

# THE STRUCTURAL PATTERNS OF NORTHERN MON-KHMER LANGUAGES

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In this paper I attempt, following a suggestion of Miss E. J. A. Henderson, to explore the relevance to comparative and historical studies generally of systematic comparison of the total structural patterns of a number of cognate languages. These patterns are established for each language at a series of levels of analysis—syllable, word, phrase, sentence—as a manifold of syntagmatic *structures* and the paradigmatic *systems* of commuting terms which constitute them. The method differs from that of classical comparative philology, which uses the formal confrontation of selected lexical items to reconstruct an omnivalent set of hypothetical anterior patterns. Nevertheless the two procedures are not alternative but complementary, for the classical method presupposes the establishment of the patterns of each language compared, while the specification of cognate languages for the study now envisaged requires that a comparison of the conventional kind should first have been made.

Such an enlargement of the basis of comparison gains added significance in the light of recent studies of the linguistic area or *Sprachbund*. A linguistic area has been defined as ‘an area which includes languages belonging to more than one family but showing traits in common which are found not to belong to the other members of (at least) one of the families’,<sup>1</sup> and both India and continental South East Asia have been put forward as examples of linguistic areas; relevant traits including, in the former case, the occurrence of retroflex consonants, and in the latter that of back unrounded vowels. Areally conditioned phenomena may embrace the favouring of one inherited feature in a language at the expense of another where the first is analogous to features in contiguous non-cognate languages. A comparative linguistics which, as in a recent approach by H.-J. Pinnow,<sup>2</sup> assigns the elements of a language to two inventories, areal and genetic, might overcome the gravest limitation of the traditional method, that it operates only on a partial and arbitrary selection of items.

The phonological patterns of Palaung, Riang-Lang, and Praok, all languages of the Northern Mon-Khmer group, which are examined in the first section of this paper, display a parallelism which cannot be attributed to the archetypal pattern that they share, since the lexical correspondences oblige us to postulate a more complex one in which some of the relevant features do not appear. This suggests an amendment to the definition of the linguistic area quoted above; for it seems reasonable to regard the parallelism as an areal phenomenon, even though no language of another family is cited.

<sup>1</sup> M. B. Emeneau, *Language*, 32, 1956, p. 16, n. 28.

<sup>2</sup> ‘Über den Ursprung der voneinander abweichenden Strukturen der Munda- und Khmer-Nicobar-Sprachen’, *Indo-Iranian Journal*, 4, 1960, pp. 81–103.

## PHONOLOGY

The analysis of Palaung in this section is based on my article 'Word and syllable patterns in Palaung',<sup>1</sup> the material for which was collected in the field in 1957; that of Riang-Lang on my phonologization of material recorded in a broad phonetic transcription, and generously made available to me, by Professor G. Luce of Rangoon; and that of Praok, a Wa dialect of Kengtung State, on material which I collected in 1957.

This study is restricted to the *primary patterns* to which the great majority of words in the three languages are referable; an exhaustive treatment of local words would entail the statement of fragmentary *secondary patterns* in addition. As a measure of the legitimacy of this procedure, it may be noted that in a sample Palaung text of 2,800 words the primary pattern accounted for 98.2 per cent of occurrences.

*Word patterns.* For general purposes it is sufficient to define the word in each of the languages under discussion as a structure of syllables. Two classes of syllable can then be established in each case, to which the terms *major* and *minor* are applied. The ultimate definition of major and minor syllables is in terms of the patterns specified below, and so differs in detail from language to language, though there is a broad general equivalence. For the present it may be said that a minor syllable is one which contains no vowel other than an anaptyctic one.

The word consists, in Palaung, of a major syllable which may be preceded by one or two minor ones; in Riang-Lang, of a major syllable which is accompanied by either term of a two-tone system, and may be preceded by one or two minor syllables; and in Praok, of a major syllable which may be preceded by one minor one. These structures may be symbolized as follows, putting Ma for a major syllable, Mi for a minor one, T for tone, and using parentheses to indicate that a constituent may be present or absent:

Palaung : (Mi) (Mi) Ma ;  
 Riang-Lang : (Mi) (Mi) Ma<sup>T</sup> ;  
 Praok : (Mi) Ma

The possibilities may be illustrated by the following examples:

Palaung : *ta* 'to weave'; *kərta* 'tongue'; *rəkərta* 'loom';

Riang-Lang : *ˊtak* 'to adhere to'; *ˊtak* 'to predict'; *ˊtəktak* 'to attack';  
*ˊtərtəkkhran* 'to be troubled';

Praok : *ka* 'fish'; *sika* 'to speak'.

In Palaung and Riang-Lang there is a high degree of correlation between the categories of minor and major syllable on the one hand—the latter taken together with tone in Riang-Lang—and those of prefix and root, as established by morphological analysis, on the other. This does not, however, hold good in Praok.

