

VESTIGES OF MORPHOLOGY IN MODERN STANDARD KHASI

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0. When some years ago an opportunity arose of working with a Khasi speaker, I was surprised to discover how close the phonological structure of the language was to Khmer and Old Mon, despite the wide separation of Khasi in time and distance from its Austroasiatic cousins, and its prolonged proximity to the Indo-Aryan languages of the plains on the one hand and to Tibeto-Burman tribal languages on the other. The recognition of phonological similarities led to a search for morphological similarities also. These are not so immediately apparent and are less striking, but they can be found nevertheless, though the morphological processes that lie behind them are for the most part as dead as those of Old Mon. A thoroughgoing study of morphological development in Khasi still remains to be undertaken, but it seems appropriate on this occasion to indicate, in however rough-and-ready a fashion, some of the more fruitful areas for future investigation for the benefit of scholars handling other AA languages.

0.1. By 'modern Standard Khasi' is meant the educated speech and written language of Cherrapunji. I have had access to three Khasi informants: Miss Namita Shadap Sen (Mrs. A.L. Basham), Miss Renée Jyrwa, and at the time of writing Mr. Ivan Simon who is Deputy Director for Research (Philology), in the

th East Frontier Agency. In the preparation of the sent study, Mr. Simon's professional linguistic understanding and his knowledge of some of the other si dialects have been invaluable. Indispensable o have been Nissor Singh's *Khasi-English Dictio-y*, Pater Schmidt's *Grundzüge einer Lautlehre der si-Sprache*, and Lili Rabel's *Khasi, a language of am* (see References for fuller details). None of se works covers the ground completely. The dictio-y has many gaps and some of the glosses are in need revision. Schmidt comes closest to a historical ount of Khasi morphology. He achieved near-acles with the inadequate and often inaccurate erials at his disposal, but working through his rk with Mr. Simon (henceforth referred to as IS) y mistranslations and misunderstandings have come light which invalidate some of his examples, if t his conclusions. Rabel's approach is strictly nchronic, so that she confines her attention to the vert' morphological aspects of her material and is t concerned with the surviving remnants of an ear-er richer morphological structure.

2. The material in this paper is arranged under e following heads:

1. Notes on Khasi orthographic conventions.
2. Prefixes.
3. Infixes.
4. Initial consonant variation.
5. Combinations of prefix and infix, or 'reinforced' prefixes?
6. Short-term compounding.
7. Suffixes and final consonant variation.
8. Vowel gradation.
9. Reduplication.
10. Sound symbolism.

11. Morphological 'Sets'.

References.

1. *Notes on Khasi orthographic conventions*

1.1. The Khasi illustrations in this paper are given in Khasi orthography which, once a few simple conventions have been mastered, is on the whole unambiguous except as regards vowel length and quality in certain contexts. The conventions that should be noted are as follows:

- y between two consonants indicates an anaptyctic vowel, short, unstressed and central in quality, viz [ɨ̯]. It is used regularly after the first of a three-consonant group at the beginning of a word, *e.g.* kdong but kyndong. Nissor Singh's dictionary sometimes has spellings with y between the two members of a two-consonant cluster, *e.g.* kydong, but this is unnecessary. The three-consonant rule appears to be widely adopted nowadays and is adhered to here.
- y between a consonant and a vowel indicates a glottal stop, *e.g.* kyang = [kʔaŋ]. The dictionary sometimes uses an apostrophe instead, *e.g.* k'ang. The apostrophe is here reserved for use to show the 'dropped' initial consonant or syllable in a short-form, *e.g.* 'ti [ti] for kti, 'sang for tyrsang.
- h is the aspirate initially, but represents a glottal stop finally, *e.g.* heh = [hɛʔ]. After consonants it indicates aspiration of that consonant, except in the case of sh, which is [ʃ].

-id, -it and -in represent a final palatal stop and nasal. -d, -b are used for final [t] and [p] after a long vowel (a Welsh convention), *i.e.* they indicate preceding vowel length, not voicing of

a final stop, e.g. paid = [pa:c], pad = [pa:t],
the pat = [pat]. Unfortunately, traditional ortho-
graphic usage is not always consistent in this re-
spect, so that I have used an acute accent to mark
length on a vowel which by regular spelling conven-
tions should be short, and a grave accent to mark a
short vowel which the spelling would lead one to
expect to be long, e.g. IS pronounced *btùid* with a
short vowel, so I have shown this with the grave
accent. (Nissor Singh uses this convention in his
dictionary but does not apply it consistently. He
sometimes uses a circumflex accent to indicate
vowel length.)

