of /sə|ɔg/ is /sɛg|ɔg/ not /*s|ɛgs|ɔg/, an impossible structure. Furthermore, such expressive forms as /səra|ɔg |ɔg/ occur in which the erstwhile 'cluster' loses all identity. It seems best that the orthography

should separate such consonants clearly.

c) Most importantly, *schēwa*-forms are physiologically disyllabic.

1.3.4.2 *The dialects*

The orthographic problems encountered in finding a single writing system to encompass all the dialects of Temiar are not as serious as might at first be thought. This is because the phonological differences between Northern and Southern Temiar are predictable. It is interesting to note, though, the curious result that an orthography which is phonemic for one of the dialects automatically becomes a morphophonemic orthography for the other, and vice versa. The decision to take the phonemic orthography for Northern Temiar as standard is based on three considerations: it is the dialect spoken by the Temiar announcers in the Orang Asli service of Radio Malaysia; it is the dialect described by Carey in his pioneer study (1961); and it is the dialect I speak myself and on which I have done most of my research.

2.0 *Morphosyntax*

This term identifies a level of analysis in which just enough of Temiar syntax is outlined to identify the significant word-classes and to indicate the more common constructions into which they enter.³ The sentence as a syntactical structure is not analysed here, except to point out that its major components are *noun phrases* and *verb phrases*, with the optional addition of elements (*adjuncts*) that fit into neither of these categories. The basic word-order of Temiar is subject + verb + object, though this may be modified in certain

circumstances.

All classes of words that enter into the construction of noun phrases and verb phrases are categorised as *nominal elements* and *verbal elements* respectively. Each word-class set up on this basis is regarded as 'primarily' either a nominal or a verbal element: it is in their primary roles that the word-classes display their widest range of morphological and syntactical potentialities. Some of the word-classes, however, possess 'secondary' roles as elements of the kind other than that of their primary role; *e.g.* the primarily verbal elements 'verb' and 'adjective' may function secondarily as nominal elements in certain circumstances, while the primarily nominal element 'pronoun' may function secondarily as a verbal element. In general, word-classes are more restricted as regards their morphological and syntactical potentialities in their secondary roles than in their primary roles. (Additionally, many word-classes may function tertiarily as sentence-adjuncts.)

It must be noted that, as is common in Southeast Asian languages, many individual lexemes possess membership in two or more different word-classes. But this is a lexical matter, and the integrity of the word-classes as such remains unassailed.

2.1 *Nominal elements*

2.1.1 *The noun phrase*

The noun phrase (NP) may be rewritten as follows:

$$NP \rightarrow (\text{prep}) \begin{bmatrix} \text{noun} \\ \text{pron} \end{bmatrix} (\text{mod}) \left(\begin{bmatrix} (\text{pron})(\text{dem}) \\ \text{dem} \end{bmatrix} \right)$$

where mod $\rightarrow \begin{cases} \text{adj} \\ \text{verb}_c \end{cases}$

The primary nominal elements are therefore: nouns (noun), pronouns (pron), demonstratives (dem), and prepositions (prep). The secondary nominal elements are: adjectives (adj) and verbs in the continuative aspect (verb_c). The primary elements are discussed in this section, while the secondary elements are discussed later as verbal elements.

All realisations of the above NP formula constitute possible utterances, but not complete sentences, in Temiar. Some examples follow:

1. (prep)noun(adj)(pron)(dem):

dēk 'house'

dēk mənū? (house big) 'big house'

dēk yē? (house I) 'my house'

dēk reh 'house below'

dēk mənū? yeh (house big I) 'my big house'

dēk mənū? ?i-reh (house big I-below) 'my
big house below'

2. (prep)pron(adj)(dem):

hā? 'thou'

ha-?ajəg hā? ?ajəg 'thou ~~senior~~'

junior/

ha-doh 'thou here'

ha-?ajəg doh 'thou ~~senior~~ here'

junior/

3. (prep)noun(verb_c)(pron)(dem):

dēk kəlkel (house collapsing) 'collapsing
house'

dēk kəlkel yeh (house collapsing I) 'my
collapsing house'

dēk kəlkel reh (house collapsing below)
'collapsing house below'

dēk kəlkel ?i-reh (house collapsing I-below)
'my collapsing house below'

4. (prep)pron(verb_C)(dem):

na-ce?cā? (he-eating) 'he who is eating' ☺

na-ce?cā? tūy (he-eating there) 'he
who is eating there' ☺

(Note: this last example is syntactically am-
biguous, and can also, as a complete sentence,
mean 'he is eating'; but see the prepositional
forms below.)

na-doh 'he here' (dem)

ha-?ajəg doh 'you ~~senior~~ here' (adj + dem)

junior

na-ce?cā? tūy 'he eating there' (verb_C + dem)

All these constructions can be preceded by a
preposition (which is what clearly indicates that
constructions of the form pron + verb_C may be noun
phrases in which the verb is a modifier rather
than a predicate):

num-dēk kəlkel ?i-reh 'from my collapsing
house below'

ma-na-ce?cā? tūy 'to him eating there'

2.1.2 Nouns

Nouns may take a proclitic preposition and
they may be modified by an immediately following
pronoun in a 'possessive' construction.

2.1.2.1 Primitive nouns

These are non-inflecting, and function in no
other syntactic class: /jəhʏ?/ 'tree', /mɔp/

'tooth', /maŋkey/ 'scar'.