<sup>1</sup> *BSOAS*, 23, 1960, pp. 544–57.

<sup>2</sup> cf. Henderson, *TPS*, 1951, pp. 131 ff.

*Syllable patterns : major syllables.* The word having been defined as a structure of syllables, the two syllable classes can in turn be defined as structures of sounds, which commute in systems at the appropriate places in structure. The patterns for each language are tabulated below.

In the symbolizations of structures, C indicates a consonant system, V a vowel system, and h a one-term aspiration system, parentheses being used as in the symbolizations of word structures above. Thus the formula C(h)(C)V((V)C) implies a minimal structure CV and a maximal structure ChCVVC, the sequence -VV- occurring only with a consonant following.

The structures of the major syllable are :

Palaung :	}	C(h)(C)V((V)C) ;
Riang-Lang :		
Praok :		C(h)(C)V(V)(C)

They thus differ only, as structures, in respect of the possibility of -VV occurring without a following consonant in Praok.

The systems are set out in the tables which follow. Columns 1-5 correspond to places in structure, V(V) being treated as one unit for this purpose.

Places 1 and 4 are always filled (i.e. the minimal structure is CV in every case). Other places may be filled or not, subject to the restrictions indicated ; no restrictions operate as between places 1-3 (the initial elements) and places 4-5 (the nuclear and final elements). In Palaung and Rieng-Lang, when place 4 is filled by a member of the group marked (ii), place 5 is also filled ; except that in Rieng-Lang there are some suspect instances of a in open syllables.

Palaung :

1	2	3	4	5
ɲ	}		(i) i	}
n			e	
t			ɛ	
n			u	
m			a	
y			o	
r			o	
l			u	
v				
ʔ			(ii) uə	
k	}	}	ə	}
p			iə	
g			eə	
b				
c				
j				
d				
s				

## Riang-Lang :

1	2	3	4	5
k p t c , ŋ ɲ d n b m y r l v w s	} h	} r } l	(i) i e ɛ a ɔ o u ə  (ii) ua a iɛ	} n?  k ŋ t n p m r l s , c ɲ y  } n? } v

## Praok :

1	2	3	4	5
c t , k p b g ŋ j ɲ d n m y r l v s	} h	} y } r } v } l } v	i e ɛ a ɔ o u u ə uə u:ə iə i:ə	}  k ŋ t n p m c ɲ y  } v, ɥ  } v

*Comparison.* I do not propose to consider all the similarities and dissimilarities of these patterns in detail, but single out for discussion three points of particular interest.

(1) Plosive distinctions. The terms of the three place 1 systems have convenience been listed in different orders, the more readily to show their correlations (which vary from language to language) with those of the place 2 and

systems. However, it will be seen on examination that apart from this varying capacity for combination with following consonants, the place 1 systems of Palaung and Praok are identical, while that of Riang-Lang differs from them only in lacking the voiced plosives *g* and *j* and in possessing a distinction between *v* and *w*.

That this similarity is not simply attributable to the persistence of the archetypal system will appear from the following representative sets of cognates :

Pal *par*, RL *̄par*, Pr *pa* 'you two' ;  
 Pal *gar*, RL *̄kar*, Pr *kə* 'they two' ;  
 Pal *ta*, RL *̄ta*?, Pr *ta* 'grandfather' ;  
 Pal *ya*, RL *̄ya*?, Pr *yɛ* 'grandmother' .

These point to an old NMK voiced/voiceless distinction in initial plosives which has survived as such only in Palaung, being replaced by a distinction of low and high tone in Riang-Lang and lost in Praok except in the context of certain vowels, where it has been replaced by one of vowel quality.<sup>1</sup> It seems likely that the partial filling of the resultant gap by voiced *b* and *d* in Riang-Lang follows from the introduction of glottalized plosives into that language at some stage, as an areal diffusion phenomenon ; while the voiced plosives of Praok can be shown to derive from old prenasalized plosives : cf. Pr *ɗak*, Umpai and Mapä Lawa *ndaak* 'tongue'.<sup>2</sup>

(2) Palaung and Riang-Lang share a threefold distinction between open syllables, syllables with final *k*, and those with final glottal stop which is comparatively rare in Mon-Khmer.<sup>3</sup> Like the plosive distinction just examined, however, it is of complex origin. This may be illustrated by the examples :

Pal *ka*, RL *̄ka*?, Pr *ka* 'fish' ;  
 Pal *ti*, RL *̄ti*?, Pr *tay* 'hand' ;  
 Pal *toh*, RL *̄tu* 'to pound' ;  
 Pal *leh*, RL *̄lɛ*, Pr *li* 'to go out' ;  
 Pal *mtuk*, RL *̄mæk* 'ox' ;  
 Pal *a*?, RL *̄ak*, Pr *ak* 'bow' ;  
 Pal *ka*?, RL *̄kuk*, Pr *kak* 'bough' .