The commonest spellings of the vowels are:
[i] ie[e] e[ɛ] a[a] o[o] ú[o] u[u]. Namita
adap Sen, my first informant, agreed with Rabel's
formants in pronouncing ie and ú as [e] and [o]
before zero consonant, r and the glottal stop, and as
phthongs [i.ə, e.ə] and [u.ə, o.ə] before all other
consonants. Renée Jyrwa and IS, on the other hand,
pronounce ie and ú as [e] and [o] in all contexts.
This simpler vowel system is adopted here whenever it
is necessary to indicate pronunciation. [e] and [o]
are longer than [i] and [u] in closed syllables,
hence the use of the length mark over the vowel letter
to indicate [o]. The vowel [a] occurs both long and
short, but is not usually marked for length before
consonants in Khasi orthography. I have tried to indi-
cate it here wherever ambiguity could arise by the use
of the acute accent.

2. The English glosses of the Khasi words cited
are there for convenience only. They do not claim to
be exhaustive, nor are they always as accurate as
much more work on Khasi texts might make them. Khasi

has its fair share of polysemy and I have sometimes had to select from a number of meanings the one which seemed the most helpful illustration of the point at issue.

2. *Prefixes*

It is necessary first to specify what is meant here by "prefix". Three kinds of formatives are concerned: (1) overt prefixes; (2) prenominal and preverbal particles; and (3) covert or vestigial prefixes. It is the last which are the most interesting from the comparative and historical point of view since without some understanding of their operation cross-linguistic comparisons would go wildly astray. I shall therefore, like my eminent predecessor in the field, Wilhelm Schmidt, pay most attention to the 'covert' prefixes, after giving a brief account of what is meant by categories (1) and (2).

2.1. *Overt Prefixes* include such straightforward formatives as nong- and jing-, which take part in prefixation processes which are still active today. Also included are a number of other prefixes such as shi-, mar-, kum-, kat-, hang-, which are more restricted in their privileges of occurrence.

Nong- and jing- are both nominalizing in function. Nong- is usually agentive, but sometimes has the meaning 'inhabitant'; e.g. nongtúh 'thief' (< túh 'to steal'); nongbehmrád 'hunter' (< behmrá 'to hunt wild animals'); nongkha-ii 'trader' (< kha-ii 'to trade'); nong Sohra 'inhabitant of Cherrapunji'; nongkyndong 'person who lives at the back of beyond' (< kyndong 'corner'). (This nong- is not to be confused with its homophone 'nong, the shortened compounding form both of shnong 'village, town' and of rnong 'brass, bronze', as in 'nonglieh

atinum-like metal' < rnong + lieh 'white';
ngrim 'site of abandoned village' < shnong + rim
d'.)

Jing- is frequently used to nominalize verbs or
bal expressions, as in jingtip 'knowledge' (< tip
know'); jingialang 'meeting' (< ia lang 'togeth-
fun, to play'). Certain variant spellings of this
y common prefix may be noted. The Nissor Singh
tionary spelling sometimes omits the final g of
prefix before a following velar, e.g. jinkhang
or' (< khang 'to shut'). It is presumably
umed that a nasal before a velar will be pronounced
in any case, and need not be further indicated.
al g is also sometimes omitted before a following
tal consonant, e.g. jintah 'curry' (< jing + tah
use as a sauce'), since the final nasal of the
fix may here be assimilated to the following t.
asionally spellings using the Khasi short un-
ressed vowel y [ĩ] are found, e.g. jynkieng
ridge' (< jing + kieng 'to sling'), jymbuiñ
reast, pap' (< jing + buiñ 'to suck'). It seems
ely that variants with the y vowel would arise in
abilized compounds in very common use, which are
ways pronounced with relatively weak stress on the
rst syllable, and which are almost certainly no
nger felt by the speakers to be dimorphemic. IS
ports that many Khasis nowadays make a distinction
etween jynkieng 'bridge' and jingkieng 'shoulder
rap (of a bag etc.)'.

Overt prefixes of less common occurrence in-
ude shi- 'one'; mar- 'facing, matching'; kat- 'to
ch a degree'; kum- 'like'; hang- 'place where'.