2.1.2.2 *Inflecting nouns*

These form plurals on the same morphological patterns as the aspectual inflections of the verbs (2.2.2.1). They may also function syntactically as verbs and adjectives:

tā? 'sir'

tatā? 'old man'

te?tā? 'old men'

hɔj na-tatā? (already he-old) 'he has grown old'

gɔb tatā? (Malay old) 'an old Malay'

rəwāy 'head-soul'

na-rəywāy 'he is suffering from soul-loss'

2.2.2.3 *Compounding nouns*

These possess two allomorphs: *free*, behaving as primitive nouns; and *bound*, proclitic to another noun or verb (in which case the morphophonemic alternations outlined in section 1.3.3 apply). In some cases the bound form is only recognisable as such because it bears no word-stress:

dēk 'house' → diŋ- (diŋ-yēw 'guard-house')

bōt 'flower' → bun- (bun-mōŋ 'bug-flower')

kā? 'fish' → ka- (ka-hō? fish-shell = 'tortoise')

kərop 'place beneath' → kərum- (kərum-dēk 'space under house')

mən- 'collectivity of' (forms plurals; no free allomorphs)

These constructions are all class-maintaining.

2.1.2.4 *Verbal nouns*

Though behaving syntactically much as primitive nouns, these are derived by productive derivational processes from verb roots. (The morphology of verbal nouns is therefore treated in section 2.2.2.3):

cəbnTb	yeh	'my going'	(root: cTb 'to go')
ten?əl	dēk	'house-building'	(root: tē?əl 'to make')
dēk	senlog	'house for sleeping'	(root: səlog 'to sleep')
cərəŋkəb	na?	'that lid'	(root: cərkəb 'to close')
cəner		'knife'	(root: cər 'to pare')

2.1.3 *Pronouns*

Pronouns may take a proclitic preposition, but they may not be modified by another pronoun. There are three allomorphic classes of pronouns: *stressed*, *unstressed* and *bound*. In all cases the pronouns express obligatorily the categories of number (singular, dual, plural) and person (first, second, third). The first-person pronouns also express the category of inclusion (the inclusion v. exclusion of the person addressed). The following paradigm sets out all the forms:

	<i>Stressed</i>	<i>Unstressed</i>	<i>Bound</i>
I	yē?	yeh	?i-
I (emphatic)	cē?	-	yi-
thou	hē?	hah	ha-
he, she, it	-	?əh	na-, ?ə-
we (thou and I)	?ār	?əh	?a-
we (he and I)	yār	yah	ya-
you two	kə?an	kə?an	kə?a-

	<i>Stressed</i>	<i>Unstressed</i>	<i>Bound</i>
they two	-	wɛh, weh	wɛ-, we-
we (you and I)	ʔɛ̄?	ʔɛh	ʔɛ-
we (they and I)	kanɛ̄?	kanɛh	kanɛ-, kɪ-, kɛ-
---- (emphatic)	kandɛ̄?	kanɛh	kani-
you (plural)	ɲɔb	ɲɔb	ɲɔb-, ɲɔ-
they (plural)	-	ʔun, ʔən	ʔun-

The lack of stressed third-person pronouns is commented on in section 2.1.4.5.

Note that in the dual and plural pronouns 'attraction' occurs:

yār ʔalɯ (we-two Alung) 'Alung and I'

ɲɔb mɛn-ʔalɯ (you plural-Alung) 'you and Alung's people'

The various allomorphs function as follows:

2.1.3.1 *Stressed pronouns*

This allomorph occurs:

a) In unmodified noun phrases:

cɔ̄? ʔa-na?? --yɛ̄? 'who's there?' --'I'

ma-cɔ̄? nam-ʔog? --ma-hā? 'to whom will he give?' --'to you'

kəʔan kəʔa-sɛhluh 'you-two, you are blow-piping'

b) As a nominal modifier ('possessive') when bearing sentence-stress:

kəwā̄s ʔyār 'our child'

2.1.3.2 *Unstressed pronouns*

These occur immediately succeeding a word bearing sentence-stress, especially when functioning as a nominal modifier or as the subject of auxiliary and adjectival verbals:

kə'wā̄s yah 'our *child*'

cə'lək ?əh 'it's red'

'hɔj yeh (already I) 'I'm off'

2.1.3.3 *Bound pronouns*

The major function of the bound form of the pronoun is as an element in the verb phrase: it will accordingly be discussed as such in section 2.2.7.

As a nominal element, the bound allomorph replaces the unstressed allomorph in all constructions or utterances where the pronoun immediately follows its head and is in turn immediately followed by a word or phrase within the same sentence-stress group. Its occurrence is, then, essentially phonologically determined, and it need bear no special relationship, morphologically or syntactically, to the word to which it is attached. Indeed, the resultant form can be classed as a word only in the phonological sense.

kəwā̄s ?ə-na-ji? = kəwā̄s ?əh na-ji? (child he
he-sick) 'his child is sick'

səlāy kanɛ-tūy = səlāy kanɛh tūy (swidden
our-there) 'our swidden over there'

hɔj ?i-ma-teh = hɔj yeh ma-teh (already I-to-
above) 'I'm off upstream'

Note that there are two bound forms of the third-person singular pronoun: /?ə-/ occurs in the

positions just described (*i.e.* as a modifier), while /na-/ occurs as the head in its construction:

na-ʔajəg doh (he-~~senior~~ this) 'this ~~senior~~ *junior*
one'

dēk ʔə-tūy (house ʔə-there) 'his house over
there'

dēk na-tūy (house na-there) 'the house of
him over there'

In verb phrases /na-/ is the form used (2.2.7).

2.1.4 *Demonstratives*

These are a closed group of temporal and locational deictic particles that may take a proclitic preposition, but may not be modified by an immediately succeeding word of any class. The basic forms are:

<i>Temporal</i>	<i>Locational</i>
kāl 'soon'	doh 'here', 'this'
tēʔ 'earlier today'	naʔ 'there', 'that'
tɔp 'past'	nin 'just out of reach'
nɛŋ 'before'	tūy 'elsewhere, other side, far away'
nin 'indefinite past'	rɛh 'below, downstream'
	teh 'above, upstream'

2.1.4.1 *With prepositions*

Demonstratives may take prepositions to form class-maintaining demonstrative constructions. The locational demonstratives combine freely with the 'true' prepositions (2.1.5):

ma-doh 'to here'

num-naʔ 'from there'

rɛʔ-tūy 'like elsewhere'

2.1.4.2 *Defined demonstratives*

Additionally, the meaning of most demonstratives may be made more definite by the proclitic /ʔa-/ 'definer', which is used with the same function with some other word-classes also (kin terms, personal names):

ʔa-kā | 'immediately'

ʔa-tēʔ 'just now'

ʔa-naʔ 'just there'

2.1.4.3 *Inflected demonstratives*

Sometimes a change of form effects a change in meaning, though the resultant demonstratives should probably be considered as distinct lexemes:

rēh '(movement) vertically downwards' (cf. rɛh)

tēh '(movement) vertically upwards' (cf. teh)

nɛŋnɛŋ 'formerly, long time ago' (cf. nɛŋ)

All of the forms in the last three sections may stand as independent utterances.