Open syllables in Palaung correspond to final glottal stop in Riang-Lang and sometimes to open syllables in Praok, whereas the open syllables of Riang-Lang have similar reflexes in Praok and correspond to final *h* in Palaung. A final glottal stop in Palaung regularly corresponds to *k* in the other two languages ; Palaung

<sup>1</sup> In Khmer and Mon a similar distinction has been replaced by a complex one embracing both 'register'—a feature analogous to tone—and vowel quality.

<sup>2</sup> Lawa examples cited in this paper are from Sanidh Rangsit, 'Beitrag zur Kenntnis der Lawasprachen von Nord-Siam', *Anthropos*, 37–40, 1942–5, pp. 689 ff.

<sup>3</sup> It is found in Mon and Srê. In Khmer, however, final [*k*] and [*ʔ*] are in complementary distribution.

final **k** occurs mainly in loanwords and apparently results from interlinguistic and interdialectal borrowing.

The evidence of Theng, the easternmost of the Northern Mon-Khmer languages, and of other Mon-Khmer languages outside the group, justifies referring Palaung **-h** and the Riang-Lang open finals to a proto-NMK **\*-h** : cf. e.g. Pal **kāh**, Theng **kāh** 'to untie' ; Pal, Th **koh** 'to cut'.<sup>1</sup> Whether Riang-Lang **-h** should be regarded as an isolated survival of the proto-NMK pattern, or as a neologism, is less certain. It corresponds to Mon **-ʔ** in some cases, but not in others (where the Old Mon reflexes have variously **-y** or **-h**). Whichever solution is adopted, we can postulate for the proto-NMK final system a twofold distinction—of **k** and either open final or **ʔ**—but not the threefold one found in Riang-Lang and Palaung.

(3) **ə**-vowels. The vowel nuclei of Palaung and Riang-Lang fall into two distributionally distinct classes, the smaller set—marked (ii) in the tables above—occurring only in closed syllables. The vowels which have this limited distribution are, in Palaung, **ə**, **iə**, **eə**, **uə**, and in Riang-Lang **a**, **iə**, **ua**. (There are no diphthongs in the larger class.) In Palaung they are in addition phonetically characterized by the shortness of the nuclear **ə**-element ; I have elsewhere given them the name 'ə-vowels'.<sup>2</sup>

No similar contextual distinction is found in Praok. But the vowel system of that language does include eight vowels—three front, three back, one open central, and one back unrounded—which in quality and in the nature of their oppositions correspond nearly enough to the eight open-syllable vowels of Palaung and Riang-Lang. The five which remain, **ə**, **iə**, **i:ə**, **uə**, and **u:ə**, may then tentatively be compared with the Palaung **ə**-vowels and with the corresponding class in Riang-Lang, their occurrence in open syllables being linked with the absence of **r** and **l** from the Praok final consonant system.

It is possible that the anomalous length distinction in these vowels residues reproduces the more general one attributed to Common Austroasiatic and Mon-Khmer ; vowel length is present as a distinctive feature in the related languages to the eastward, Lawa and Theng, as these are recorded by Sanidh Rangsit and Maspero.<sup>3</sup> And since the distribution of Palaung **iə** and **eə** suggests that they were in origin non-distinctive variants,<sup>4</sup> the difference between the systems of the three languages is not such as to debar us from postulating a set of **ə**-vowels in proto-NMK : say **\*ə**, **\*yə**, **\*wə**. Once again it is the lexical material which engenders doubt ; the **ə**-vowels show the irregular correspondences characteristic of features propagated by diffusion.

<sup>1</sup> Theng forms are quoted from H. Maspero, 'Matériaux pour l'étude de la langue t'eng', *BEFEO*, 47, 1955, pp. 457 ff.

<sup>2</sup> *BSOAS*, 23, 1960, p. 550.

<sup>3</sup> Whose transcriptions are phonetic rather than phonological.

<sup>4</sup> Shorto, *op. cit.*, p. 551, n. 2.

The same vowel is sometimes found in all three languages, as in Pal *riər*, RL *\_riəs*, Pr *riə* 'root'. More often the correspondence is of a *ə*- to a non-*ə*- vowel, or, less frequently, of *ə* (Riang-Lang *a*) to a *ə*-diphthong, as may be seen from the following examples :

- (Praok non-*ə*) Pal *kuən*, RL *\_kuan*, Pr *kən* 'child' ;  
 (Riang-Lang non-*ə*) Pal *lɛər* ~ RL *\_ples*, Pr *pliə* 'spear' ;  
 (Palaung *ə*) Pal *siəm*, RL *\_sɛm*, Pr *sɛm* 'Shan' ;  
 (Riang-Lang *ə*) Pal *gəŋ*, RL *\_kuaŋ* ~ Pr *gəŋ* (<\**ŋgəŋ*) 'stalk' ;  
 (Praok *ə*) Pal *juŋ*, RL *\_cəŋ*, Pr *cuəŋ* 'leg' ;  
 (*ə*/*ə*-diphthong) Pal *tuər*, RL *\_tal* 'to find' ;  
 RL *\_han* ~ Pal *phən*, Pr *phuən* 'five'.