E.g. shiktien 'a mouthful' (< ktien 'mouth');
baroh shirta 'all his life' (< baroh 'all', rta
'life').

marktí 'hand-to-hand' (< kti 'hand'); markhmat
'face-to-face' (< khmat 'face'); marbúd 'one after
the other' (< búđ 'to follow').

kat-, kum-, hang-, are found before deictic
suffixes listed in Section 7. *E.g.* katne 'as much as
this'; hangne 'here'; kumne 'like this'.

2.2. *Prenominal and preverbal particles*

A number of other forms such as ha 'in, into',
na 'from', da 'by, with', which may loosely be com-
pared to English prepositions, frequently behave like
prefixes in that they combine with the locative suf-
fixes described in 7.1, and are unstressed in relation
to the nouns that follow them. They occur, however,
in nominal constructions with a freedom denied to the
overt prefixes described above, and are therefore
probably best regarded as free forms rather than as
affixes. Of the same type are a number of preverbal
particles, such as la, la, sa and the relative ba,
and certain rarer particles of the same Ca structure.
Whether or not to handle such forms as morphological
rather than syntactic elements is a matter for debate.
I have decided to exclude them from the morphology of
Khasi for the purposes of the present paper.

2.3. *Covert prefixes*

More interesting from the comparative and his-
torical points of view are what appear to be the re-
mains of obsolete prefixation processes surviving in
the first elements of clusters. To Wilhelm Schmidt,
who posited CV(C) as the canonical form of all stems
in the Mon-Khmer languages generally (Schmidt 1904,

), the first consonant of any initial cluster was *de facto* a prefix. This would be astonishing if it were true, but it is not necessary to go to such extremes to appreciate the force of Schmidt's argument that some at any rate of the clusters may have arisen from the juxtaposition or fusion of what Maspéro (1912, 82) termed an asyllabic prefix with the initial consonant of the stem. Schmidt pointed out that many words for body parts, kinship terms, animals and plants begin with a k or kh cluster, which suggests the presence of a prefix to denote living things. Consider the following, for instance: khmat 'eye'; khmut 'nose'; khliēh 'head'; khliáb 'spleen'; khjat 'foot, leg'; klong 'heart';¹ ksang 'gall'; ksult 'egg'; kti 'hand'; ktien 'mouth, word'; kpoh 'belly'; khliang 'side of the body'; khnap 'hoof'; khliang 'gazelle'; kmie 'mother'; kpa 'father'; kñi 'maternal uncle'; kthaw 'father-in-law'; klaw 'mother-in-law'; ksew 'grandchild'; ksi 'louse'; ksew 'dog'; khnai 'cat, mouse'; khla 'tiger'; ksilh 'otter'; kyleng 'spider'; khñiang 'insect'; ktiar 'centipede'; ksar 'snake'; klew 'peacock'; kbeit 'hawk'; ksalñ 'maggot'.

The short compounding form (see Section 6 below) common to all these words is Schmidt's stem form without the prefix, viz. 'mat, 'mut, 'liēh, 'jat, etc. In synchronic terms this means no more than that Khasi drops the first consonant of a cluster in certain compounds. Support for the view that this consonant is in fact all that remains of a forgotten prefix comes from related languages, in which the cognates of the words concerned appear in the simple form. It seems more probable that this simple form represents the word-base without a prefix than that so many widely separated languages should independently have

dropped the first consonant of an original cluster. Compare the cognates of six items from the list of Khasi examples listed above: (Khmer forms, in transcribed pronunciation, from Judith Jacob. Mon, in transcription of modern pronunciation, from H. L. Shorto, with spelling shown in italics where especially relevant. Vietnamese in orthography (*italic*). 'Palaung Group' forms from H. L. Shorto. This Group includes Palaung, Riang-Lang, Praok and Theng. 'MK of Vietnam' stands for the Mon-Khmer tribal languages of which word lists are given in Thomas, 1966, and Wilson, 1966. Mường from Wilson (see above) and from Barker, 1966.)