2.1.4.4 *As modifiers*

In constructions, the demonstratives have a modifying deictic function in noun phrases, and serve as adverbial adjuncts to verb phrases. It is good Temiar idiom to use demonstratives freely in this way whenever possible, even when it does not seem to add anything to the meaning; this is especially the case with pronouns:

yēʔ doh ʔim-ʔog ma-hāʔ naʔ 'I here will give to you there'

na-kəlʔ ma-tɛʔ rɛh (he-fall to-earth below)

'he fell down'

ki-cTb ma-bōk lumpōh tūy (we-go to-Kuala Lumpur
elsewhere) 'we went to Kuala Lumpur'

səlay tawun ?ənam puloh ha-tōp (swidden year
sixty formerly) 'the swidden of 1960'

2.1.4.5 As ⁿpronominal complements

The demonstratives are essential complements to allow the third-person pronouns /na-/, /wε-/ and /?un-/ to stand free:

na-doh 'he here'

wε-tē? 'they-two just now'

?un-tūy 'they elsewhere'

When compounded in this way the third-person pronouns behave syntactically like any other stressed-form pronoun.

2.1.5 Prepositions

2.1.5.1 True prepositions

All true prepositions are obligatorily proclitics and may occur attached to nouns, pronouns, demonstratives, and interrogative particles. The most common prepositions are: /ma-/ 'to', /num-/ 'from', /rε?-/ 'like', and /?εn-/ 'in, at'.

?εn-jəhʉ? tūy (in-tree there) 'in the tree
over there'

num-tiw bō? (from-river main) 'from the main
river'

rε?-yē? ham-tə?εl (like-I you-m-do) 'do it
like I do'

ma-lō? ha-cTb? ma-teh (to-where you-go --to-
above) 'where are you going?' --'upstream'

2.1.5.2 *Restricted prepositions*

Some prepositions are restricted in occurrence to certain word-classes, and occasionally to certain lexemes:

do-rēh; do-tēh 'downwards; upwards'

?e-lo? (?e-what?) 'what?, why?'

2.1.5.3 '*Articles*'

Some prepositions serve purely syntactic rather than 'semantic' functions, in particular that of indicating the 'case' of noun phrases, especially when they are in inverted positions within the sentence. The major prepositions of this type are /?i-/ 'subjective' and /ha-/ 'objective':

na-wē? ?i-kəlō? ?əh (he-leave ?i-brother he)
'his brother left' (a reversal of the normal:
kəlō? ?ə-na-wē?)

ha-?ōs wē-nōh (ha-fire they-light) 'they lit
the fire'

Note: /?i-/ and /ha-/ also make the attached noun phrase definite, and further analysis may show that they have something of the character of definite articles, differentiated by 'case'. In the first sentence /?i-kəlō?/ identifies specifically the brother already mentioned in the discourse, and none other. The second sentence contrasts with /?ōs wē-nōh/ 'they lit (any) fire', and it refers specifically to the particular fire they had got ready, and no other. This usage may be compared with the 'definer' usage of /?a-/ with demonstratives (2.1.3).

2.1.5.4 *Synthetic prepositions*

Certain nouns of location and quantity possess bound allomorphs which may behave syntactically as prepositions, with the sole difference that they

may in turn take true prepositions (like any noun). The preposed forms, however, behave as compound prepositional phrases rather than as noun phrases. These words are the following:

kərum-	'beneath'	(kərop 'underside')
paŋ-	'on top of'	(pāk 'topside')
laŋ	'other side of'	(lāk 'side')
kəloj-	'inside'	(kəloj 'interior')
rəm-	'as much as'	(rəp 'how much?')
mar-	'as big as'	(mar 'size')

For example: kəloj-ʔōk 'in the water'; num-kəloj-ʔōk 'from (out of) the water'

2.1.5.5 /ma-/ as a verbal element

The use of /ma-/ to link some transitive verbs with their noun-phrase objects is mentioned in section 2.2.1.

2.2 Verbal elements

2.2.1 The verb phrase

The verb phrase (VP) may be rewritten as follows:

$$VP \rightarrow (tə?)(aux) \left\{ \begin{array}{l} \text{adj} + \text{NP} \\ \text{pron}(-m-)\text{verb} \end{array} \right\}$$

$$\text{where verb} \rightarrow \left\{ \begin{array}{l} \text{verb}^i \\ \text{verb}^t \\ \text{bar-} + \text{noun} \end{array} \right\} \left\{ \begin{array}{l} (\text{pron} + -m- + \text{verb}) \\ (\text{ma-})\text{NP} \\ (\text{pron} + -m- + \text{verb}) \end{array} \right\}$$

The primary verbal elements are therefore: verbs (verb), falling into two major subclasses, intransitive (verbⁱ) and transitive (verb^t); adjectives (adj); auxiliaries (aux); the morpheme /bar-/: the morpheme /-m-/: and the negative /tə?/. The secondary verbal elements are: nouns (noun); pro-

nouns (pron); noun phrases (NP); and the preposition /ma-/. The secondary verbal elements have already been discussed in their primary roles in section 2.1.