*Minor syllable patterns.* These show greater divergence than the patterns of major syllables, the structures being :

$$\begin{array}{l} \text{Palaung :} \\ \text{Riang-Lang :} \\ \text{Praok :} \end{array} \left. \begin{array}{l} \\ \\ \end{array} \right\} \begin{array}{l} C(C) \\ C \end{array}$$

The systems are set out in the tables below. Place 1, in Palaung and Riang-Lang, is always filled. No consonant may follow itself in a two-place minor syllable, \**kək-*, \**rər-*, and \**ləl-* being excluded.

In Palaung, when place 1 is filled by *b*, place 2 is always filled ; no syllable \**bə-* occurs. In Riang-Lang, *m* in place 1 occurs only before a major syllable with initial *r*, as in *\_məraŋ* 'horse' ; *N*<sub>1</sub>, *N*<sub>2</sub> in place 2 represent a twofold nasal distinction the exponents of which vary according to context.

Palaung :

1	2
k p b r s c t y ,	$\left. \begin{array}{c} \\ \\ \\ \\ \end{array} \right\} \begin{array}{c} n \\ r \end{array}$

Riang-Lang :

1	2
k c t p r l s m	$\left. \begin{array}{c} k \\ N_1 \\ N_2 \\ r \\ l \end{array} \right\}$

Praok :

$\left. \begin{array}{c} s \\ t \end{array} \right\} \text{ followed by } i$
--

These systems are notably less symmetrical than those of the major syllable, and in view of the correlation mentioned above between minor syllable and prefix, and of the restricted structural possibilities, it may be thought that their limitations should be treated as lexical rather than strictly phonological ; that is, that they form part of wider ideal systems some possibilities of which are not realized, just

as major syllables can be constructed within the terms of the phonological pattern which do not actually occur.

*Loanwords.* Contiguous non-cognate languages have been deliberately excluded from this study. Nevertheless, pattern analysis throws a good deal of light on the loan process. The comparison already undertaken suggests that within the realm of phonology structure is less subject to change than are systems. Thus differences of system are probably assimilated more readily in borrowing than differences of structure, so that where the structure of the borrowing language includes that of the language from which words are borrowed—as is largely the case with Northern Mon-Khmer and Tai—words are readily naturalized. Moreover, when prefixes are added to borrowed words, extensive borrowing may take place without the frequency distribution of patterns being upset. Such prefixes may function partly as grammatical labels; cf. Pal *kəreu*’, RL *təreu*’ ‘to assemble’, both of which contain the reciprocal verbal prefix together with a root derived from Shan *sū*.

### MORPHOLOGY

Phonology is only one field in which the comparison of structural patterns can be illuminating; Mrs. Jacob’s paper in this volume applies a similar technique to the study of morphological patterns in Mon and Khmer, with equally instructive results. In this and the succeeding section I discuss some of the considerations which are relevant to the comparative study of morphological and grammatical lexical patterns in Northern Mon-Khmer, without attempting an exhaustive analysis.

The material cited is drawn from the same sources as in the preceding section except that the Palaung data are taken directly from my 1957 field notes. La data are from Sanidh Rangsit, *op. cit.*

In the phonology different classes of syllable were recognized having specific functions in word structure, and structures and systems were then stated for each class of syllable. Similarly in morphology structures and systems are to be stated for each of a number of word classes having specific functions in the phrase or sentence, the constituents of structure being systems of prefixes and roots. The structures for the word classes noun and verb, which are identical, may be symbolized as follows, putting P for a prefix system and R for a root system:

Palaung :	}	(P) (P) R ;
Riang-Lang :		
Praok :		

There are resemblances between this table and that of syllabic structure on p. 46. It should be observed, however, that morphological and syllabic structures do not always coincide even in Palaung and Rieng-Lang, nor are morphological



units necessarily statable in terms of those used in phonological analysis. Examples of morphologically complex monosyllables are Pal *pyu* 'to set up' ~ *yü* 'to rise', RL *plæ* 'to drive out' ~ *læ* 'to go out'; in the latter case prefixation affects the tone, which on p. 46 was assigned to word and not to syllabic structure. Again, in Praok it is convenient to describe as a prefix a morpheme whose exponent is voicing of the initial plosive of the root, as in *gləm* 'load' ~ *kləm* 'to carry on one's shoulder'.