	<i>Khmer</i>	<i>Mon</i>	<i>Viet</i>	<i>Mường</i>	<i>Palaung</i> <i>Gp.</i>	<i>MK of</i> <i>Vietnam</i>
'eye'	[phnè:k]	mòt	mắt	mạt	măt	mat, mũh măt, mukh meăt, mỗh mañ, moat, măt
'nose'	(crə)moh	mùh	mũi	mũi	mu, -mur, -mue	mui, mu, muh, môh, mụh, mũi
'foot'	cỳ:ŋ	càŋ	chân	chơn	cơŋ, jwŋ, caŋ	jơŋ, djơŋ, chơn
'hand'	day	toa (<ti)	tay	thay	ti, -ti? tay	ti, taii, tai t'i, atai, dăi tey atêi
'louse'	cay	coa (<ci)	chì chây	chí	se, -si?, si	ch'i, chai, si

	<i>Khmer</i>	<i>Mon</i>	<i>Viet</i>	<i>Muong</i>	<i>Palaung</i> <i>Gp.</i>	<i>MK of</i> <i>Vietnam</i>
g'	chkae	klɔ	chó	chó	-soʔ, so	cho, ch'o, tyo, so chó, acho

4. As has been pointed out in Henderson 1973, there is a phonological rule inhibiting the sequence homorganic consonants in initial sequences, so that body parts, kinship terms, etc., whose stems begin with a velar consonant cannot have a velar prefix. Schmidt drew attention to a number of such cases in which there appears to be substitution of a denti-velar prefix (s, sh, t or d) for the velar 'living beings' prefix. *E.g.* skei 'barking deer'; skaiñ 'ly'; shkór 'ear'; skhep 'hip'; dngiem 'bear'; dkhoh 'wl'; dkhiew 'ant'; dkhew 'hornet'; dkhi 'mason bee'; ar 'tortoise'; dkhan 'mole'; tnga 'spouse'.

5. Not by all means all Khasi words beginning with k- or kh- cluster can be plausibly regarded as manifesting the same velar prefix as that postulated above; nor is it perhaps necessary, as Schmidt does, to seek or expect to be able to suggest a single, original 'meaning' or function for such prefixes as they have existed. There may be traces, for example, of a verbal velar prefix in such pairs as lǎw 'to take off, loosen', khlǎw 'to take out, gouge out'; ng 'to pull, drag (in physical sense)', khring 'to draw towards one in a less physical sense, *e.g.* to draw someone over'. Furthermore, until we have an authoritative statement of the initial cluster system of Proto-AA it is inevitably difficult to sort out clusters from prefixed stems, especially since Khasi speakers themselves are no longer aware of 'covert' prefixes as morphological elements. There are,

however, enough examples of morphological 'sets' to support strongly the theory that at one time a fairly extensive system of prefixation existed. Compare for example:

tnat 'branch, twig', pnat 'forked branch, prong', 'nat (short form of tnat). Also, thnat (1) 'having a branched finger or toe', (2) 'cockspur'.

2.6. One of the prefixes of which one would certainly expect to find traces is the widespread AA labial prefix, which frequently has causative-transitive function.² Such traces do in fact exist, although the causative forming role in Khasi has been very largely taken over by the formative pyn-, of which more is said in Section 5. Vestiges of a possible simple p- or b- prefix are given below:

rung 'to enter' (intr. only)	phrung 'to penetrate' intr. and tr.
dem 'to lie down, to bend, to bow'	pdem 'to incubate'
lait 'to be free, to escape'	pláit 'to open out, to clear away' ³
tuid 'to flow'	btuid 'to slip, be slippery'
súh 'to thrust, (sew)'	bsúh 'to push in, to intrude'
tep 'to bury'	btep 'to cover with earth, put into the ground'
tap 'to cover'	btap 'to lay one on top of the other'

Possibly also:

tah 'to smear'	bta 'to wash the face; to besmear the face with'
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(Alternation of final glottal stop (orthographic and zero consonant within related pairs of words is and elsewhere, *e.g.* in the verbal auxiliary particles *la* and *lah*, *sa* and *sah*.)

The factor determining whether a *p-* or a *b-* is used appears to be dissimilation of the voice feature, whereby *b-* is preferred before voiceless stem initials, and *p-* before voiced ones (see Henderson 1933).