Note that unlike the noun phrase rules the above rules allow of the construction of complex phrases by the subordination of a noun phrase object or of a recursive verb phrase.

All realisations of the above VP formula constitute possible utterances, and in some cases possible sentences also. Some examples follow:

1. (tɔʔ)(aux)adj + NP:

mənūʔ ʔəh (big it) 'it's big'

mənūʔ dēk rəŋah ha-ʔən-tūy (big house dark
you-at-there) 'your dark house there
is big'

tɔʔ mɛʔnūʔ dēk naʔ (not big house that)
'that house is not big'

mɔʔ mənūʔ ʔəh (exists big it) 'it is big'

2. (tɔʔ)(aux)pron(-m-)verbⁱ(pron + -m- + verb):

na-cTb (he-go) 'he goes'

hɔj na-cTb (already he-go) 'he has gone'

tʔʔ nam-cTb (still he-m-go) 'he still
wants to go'

na-cTb nam-nēh (he-go he-m-see) 'he goes
to see'

tɔʔ mɔʔ nam-ʔog kim-cTb (not exist he-m-
give we-m-go) 'he just won't allow us
to go'

3. (tɔʔ)(aux)pron(-m-)verb^t + pron + -m- + verb:

ʔi-səluh ŋam ʔim-rec (I-shoot animal I-m-
eat) 'I shot an animal to eat'

4. (tɔʔ)(aux)pron(-m-)verb^t(ma-)NP:

hɔj mu-pəluʔ ma-kanēʔ (already they-m-hit
ma-we) 'they were about to hit us'

(ʔe-loʔ) tɔʔ ha-rɛpɾec sec mɛjmej naʔ
(why) not you-eat meat excellent that)
'(why) didn't you eat that excellent
meat?'

5. (tɔʔ)(aux)pron(-m-)bar- + noun:

tɪʔ na-bar-leh (still he-bar-wife) 'he
is still married'

(jəhʔ naʔ) tɔʔ na-bar-səlāʔ ((tree that
not-it-bar-leaf) '(that tree) has no
leaves'

Note: most verbs may be modified by adjectives, but the VP formula would be made unnecessarily complicated if it were altered to account for such 'adverbial' constructions; some examples are given in section 2.2.8.4b.ii.

2.2.2 Verbs

Morphologically, verbs fall into three form-classes according to the canonic structure of the root:

Monosyllabic: CⁱVC^f (kɔw 'to call')

Schewa-form: Cⁱ_əC^mVC^f (səlɔg 'to lie down')

Polysyllabic: CⁱVC^mVC^f (halab 'to go down-
river')

CⁱVCC^mVC^f (sindul 'to float')

Inflectional (*i.e.* class-maintaining) morphological processes allow verbs to express the following categories: aspect (perfective, continuative, simulfactive); voice (active, causative); and mode (indicative, desiderative). In addition, cross-cutting these categories is a contrast

between transitivity and intransitivity, sometimes unmarked morphologically but lexically defined, and sometimes marked indirectly by the inflection of the verb. Tense is unmarked in the Temiar verb, though it may be expressed by various verbal auxiliaries and sentence adjuncts.

Derivational (*i.e.* class-changing) morphological processes allow verbs to form verbal nouns and ideophones (expressive adjuncts) of various kinds.

2.2.2.1 *Verb inflection*

a) *Monosyllabic and schewa-form verbs:*

The morphological processes that generate the various aspects, voices and modes of the verb are best illustrated paradigmatically.

In general, the perfective aspect is unmarked, consisting of the root alone. The other two aspects are formed by reduplicative processes, involving the initial and final consonants in the continuative aspect, and the initial consonant and the marker vowel /-a-/ in the simulfactive aspect. The active voice is unmarked, while the causative voice is formed variously by the infixation of /-r-/ or by prefixation of its allomorphs /tɛr- ~ bɛr-/. The desiderative mode is in all cases formed by the infixation of /-m-/ between the proclitic pronoun and the verb; it is discussed separately in section 2.2.5.

It should be noted, however, that many verbs are defective: for example, *schewa* verbs commonly lack perfective forms, or they exist only in the causative form. Discussion of these exceptions is out of place in this summary account, as they involve no new morphological principles.

Taking the roots /kōw/ 'to call' and /səlog/ 'to lie down, sleep, marry' as models, the patterns of verb inflection are as follows (note that many of the morphophonemic alternations described in section 1.3.3.1 are involved in these processes).

Active Voice

Perfective:	C^iVC^f	kōw
	$C^i\epsilon C^mVC^f$	səlog
Simulactive:	$C^i_aC^iVC^f$	kakōw
	$C^i_aC^mVC^f$	səlog
Continuative:	$C^i\epsilon C^fC^iVC^f$	kəwkōw
	$C^i\epsilon C^fC^mVC^f$	səglog

Causative Voice

Perfective:	$t\epsilon rC^iVC^f$	tərkōw
	$C^i\epsilon rC^mVC^f$	sərlɔg
Simulactive:	$t\epsilon r_aC^iVC^f$	*tərakōw
	$C^i\epsilon r_aC^mVC^f$	*səralɔg
Continuative:	$t\epsilon r\epsilon C^fC^iVC^f$	tərwkōw
	$C^i\epsilon r\epsilon C^fC^mVC^f$	sərglog

Notes:

i) The above examples are for the sake of illustration only; hardly any verbs are employed in every possible inflected form. The two starred forms are not yet attested; see note iv below.

ii) Monosyllabic roots with initial /c-/ or /t-/ take /bɛr-/ instead of /tɛr-/ in the causative: /cā?/ 'to eat' gives /bɛrcā?/ 'to feed'.

iii) Some apparently irregular verbs diverge from this paradigm in one or more respects. The causative perfective of /həwal/ 'to emerge', for example, is /*hərwal/. The 'irregularity' here, however, is not in the reduplicative pattern employed (it is a frequent means of forming expressives), but in the use to which it is put.