The next set of tables shows the prefix systems for nouns and verbs in the three languages. It is based on the analysis of a vocabulary of about 1,700 words in the case of Palaung and Riang-Lang and about 1,850 words in that of Praok, the number of instances noted being given in brackets after each prefix. Only those words are counted the roots of which, occurring themselves as words in their simple form, can be assigned to classes.

The symbol *V* in the first column denotes the Praok initial voicing; / symbolizes complementary distribution. The second column shows the classes of root with which a given set of prefixes colligates, N here standing for nominal, V for verbal, and NS for noun suffix roots. For the sake of simplicity no account is taken of the lexical meaning which may be assigned to a given prefix (as with Palaung *kər-* and Riang-Lang *tər-*, which in most of their occurrences may be classed as 'reciprocal' prefixes).

*Prefix systems : nouns*

Palaung :

<i>ə-</i> (2)	N
<i>kən-</i> (1)	
<i>kər-</i> (1)	
<i>pə-</i> (1)	
<i>rə-</i> (12)	
<i>i-</i> (2)	V
<i>kən-</i> (1)	
<i>kər-</i> (1)	
<i>pən-</i> (18)	
<i>rə-</i> (39)	
<i>rən-</i> (1)	NS
<i>i-</i> (4)	
<i>sə-</i> (1)	

Riang-Lang :

<i>kə-/tə-</i> (3)	N
<i>tək-</i> (1)	
<i>tən-</i> (1)	
<i>tər-</i> (6)	
<i>pəŋ-/pən-</i> (2)	
<i>rə-</i> (3)	
<i>sə-</i> (1)	
<i>sən-</i> (1)	
<i>tək-</i> (3)	V
<i>tən-</i> (1)	
<i>tər-</i> (3)	
<i>pək-</i> (2)	
<i>pən-</i> (1)	
<i>pər-</i> (3)	
<i>rək-</i> (1)	
<i>rəŋ-</i> (20)	
<i>rəm-</i> (3)	
<i>səm-</i> (7)	

Praok :

<i>g-/V</i> (4)	N
<i>si-</i> (6)	
<i>g-</i> (5)	V
<i>b-</i> (1)	
<i>V</i> (5) <sup>1</sup>	
<i>si-</i> (2)	

<sup>1</sup> *V* in combination with verbal roots is in complementary distribution with *g-* and *b-*, which occur before roots with initial *r*, *l*, but does not maintain the same twofold distinction.

*Verbs*

## Palaung :

<b>kər-</b> (2)	N
<b>kə-</b> (1)	V
<b>kən-</b> (2)	
<b>kər-</b> (13)	
<b>p-</b> (2)	
<b>pən-</b> (2)	
<b>rə-</b> (2)	

## Riang-Lang :

<b>tək-</b> (2)	N
<b>p-</b> (1)	
<b>sək-</b> (1)	
<b>sən-</b> (1)	
<b>kən-</b> (1)	V
<b>tək-</b> (39)	
<b>tən-</b> (1)	
<b>tər-</b> (26)	
<b>pək-</b> (6)	
<b>pəŋ-/pən-</b> (3)	
<b>p-</b> (3)	
<b>ph-</b> (1)	
<b>pər-</b> (1)	
<b>rək-</b> (1)	
<b>sə-</b> (1)	
<b>sək-</b> (9)	
<b>sən-</b> (1)	
<b>səm-</b> (1)	

## Praok :

<b>g-/V</b> (9)	N
<b>si-</b> (6)	
<b>sib-</b> (1)	

The most striking observation to emerge from these tables is the gross divergence of the morphological as compared with the phonological system, although, as one might expect, this was partly reflected in the systems stated in the minor syllable. Riang-Lang has the most complex overall pattern, with eighteen prefixes occurring in thirty-six functions, against eleven prefixes occurring in twenty functions in Palaung ; Praok, which is altogether more idiosyncratic, has four prefixes occurring in nine functions. Two-consonant prefixes with final *ə* are peculiar to Riang-Lang, as are those depending on nasal oppositions (*rə* **rəm-** ; *sən-*, **səm-**), while one-consonant syllabic prefixes, which account for almost three-fifths of all instances in Palaung,<sup>1</sup> play a very small part in the other languages. Indeed, the divergence is decidedly more marked if relative frequency is taken into consideration. The following points may be noted :

- (1) Syllabic prefixes account for 98 per cent of instances in Palaung and 97 per cent in Riang-Lang, against only 41 per cent in Praok.
- (2) Verbs form a small proportion of polymorphemic words in Palaung (22 per cent) as compared with Riang-Lang (61 per cent) and Praok (43 per cent).
- (3) The most productive prefixes, accounting for 5 per cent or more of instances, in Palaung are *rə-* in nouns, colligating with nominal roots ; *pə-* and *rə-* in nouns, colligating with verbal roots ; and *kər-* in verbs, colligating with verbal roots. These four together account for three-quarters of the instances.