IS has drawn my attention to the following set of words, which he feels may be related:

'*layer*'; *bsap* 'to insert (*e.g.* into the middle of a heap)'; *bsiap* 'to insert (more softly and delicately than *bsap*, *e.g.* a piece of paper between the leaves of a book)'. If we accept that *bsap* and *bsiap* are morphologically related in some way, are we to suppose that in *bslap* we have an instance of an *-i-* infix? An interpretation more compatible with what we found elsewhere in the language would be that we have here an instance of the kind of phonaesthetic use of vowel alternation that characterizes some types of reduplication and adverbial expressions. Compare also *tlak*, describing a very light touch, with *tak*, used of a former contact; also *liap-liap*, used to describe a cat lapping milk, as contrasted with *lap-* to which IS feels is more suitable for a dog (see sections 8, 9, and 10).

The form *bsa* 'to feed' sets one searching for a corresponding *sa* 'to eat', of which there are widespread cognates in the AA languages generally. Standard (*i.e.* Cherrapunji) Khasi has no such form, however, the word for 'to eat' being *bám*. According to IS, however, *sa* forms are found in some Western

Khasi dialects. A simple labial causative (or other prefix is, if it ever existed, certainly now dead as a morphological device, the overwhelmingly common causative formative nowadays being *pyn-*, which is discussed in 5.4.

2.8. One or two words suggest a possible former *s-* prefix. Compare *ngááb* 'cheeks' with *sngááb* 'gills'; *khem* 'to press, squeeze' and *khim* 'narrow, compressed'; *skhem* 'to be firm, tight, compact'; *ngam* 'to submerge' with *sngem* 'moist, damp'; *tait* 'to reject' with *stait* 'chaff'; *tah* 'to remove bark of a tree' with *shtah* or *stah* 'to shave (wood)'. There is also alongside *tuid* 'to flow' and *btuid* 'to slip' (see above), the form *syntuid* 'to slide'. If *tuid* is taken as the stem, then the preceding syllable may represent prefixed *s-* plus infixed *-yn-* (see Section 5).

Looking at other AA languages, one can see that *s-* prefixes probably survive in some instances where Khasi no longer has a comparable unprefixated form, except in compounds (see Section 6). Conversely, some Khasi dialects show *s-* where standard Khasi now has none; e.g. Mnar dialect [*smit*] 'night', Standard *miet*; Mnar [*smou*], Lamin [*ʃmya*] 'stone', Standard *máw*.

	<i>Khasi</i>	<i>Khmer</i>	<i>Mon</i>	<i>Viet</i>	<i>Mường</i>	<i>Palaung</i>	<i>MK</i>
						<i>Gp.</i>	<i>Vietn.</i>
'day, sun'	<i>sngi</i>	<i>thnay</i>	<i>noa</i> (၇၀)	<i>ngày</i>	<i>ngày</i>	<i>sen,</i> <i>səŋi?</i> <i>siŋay</i>	<i>ngay,</i> <i>to'ngay</i> <i>tangay</i> <i>hany</i>
'leaf'	<i>sla</i>	<i>slək</i>	<i>hla?</i>	<i>lá</i>	<i>lá</i>	<i>hla,</i> <i>-la?</i> <i>la</i>	<i>la,</i> <i>lă</i> <i>hla,</i> <i>hlá</i> <i>hala,</i> <i>sala,</i> <i>asoq</i>

. Not all the prefixes postulated by Schmidt were disyllabic'. Khasi has a large number of disyllabic words in which the first syllable consists of a simple initial consonant followed by a short vowel, a, i, or u. Many of these words are clearly loans, from Hindi or Bengali for the most part. Before any useful calculations can be made as to the possibility of some of these disyllabic words containing prefixes it will be necessary to sift the loans from the indigenous words. Only Rabel (1973) has so far done this with any degree of thoroughness. Nissor Singh notes some of these words but by no means all. Some of Schmidt's suggestions seem nevertheless worth pursuing. He gives a number of cases in which there appears to be a prefix consisting of a consonant followed by the vowel *a*. In some of the instances he gives, the prefix is one of the preverbal elements discussed in Section 2.2. In others IS was persuaded that what we are dealing with is a vocalized prefix, *e.g.* *patien* 'doubtful', which is presumed to be from *pa-* + *tien* (the short compounding form of *ti* 'word'); *dadait* 'itchy', (cp. *dait* 'to itch'), *pa-tien* 'backwards'. Of *da-* IS feels that it carries a sense of two things going on at the same time. More convincing is the postulation in some words of a prefix *pa-* which IS felt to have iterative force. Compare: *teng* 'time, occasion', *pateng* 'generation'; *da-* 'to hit', *patied* 'to keep on hitting'; *doi-doi* 'to see-saw (with the feeling of constant repetition)'; *dún* (dialectal) 'to tilt', *pa-dún* 'sloping'.