iv) Where the meaning allows, all these forms are productive, with the exception of the causative simulfactive which occurs in certain 'crystallised' forms only, and even then usually with a meaning other than that implied by the inflectional categories. It is a pattern frequently occurring in expressives, however.

v) Non-productive patterns different from the standard ones but obviously causative in form are also found: /jəl/ 'to bark', /pəjəl/ 'to go hunting with dogs'; /lɛk/ 'to know', /təlɛk/ 'to teach'; /gōs/ 'to live', /təgōs/ 'to hunt for food'. The derived verbs all inflect like ordinary *schewa*-form verbs, except that they do not form causatives in /-r-/.

b) *Polysyllabic verbs:*

These undergo very few morphological changes. The root form marks the active perfective. A periphrastic construction equivalent to the active continuative can be formed with the proclitic /bar- ~ ba- ~ bə-/:

bə-halab 'to go downriver'

ba-sindul 'to float'

There are no other morphological devices available to these verbs. Many polysyllabic verbs may nevertheless be employed causatively with only the context to indicate the change of meaning:

?i-halab mə-rəh 'I went downriver'

?i-halab tət̩k mə-rəh (I-go-downriver cane to-below) 'I took the cane downriver'

2.2.2.2 Functions of verb inflections

a) The contrast perfective/continuative

i) Focus:

While the perfective aspect puts the emphasis on the result or object of the action, the continuative aspect puts the emphasis on the action itself. Other contrasts implied are: completive/continuative, punctiliar/iterative, resultative/self-sufficient. The following examples illustrate these contrasts (the perfective form is given first, the continuative second):

na-rec ʔamboj 'he eats pork' (as
opposed to other meats)

na-rɛpɾec ʔamboj 'he's eating pork' (as
opposed to bathing or sleeping)

na-səlɔg babōʔ 'he slept with a woman'
(i.e. married her)

na-sɛgɔg babōʔ 'he sleeps around with
women'

na-bɛrcāʔ kəwās ʔəh 'she fed her child'
(i.e. got it fed)

na-bɛrɛʔcāʔ kəwās ʔəh 'she was feeding
her child' (i.e. occupied herself
in feeding)

ʔi-halab ma-reh 'I went downriver'
(and reached my destination)

ʔi-bə-halab ma-reh 'I was going downriver'
(when something happened)

ii) Transitivity:

The continuative aspect neutralises the transitivity of otherwise transitive verbs. For example, /səlɔh/ 'to shoot with a blowgun' is obligatorily transitive in the perfective aspect, but only optionally so in the continuative:

?i-səluh p̄am 'I shot an animal/some animals'

?i-səluh 'I went shooting'

?i-səluh p̄am 'I was shooting animals'

Note: if the object of the verb has already been mentioned it may be left unexpressed after a transitive verb: /?i-səluh/ could then mean 'I took a shot at it' where 'it' has already been mentioned.

b) *The simulfactive*

i) *Intensification:*

The simulfactive indicates suddenness, intensity, simultaneity:

?əm-cā? mənū? 'we'll eat a lot'

?əm-cacā? mənū? 'we'll have a feast'

?un-cəbcTb ma-teh 'they're going upstream'

?un-cacTb ma-teh 'they're all going upstream together'

?i-gə! 'I sat down'

?i-gagə! 'I sat down suddenly'

?im-pəlu? hah 'I'll hit you'

?im-palu? hah 'I'll hit you hard'

na-səlog 'he went to sleep'

na-salog 'he went straight off to sleep'

ii) *Spontaneity:*

The simulfactive may indicate an action that appears to occur without an external agency; sometimes the perfective form of the same verb

expresses the corresponding ergative construction:

na-wōg kəbē? 'he peeled open the fruit'

kəbē? na-wawōg 'the fruit split open'

na-certək rəŋkā? 'he shut the door'
(causative perfective)

rəŋkā? na-catək 'the door slammed shut'
(active simulfactive)

iii) *Reciprocity*:

With a preceding dual-number pronoun and the morpheme /bar-/ (see section 2.2.4) the simulfactive forms the reciprocal construction:

wε-bə-salōg (they slept each other)
'they got married'

kəʔam-səŋmāŋ 'ask questions, you two!'

kəʔam-bə-samāŋ 'ask each other questions!'

na-cō? kəwq̄s ʔəh 'she slapped her child'

kəwq̄s ʔəh wε-bə-cacō? 'her children were
slapping each other'

This construction is sometimes ambiguous; the following sentence is not a reciprocal one, but a synthetic continuative-intensive: /wε-bə-cacā?/ 'they were eating well together'.

c) *Causative*:

Both transitive and intransitive verbs may be given a causative meaning. In the case of otherwise intransitive verbs the causative inflection makes them transitive:

papēt na-cā? bər 'the baby eats vegetables'

ʔi-bercā? bər ma-papēt 'I feed vegetables'

to the baby'

tɔʔ ʔi-səŋTɪ (not I-wake) 'I didn't wake
up'

tɔʔ ha-səŋTɪ yeh (not you-cause-wake I)
'you didn't wake me up'

cɛp na-səg 'the bird got trapped'

yēʔ ʔi-tərsəg cɛp 'I trapped the bird'

d) *Adjectivalisation*

The continuative form of the verb may also function as a nominal modifier (see section 2.1.1).

2.2.2.3 *Verbal derivatives*

Verbs may undergo two major class-changing morphological processes: nominalisation, and the formation of various kinds of verbal adjuncts (expressives, ideophones).

a) *Nominalisation:*

The affix /(-)n-/ 'nominaliser' may occur with all three aspects of the active voice and with the continuative aspect of the causative voice. But it does not follow that the same aspectual *meaning* is carried over into the nominalised form; 'aspect' is here used in its morphological sense only. It is unusual for any single root to exhibit all possible nominalised derivatives, so the following paradigm employs a mixture of roots. (*Cf.* section 2.2.2.1a.)