<sup>1</sup> *ə-*, *i-* are regarded as consisting of /ʔ/, /y/ plus a feature of syllabicity.

(To them should perhaps be added *i-* in nouns, colligating with noun suffix roots, since the four words in which I recorded it—*i'w* 'this', *itay* 'that', *inwɔŋ* 'far upstream', and *imə* 'which?'—have collectively a high frequency of occurrence.) The most productive in Riang-Lang are *rəŋ-* in nouns, colligating with verbal roots, and *tək-*, *tər-*, and *sək-* in verbs, colligating with verbal roots; they account for rather less than three-fifths of the instances.

Comparison thus indicates that, in the morphological as in the phonological pattern of Northern Mon-Khmer, structure is more stable than systems; while these are peculiarly subject to change. It remains to consider how far this change is due to influences from outside the languages in question, and how far to spontaneous innovation. It seems *prima facie* unlikely that areal factors, which in phonology were seen to result in a uniformity greater than that attributable to genetic inheritance, should in the morphological field produce a diversity. Contact may indeed operate selectively on the genetic inventory of a language, as well as through the borrowing of items, but in this case it seems perverse thus to explain the innovatory tendencies which appear most clearly when questions of frequency are taken into account. Thus, of the productive prefixes singled out above, only Palaung *kər-* and Riang-Lang *tər-* can be confidently equated from a genetic point of view, for the correspondence between Palaung *rə-*, with verbal roots, and Riang-Lang *rəŋ-* is probably partial only. Innovations peculiar to Riang-Lang are the extension of the reciprocal *tər-* to form collective nouns from nominal roots, as in *tərti* '(in) various places' ~ *ti* 'place', and the prefixes with final *k*, which appear to have no analogue in any other Mon-Khmer language. In Praok, *si-* probably results from the generalization in almost all prefixial contexts of a prefix which originally corresponded to those with initial *s* in the other two languages, although we have noted only one instance of such a prefix in Palaung.

The view of the morphological facts given by a comparison of patterns is quite different from that derived from a genetic comparison such as is set out in summary form in the next table. This is based on correspondences between words containing a given prefix and not on the functioning of the prefix in a system; it is a synoptic one, and does not distinguish between word classes. Data for Lawa, a language of intermediate type, have been added to those for the three languages hitherto considered.

This table does not include all the prefixes listed on pp. 53–54, and others appear in it which are not listed there. But it does not necessarily follow that prefixes omitted from it are innovations, or that those included reflect ancient ones; the data which make up the two universes of discourse are not the same. The purpose of such a genetic comparison is reconstructive; but the procedure adopted has inherent dangers.

It should be noted first that, as with other kinds of reconstructive comparison, the number of instances on which the equivalences shown in the table are founded is small in proportion to that of the words, in any given language, exhibiting the

Riang-Lang	Palaung	Lawa	Praok	
kən-	kən-	a-	V?	
kəm-				
cən-				
tən-				
pən-	pən-	ra-	si-	
kər-	kər-			
tər-				
pər-	pər-			
sək-	sə-	sa-		
sən-				
səm-				
tək-	kə-, kən-, kər-	?	zero?	
pək-	?			
rəŋ-	rə-		?	?
rəm-				

prefixes in question. Once new formations, and the workings of analogy morphologically complex words, effect a shift in the pattern within which morphemes function, the historical antecedents even of the words which survive unchanged lose their relevance. It may help to make this clear if for a moment we leave the immediate field of this paper and consider an example from a flexion language.

The *-s* ending of the plural of French nouns is sometimes said to be derived from the Latin *-s* endings. In Old French, however, the function of *-s* varied according to the declension: it was either the mark of the plural (*corones* for the nominative singular and oblique plural (*murs*), or of the nominative singular and both cases of the plural (*flors*). All these uses can readily be traced to Latin antecedents. The generalization of *-s* as a solely plural ending took place in the fifteenth century. It seems legitimate to say that with that further divergence of the two systems the apparent historical connection between certain Latin and French forms (having very different extensions) lost most of its significance.

The danger of relying on a table such as that above to establish a star

prefix system for the ancestral language should be apparent. Nor can it necessarily be taken as demonstrating the conservative character of Riang-Lang, with Palaung, Lawa, and Praok representing progressive reductions of an archaic system approximating in complexity to that of Riang; a wider basis of comparison would suggest that the prefixes with final *k*, at least, are Riang-Lang innovations. Indeed, it may be thought that it does little more than illustrate the varying morphological complexity of the four languages, without the precision which pattern comparison permits.

Most hazardous of all, perhaps, is the reconstruction of prefixes supported by lexical comparisons alone and not by any opposition existing within a single language. It is tempting to cite such 'prefixes' in explanation of partial correspondences such as Pal *kətam*, RL *ˈtam* 'egg', alongside the more usual type of Pal *kəte*, RL *ˈkəte* 'earth'. But such differences should not be projected into the parent language as oppositions unless some positive contributory evidence is available. (It is fair to add that certain phenomena in Khasi might possibly be used to support the assumption of a prefix in this case.)