Active Voice

Perfective:	$C^i \varepsilon n V C^f$	cɛr 'to pare' → cɛnɛr 'knife'
	$C^i \varepsilon n C^m V C^f$	səluh 'to shoot' → sɛnluh 'shooting'

Simulfactive:	$C^i anVC^f$	$k\bar{e}j$ 'to scrape' → $kan\bar{e}j$ 'scraper'
	$C^i \bar{e}naC^m VC^f$	$s\bar{e}luh$ 'to shoot' → $s\bar{e}naluh$ 'leaf- monkey' ('thing shot at')
Continuative:	$C^i \bar{e}C^f nVC^f$ or $n\bar{e}C^f C^i VC^f$	$k\bar{e}j$ 'to scrape' → $k\bar{e}jn\bar{e}j$ or $n\bar{e}jk\bar{e}j$ 'scraping'
	$C^i \bar{e}n\bar{e}C^f C^m VC^f$ or $n\bar{e}C^f C^i \bar{e}-$ $C^m VC^f$	$s\bar{e}gl\bar{e}g$ 'to knot' → $s\bar{e}n\bar{e}gl\bar{e}g$ or $n\bar{e}gs\bar{e}l\bar{e}g$ 'knot'

Causative Voice

Continuative:	$t\bar{e}r\bar{e}nC^i VC^f$	$t\bar{e}r\bar{?}oj$ 'to raise' → $t\bar{e}r\bar{e}n\bar{?}oj$ 'raising'
	$C^i \bar{e}r\bar{e}nC^m VC^f$	$s\bar{e}r\bar{l}og$ 'to lay down' → $s\bar{e}r\bar{e}n\bar{l}og$ 'lay- ing down'

Polysyllabic verbs have only one nominalised form:

$C^i \bar{e}nVC^m VC^f$	$golap$ 'to carry on shoulder' → $g\bar{e}nolap$ 'carrying on shoulder'
$C^i \bar{e}nVCC^m VC^f$	$sindul$ 'to float' → $s\bar{e}nindul$ 'floating'

Note: The forms with word-initial /n-/ are customary in Perak, while the infixal forms are used in Kelantan. This difference cross-cuts the Northern-Southern dialect difference.

All of these verbal nouns fall syntactically into the noun class, and their role in phrase structure has already been dealt with (2.1.2.4). Semantically, however, it is possible to distinguish

four different kinds of verbal noun:

i) *Gerunds*: These may be freely formed from any verb root, expressing the act or state of doing or being, whatever the verb denotes. The different form-classes of verbs derive their gerunds from different morphological aspects, thus:

Active: monosyllabic - continuative
schewa-verbs - perfective (in Kelantan)
 perfective or (prefixal)
 continuative (in Perak)
 polysyllabic - root

Causative:

monosyllabic - continuative
schewa-verbs - continuative
 polysyllabic - (none)

ii) *Agentive nouns*: These may not be freely formed, even from verb roots that would seem to allow it. They usually are nouns denoting the material object used to bring about the action denoted by the verb root:

canūŋ 'hammer' (cūk 'to hammer')
 cəner 'knife' (cəŋ 'to pare')

Agentive nouns are formed from the perfective ('knife') or simulfactive ('hammer').

iii) *Resultative nouns*: These may not be freely formed (though they probably retain a greater degree of productivity than agentive nouns). They are nouns denoting the physical object resulting from the action denoted by the verb root:

sənegləg 'knot' (səgləg 'to knot')

kənalēk 'strut' (kalēk 'to prop up')

kəɾənwāk 'frame' (kərwāk 'to frame')

Resultative nouns are usually formed from the continuative of *schewa*-form and causative verbs ('knot', 'frame'), and from the root of polysyllabic verbs.

iv) *Objective nouns*: These may not be freely formed. A few lexemes can be analysed as being of this type: /sənaluh/ 'dusky leaf-monkey' is morphologically equivalent to 'that which is shot' (/saluh/ + /-n-/); /sənalɔg/ may occasionally be used for 'the state of marriage' (/salɔg/ 'to marry'). Both these words are derived from the simulfactive of the verb.

b) *Expressives*:

This is a heterogeneous category of adjuncts many of which are formed from real or imaginary verb roots by what can only be described as 'reduplicative play'. Syntactically they stand in apposition to the whole verb phrase, or even to the whole sentence. Semantically they serve as a kind of expressive mirror-phrase, summing up in a word or two the 'feelings' that are stereotypically supposed to be aroused in the interlocutors' minds. It is extremely difficult to find satisfactory translation labels for these forms because, even though they are standardised phrases, they are concerned more with connotational than with denotational meaning. They are very common in ordinary conversation, and in stories and song-lyrics they are an essential element of the style.

Only a few of the very many patterns are exemplified here:

i) $C^i \epsilon C^f C^i \epsilon C^m VC^f$ derived from $C^i \epsilon C^m VC^f$ verbs:

bəybəguy (bəguy 'to waft' (smoke))

regrəwēg (rəwēg 'to stand conspicuously upright')

This is a productive pattern.

ii) $C^i \epsilon \text{ə} C^m VC^f C^m VC^f$ derived from $(*)C^i \epsilon \text{r} C^m VC^f$:

kəralog log sound of heavy footsteps (no root *kəlog)

cəra?ūk ?ūk stomach queeziness (no root cə?ūk known)

kərahəb həb lip-smacking (kərahəb 'to eat noisily')

iii) $C^i \epsilon C^f C^i \epsilon \text{r} C^m VC^f$ derived from $C^i \epsilon \text{r} C^m VC^f$:

genger|ət spindly-ness (ger|ət 'long and thin (of small objects)')

Note: Diffloth has shown that in the Aslian languages the category 'expressive' is historically and grammatically distinct from that of 'verb' (see his paper in this volume). However, insofar as a) expressive and verbal morphology uses many of the same patterns and b) some expressives actually derive from verb roots, it does not ~~destroy~~ *distort* Temiar grammar too much to treat expressives as 'verbal derivatives' in an elementary analysis such as this.

2.2.3 *Auxiliaries*

The verbal auxiliaries are: /hɔj/ 'already', /mɔʔ/ 'there is/are', /tɪʔ/ 'yet, still, more', and /boleh/ 'can'. (/boleh/ is probably a Malay loanword.) Their functions are as follows:

a) *Verbal modifiers*:

Within the verb phrase the auxiliaries limit or qualify the verb:

hoj na-tə?ɛl ?əh (already he-do it) 'he has done it'

tT? ?i-jə?ji? 'I am still sick'

mɔ? ha-cā? seǰ doh? -- mɔ? (mɔ? you-eat meat this? --mɔ?) 'Is it the case that you eat this meat?' -- 'it is'

boleh na-cTb -- boleh 'can he go?' -- '(he) can'

Note: /hoj/ is the most common way of indicating the past tense, and this is its major function.

b) *As independent words:*

Apart from serving as affirmatives in responses to questions (as in some of the above examples), the auxiliaries /tT?/ and /mɔ?/ may function adjectivally, sometimes reduplicated as /tɛ?tT?/ and /mɛ?mɔ?/:

tT? bēh hah? (still father you) 'Is your father still alive?'

tɛ?tT? ?əh (still he) 'Yes, he is'

mɔ? dēk ?ɛn-tūy 'there are houses over there'

hɔy, tɔ? mɛ?mɔ? (no, not there-are) 'no, there are not'

hoj yeh (already I) 'I'm off!'

2.2.4 *The morpheme /bar-/*

2.2.4.1 *Allomorphs*

/bar-/, a proclitic, has the following phonologically determined allomorphs:

/bar-/ before monosyllables: bar-dēk 'to have a house'

/ba-/ before CəC...: ba-bərəbcTb 'to make (something) go'

/bə-/ before CVC... (where V is any vowel other than /ə/): bə-halab 'to go downriver'

In slow speech, however, /bar-/ may be used in all these positions (*cf.* section 1.3.3.2b).

2.2.4.2 Functions of /bar-/

a) With monosyllabic and *schewa*-form verbs in the continuative aspect, /bar-/ expresses 'to be in the middle of doing something':

?i-bə-cəbcṭb ma-rəh 'I was in the middle of going down'

na-bə-səglɔg 'he is sleeping'

b) With polysyllabic roots, /bar-/ forms the continuative aspect:

?i-bə-golap paɔʔ (I-bar-carry-on-shoulder firewood) 'I am carrying firewood'

c) With some adjectives /bar-/ makes the ascribed characteristic inherent rather than contingent:

cəwəʔ laʔəs (dog bad) 'a bad dog' (either for the moment or always)

cəwəʔ bə-laʔəs 'a bad dog' (inherently so)

d) With numerals /bar-/ forms adjectival phrases:

kanēʔ bar-nəʔ doh (we bar-three here) 'we three'

e) With nouns, /bar-/ forms verbs:

?im-bar-dēk ?ən-tūy (I-m-bar-house at-there) 'I shall have my house over there'

cōʔ bar-yāj ?a-tēʔʔ (who bar-noise just-now) 'who made a noise just now?'

wə-bar-gēs (they(-two)-bar-incest) 'they committed incest'

2.2.5 The morpheme /-m-/

2.2.5.1 Morphosyntax of /-m-/

The affix /-m-/ occurs only bound simultaneously to a preceding bound-form pronoun and a succeeding

verb (to which extent it serves as a verb-marker). The paradigm of the *m*-affixed forms of the pronouns is as follows, with the stressed-form pronoun on the left:

	Singular	Dual	Plural
1st person	yē? ?im- cē? yim-	yār yam- ?ār ?am-	kanē? kim- kandē? kanim-
2nd person	hā? ham-	kə?an kə?am-	ɲob ɲom-
3rd person	na- nam-	wə- wəm-	?un- mu-, mə-

2.2.5.2 *Functions of /-m-/*

a) In declarative verb phrases /-m-/ marks the desiderative and intentive modes; /-m-/ does not necessarily imply futurity.

?og ?im-cā? (give, I-m-eat) 'give me some,
I'd like to eat it'

ham-gabag ka-həy? (you-m-sing or-no) 'Do
you want to sing or not?'

b) With second-person pronouns /-m-/ forms the imperative mode; with first- and second-person pronouns /-m-/ expresses the hortatory mode:

ham-tuh (you-m-tell) 'tell me!'

nam-?ən ma-doh (he-m-carry to-here) 'let him
bring it here' or 'tell him to bring it here'

c) Between verbs the construction (pron + -m-) marks the subordination of the second verb phrase to the first; it implies a purposive or resultative relationship between the phrases:

?ōr nam-cṭb nam-dalag ma-?un-tūy (order he-m-
go he-m-call to-they-there) 'tell him to
go and call them'

?i-hḡd nam-?og ma-yē? ney (I want he-m-give
to-me one) 'I want him to give me one'

d) With the auxiliary /hɔj/ 'already' /-m-/ forms an idiomatic construction with the meaning 'to be about to...', 'almost to...':

hɔj nam-kəbʊs 'he almost died' or 'he is about to die'

e) With interrogative particles /-m-/ forms idiomatic constructions expressing querulous questions of the type 'why should...?':

cɔʔ nam-tuh ʔəh? (who he-m-tell he) 'why should you think anyone told him?'

ʔe-loʔ nam-cɪb ma-teh? (why he-m-go to-above) 'why should you think he went up there?'

2.2.6 *The negative*

2.2.6.1 /tɔʔ/

Verbal phrases are made negative by the addition of /tɔʔ/ 'not' initially:

tɔʔ na-kəluʔ (not he-fall) 'he didn't fall'

tɔʔ boleh mu-gabag (not able they-m-sing) 'they won't be able to sing'

2.2.6.2 *Negative imperative*

The negative imperative is formed with /jɛʔ ʔa-/ (literally: 'refrain from') proclitic to the verb:

(ham-)jɛʔ ʔa-cɪb 'don't (you) go!'