#### LEXICON

Grammar and lexicon, in the conventional sense, may together be regarded as constituting a set of patterns analogous to those discernible in phonology and morphology; grammar providing the structures, and lexicon the systems. Indeed, grammar—specifically syntax—and lexicon may be seen as the prototypes of these two concepts; one may as legitimately speak of a 'lexicon' of phonemes as of one of words, and the case and tense endings of flexional languages are in reality a specialized type of lexical sub-system.<sup>1</sup> Such sub-systems, found in a specific grammatical context, bear the same relationship to the total lexicon as do the phonological systems appropriate to particular places in structure to the 'lexicon' of phonemes.

These considerations are relevant when we seek kinds of lexical comparison which will have the force, in our very different field, of morphological coincidence in the Indo-European field. The emphasis accorded to this in Indo-European comparative linguistics is to be justified by the low probability of random coincidence in such a congruent set of items as the endings of a tense provide, when compared with an equivalent number of lexical items arbitrarily selected. It is the total or preponderant correspondence of such flexional elements *as a set* which enables them to be given priority in determining linguistic relationships, and makes it possible, for instance, to classify English as Germanic in spite of the mixed origins of its vocabulary.

<sup>1</sup> Lexicons of Burmese by convention list morphemes, not words.

It might be thought that, since in the languages with which we are concerned there are classes of particles which can be said to discharge a similar function to that of declensional and conjugational affixes in Indo-European, correspondences between those particles might provide the required criterion. However, both the comparison of indisputably cognate languages and in the few cases where historical evidence is available, investigation shows that, on the contrary, Mon-Khmer particles are peculiarly unstable. This may in part be due to the frequent development of weak forms of words which occur in relatively unstressed positions, leading to homophony, and to extreme reduction followed by replacement by an originally reinforcing element.<sup>1</sup> It is undoubtedly in part due to the greater combinatory and positional variability of these particles, and the words with which they are collocated, compared with the affixes of other languages.

It is therefore highly desirable to establish whether in Mon-Khmer languages of similar structure there are any lexical sub-systems so coherent that their coincidence may have some of the diagnostic value of Indo-European affix systems. Two possibilities which come to mind are the sub-systems formed by numerals and pronouns. The first of these has the disadvantage that not only is borrowing of numerals widely attested, but, as is well known, they are subject to alliterative deformation as a result of their use in counting.<sup>2</sup> There is evidence of such irregular development among the numerals of Northern Mon-Khmer.

I propose here briefly to examine the Northern Mon-Khmer pronominal systems, as a pointer to the type of investigation that may prove fruitful in this field. It is first of all necessary to consider the nature of the oppositions between the terms of the systems, in order to demonstrate the comparability of those systems taken as a whole.

Palaung, Riang-Lang, and Praok all have pronouns which may be assigned to first, second, and third persons singular, dual, and plural.<sup>3</sup> This categorization accounts for the whole inventory of Riang-Lang. Palaung has in addition to the singular both dual and plural two forms for the first person, which may be termed endo- and exodeictic respectively: 'I and my fellow(s) here', 'I and my fellow(s) elsewhere'. Praok has the same number of forms in these categories, but, so far as I have been able to determine, the two forms of the first person dual and plural are in free variation; certainly their use is not endo- and exodeictic as in Palaung. Praok has a further peculiarity in the use of the 'dual', which may refer to a singular female; or, to put it differently, one male is referred to by the singular, one female

<sup>1</sup> The Mon negative particle (derived from Old Mon *sak*) in some contexts has as its exponents aspiration and labialization of the initial consonant of the verb with which it is collocated. It is now frequently accompanied by the reinforcing particle *pūh*, borrowed from Burmese.

<sup>2</sup> cf. *four*, *five*, and *quatuor*, *quinque*.

<sup>3</sup> No such arrangement is discernible in the Lawa pronouns as recorded by Sanidh Ratanaprasit but it is unlikely that his investigation was exhaustive enough to be decisive.

may be referred to by either the singular or the dual, and two of either sex are referred to by the dual. None of the languages has oppositions referable to status or to grammatical function (case, pre- and post-verbal forms, etc.).