2.2.6.3 *With adjectives*

Adjectives (2.2.8) may be made negative by /tɔʔ/, in which case they are usually in the reduplicated form:

tɔʔ sɛnjɛk 'not straight' (sɛjɛk 'straight')

2.2.6.4 *As independent utterance*

/tɔʔ/ may occasionally be used as an independent utterance to mean 'no!' when denying the truth of something just said. More usual in such positions,

however, are various sentence adjuncts that do not occur as verbal elements.

2.2.7 *Pronouns*

The pronouns have already been treated in some detail as primary nominal elements in section 2.1.3, and examples of their functioning in verb phrases were given in section 2.2.1. It remains only to give special attention to pronouns in this latter role.

In verb phrases the pronoun takes the bound form (indeed the main function of the bound pronouns is as verbal elements), and it serves to link the verb proper with its antecedent noun-phrase subject. The pronoun agrees with the subject in number, person and inclusivity. In this construction the pronoun is proclitic directly to the verb proper or to /bar-/ or /-m-/:

mɔp na-lut (tooth it-emerge) 'the tooth has emerged'

kanē? kanim-cTb (we we-m-go) 'we want to go'

tatā? na-bē-halab (old-man he-bar-go-down-river) 'the old man is going downriver'

If the subject is unexpressed, being understood from the context, the proclitic pronoun may occur alone with the verb to form a self-sufficient utterance or sentence:

?i-cTb 'I go'

tɔ? ha-tehtuh ka-deh? (not you-tell (question-marker)) 'didn't you tell?'

na-pelud ?a-kā! (it-explode ?a-soon) 'it'll explode any minute now'

hɔj mu-kōw (already they-m-call) 'they were about to call'

This subject-less construction allows the setting-up of a paradigm analogous to a verbal 'conjugation' (cf. Carey 1961: 14-5); but both classes of elements in such a paradigm are separable and may also occur with quite other formatives.

2.2.8 *Adjectives*

Most adjectives are morphologically similar to verbs (and most adjectives may indeed function as stative verbs); the diagnostic difference from verbs is that adjectives may not take the modal affix /-m-/ or undergo causative inflection. There are at least three classes of adjectives:

2.2.8.1 *Inflecting adjectives*

a) Almost all adjectives may be inflected for plurality, intensity or adverbiality by taking a form corresponding morphologically to the continuative aspect of verbs:

dēk jəro? (house long) 'a long house'

dēk jε?ro? 'long houses'

?abat cələk (cloth red) 'red cloth'

?abat cεŋlək 'red cloths'

sej mεj (meat good) 'good meat'

sej mεjmεj 'excellent meat'

mεjmεj hām-bə? (good-good you-m-carry) 'carry it carefully'

b) A subclass of inflecting adjectives is a group of words describing characteristics of animate nouns. These inflect for number on the pattern of the simulfactive and continuative aspects of the verb (cf. section 2.1.2.2):

bō? ?əh (female it) 'it's a female'

sen?ɔy babō? tūy (person female there) 'that
woman/girl over there'

?un-bɛ?bō? tūy (they-females there) 'those
women/girls'

Adjectives of this class may also function as nouns,
and in some cases as verbs.

2.2.8.2 *Non-inflecting adjectives*

These are not as common as inflecting adjectives.
Some examples are: /laʔəs/ 'dirty, bad', /cɛbrɛb/
'rough-textured', /galdɛn/ 'beautiful (woman's face)',
/pərahwak/ 'bright yellow'.

Note: though these words do not inflect as
adjectives, many of them are morphologically complex:
/cɛbrɛb/ is in the 'continuative' form, and /laʔəs/
is related to /ʔəsʔəs/ 'filthy' and /ʔɛsnəs/ 'dirt'.

2.2.8.3 *Restricted adjectives*

This is a small group of modifiers that never
occur as stative verbs; their only function is to
limit or qualify other words:

dēk he? (house only) 'a simple house with no
additions'

na-|ɛg|ug he? (he-laugh only) 'all he does
is laugh'

hɔy gēb (no completely) 'absolutely no'

pərahwak gēb 'completely yellow'

mɛj həjɛ? na-doh (good also it-this) 'this one
is also good'

2.2.8.4 *Functioning of adjectives*

a) *In noun phrases:*

As nominal modifiers adjectives follow their
head (*cf.* section 2.1.1):

sən?ɔ̄y məj (person good) 'a good person'
 səmuj pərahwak (wasp yellow) 'a yellow wasp'

b) *In verb phrases:*

i) As stative verbs adjectives precede their
 'subject complement' (*cf.* section 2.2.1):

məj sən?ɔ̄y na? (good person that) 'that
 person is good'

pərahwak səmuj təh (yellow wasp above) 'that
 wasp up there is yellow'

Note: stative constructions of this type possess a distinctive intonational pattern in which a strong sentence stress falls on the final syllable of the adjective.

ii) As verbal modifiers adjectives usually follow their head (*cf.* section 2.2.1, note):

na-cTb gej (he-go quickly) 'he goes quickly'

?ɛm-cā? mənū? (we-m-eat big) 'we'll eat a lot'

¹I have much benefitted from discussion or correspondence with several linguists during the research on which this paper is based. I would especially like to thank Asmah Haji Omar, Gérard Diffloth, R. Radhakrishnan, H.L. Shorto, J.L.M. Trim and N.H. Zide for their advice. Nevertheless, I must accept full responsibility for the analysis presented here.

²I am very grateful to J.L.M. Trim for first suggesting this analysis. But as Mr. Trim had available to him only the faulty and incomplete data of my earlier material, he must be absolved of responsibility for any misuse I have made of his ideas.

³The procedure adopted here owes much to the approach proposed in Lyons 1968, especially in Chapters 4, 7 and 8.

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