This state of affairs may be set out schematically as follows :

Palaung				Riang-Lang				Praok			
S :	1	2	3	S :	1	2	3	S :	1	2	3
D :	1a	1b	2 3	D :	1	2	3	D :	1/1	2	3
P :	1a	1b	2 3	P :	1	2	3	P :	1/1	2	3

The differences between the systems are minor, although interesting, and we may proceed to consider how far the parallelism of categories extends to the forms. These are :

	Palaung	Riang-Lang	Praok
S 1 :	o	o'	aŋ
2 :	mi	mi'	may
3 :	ən	hn'	nə
D 1 :	endo.	ay	{ a yɛ
	exo.	yar	
2 :	par	par	pa
3 :	gar	kar	kɛ
P 1 :	endo.	ɛ	{ e yi
	exo.	yɛ	
2 :	pɛ	pe'	pe
3 :	ge	kə'	ki

The great majority of these exhibit regular correspondences, the first person dual and plural pronouns of Riang-Lang agreeing with the endodeictic forms of Palaung ; the divergent vocalism of Praok *pa* ; *yɛ*, *kɛ* and *e*, *pɛ* ; *yi* is attributable to the old distinction between voiceless and voiced initials, preserved in Palaung, which is referred to on p. 49 above. Five forms are irregular, those for the third person singular ; the Praok first person dual alternant *a* ; and the third person plural of Riang-Lang.

Dealing with these in the reverse order, Riang-Lang *kə'* is irregular only in its vocalism, where its cognates lead one to expect *\*kɛ'*. No ready explanation suggests itself, unless the pronoun be taken as a weak form, as the third person singular appears to be (see below). Praok *a* is perhaps an analogical formation based on the paradigm *a* : *pa* :: *e* : *pɛ*. The expected form is *\*ay* ; it may be relevant that with this a homophony would arise between *\*kən ay* 'our child', *kən ay* 'son'. The third-person forms, no two of which agree, are the obscurest. In the first place, Riang-Lang *hn'* is a unique instance of the anomalous phonological structure CCC. It is apparently a weak form ; but although Palaung *ən*

has the weak contextual variants [ŋ], [n], it would be impossible to connect two words without making unprovable assumptions. *ən* has at least one cognate outside Northern Mon-Khmer, though with a different meaning (Stieng 'who?'), and there is some temptation to take it as representing the original form; but its cognates within the group, RL *an*, attributive particle—as *an dəy tru* ' (the one) who will come '—and Pr *an* 'that, the', show that the form of its proto-NMK reflex is most likely to have been deictic.

With these facts we seem to be on safer ground in making inferences to the parent language. (It must be stressed that this would not be equally true of assemblages of words which failed to constitute lexical sub-systems.) While the parallelism in the systems of oppositions is not in itself conclusive, and the possibility of areal influences would have to be investigated before it could be taken, the agreement of twenty-six out of thirty-one forms reinforces that of the systems. The occurrence of two forms of the first person dual and plural in both Palaung and Praok suggests that this was a feature of proto-NMK also, a form falling into disuse in Riang-Lang; but the original distinction need not have been, as in Palaung, endodeictic/exodeictic.

The possession of dual pronouns is a special characteristic of Northern Mon-Khmer. As an innovation of the group, their formation (except for that of the 'endodeictic' first person) is transparent when they are compared with the words for 'two': Pal *ar*, RL *ur* ~ Pr *ra* < \**r'ar*, Lawa *la'aa*. Palaung *yar*, *par*, and the corresponding forms in the other languages are to be derived from compounds \**yee-ar* 'we two', etc. The prefix underlying Pr *ra*, Lawa *la* postdates this formation and belongs to a period after the separation of the two languages.<sup>1</sup>

Whether other lexical sub-systems of comparable stability can be found remains a valid subject for investigation. The essential requirement seems to be a more or less symmetrical set of internal oppositions.

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The foregoing may serve to indicate the possibilities inherent in a comparison of structural patterns in the several fields of phonology, morphology, and lexicology, this last being taken with syntax as an organic whole. Phonological patterns can give the most illumination on areal phenomena, grammatico-lexical patterns on genetic ones. Both these classes of facts seem to me relevant to a truly comprehensive comparative linguistics. Languages, considered as related entities, may be viewed either in the orthodox way as the matrices of a largely arbitrary residue of elements

<sup>1</sup> cf. also Pr *rəm* 'water' < \**r'əm* ~ *-əm* in *pay'əm* 'cloud', Pal *om*, RL *om*.



which testify to the former existence of a single parent language,<sup>1</sup> or, as Professor Holmer has suggested elsewhere,<sup>2</sup> as records of the whole history of the contacts of their successive speakers. The virtue of a structural approach is that it allows borrowed elements the weight appropriate to their frequency. And here I may perhaps quote the words of no linguist, but a literary critic, J. G. Weightman : 'The important thing about an influence is not where it comes from but what it turns into.'

<sup>1</sup> cf. e.g. Dyen, *Language*, 32, 1956, p. 612. This is an extreme view, of the justice of which I am not wholly convinced. The concluding paragraph of G. B. Downer's paper in this volume suggests an alternative interpretation.

<sup>2</sup> *Lunds Universitets Årsskrift*, N.F., Avd. 1, 45/4, 1949, p. 11.