There is also *ta-* in *tawiar* 'in a circle' (cf. *gawiar* 'circle'), and *ma-* in *masi* 'bull, cow, ox' (short compounding form *'si*), *makia* 'vagabond', *maloi*

'coconut shell', etc. This ma- is perhaps to be related to the ma- which is sometimes prefixed to pronouns, e.g. ma-nga 'as for me, I...', etc. Note also the form mano 'who?' (? ma- + -no. See 7.1).

3. *Infixes*

3.1. Any traces of infixation in Khasi are of particular interest for comparative purposes since this process is of all others characteristic of the AA and the Austronesian language families, as contrasted with their neighbors. Infixation in Khasi is no longer a live process, but there are vestiges here and there of infixes on the AA model. The commonest infix is nasal, written -yn-, -n-, or -yng according to phonetic context. The effect of this infix is frequently to nominalize, but it is sometimes used to create semantic near-doublings, in which one of the pair is restricted to a more specialized aspect of the general meaning common to both.

Examples:

shong	'to sit, dwell'	shnong	'place, village, town'
sád	'to comb'	snád	'a comb'
lyngkot	'short'	lyngknot	'low stool or table'
kdong	'corner (in sense of place of ambush; opportunity)'	kyndong	'corner'
dkoh	'lame'	tyngkoh	'to hop (as in hop-scotch)'
kjat	'foot'	kynjat	'to kick'
briew	'man, person'	bynriew	'Man, mankind'
sap	'inborn talent or skill'	snap	'inherited trait'

súr	'to spread (something sticky)'	snúr	'(spider's) web'
ksháid	'waterfall'	kynshàit	'to gush out'
ktien	'mouth, word'	kyntien	'morsel, word'
shiktien	'a mouthful'	shikyntien	'a morsel'
khap	'to pinch or hold between tongs'	knap	'pliers, tongs'
kti	'hand'	kynti	'to pound with the fist'
(krem) kroh	'straight face of a cliff, cave'	kynroh	'wall'
traí	'root'	tynrai	'root, source, origin'
kup	'to put on, wear'	knup	'basket rain-shield that rests on head; tortoise shell'
sait	'to wash, <i>e.g.</i> vegetables'	snait	'a strainer'
kham	'to seize, hold in the hand'	khnam	'arrow'
lter	'lengthwise'	lynter	'a length'
kdat	'to make a detour, avoid direct route'	kyndat	'to thrust to one side'

In the above examples the infix can readily be demonstrated by comparison with a corresponding non-infix form. Another less obvious pair suggested by Schmidt is her 'to fly', *sner* 'feather, wing'.

3.2. Comparison with related languages suggests that other Khasi words may contain old nasal infixes, even though the non-infixed forms have not survived in Khasi itself. An example of this is shñih 'hair', which has the following cognates. Khasi final -h (= glottal stop) corresponds regularly to final -k in other AA languages: *Khmer* sok; *Mon* sok; *Viet.* tó; *Palaung Group* hu?, -huk, haek; *Mon-Khmer of Vietnam* sák, suk, tok, sok, sǎk; *Mường* thák, sák. Comparison with other Khasi dialects may also be fruitful, e.g. Mnar [su?] 'hair'. IS point out that bnoh 'pole with a crook used to cut off dead branches, etc.' is clearly the infixed noun corresponding to standard Khasi woh 'to hook off (dead branches, etc.)', Pnar dialect boh. (The cluster wn- is not permitted in Khasi. See Henderson 1973)

3.3. Traces of nasal infixes in Khasi are rare enough; traces of other infixes even rarer. A possible -l- infix may account for the pairs khái 'to pluck with the nail', khái 'to pluck with the thumb and nail (as in dehusking maize)'; shur 'to venture' shlur 'brave, heroic'. r- infix is apparent in the pairs bnái 'moon', phyrnái 'to shine brightly'; kmen 'to be joyful', kyrmen 'to hope'. There is also the interesting case of ker 'to fence', with two related nominal forms, jingker 'a fence', using the 'overt' nominalizing prefix jing-, and kper 'garden, compound', with what appears to be a labial infix. Compare *Khmer* kbaε(r) 'edge', *Palaung* kərbum, *Praok* sipum, *Lawa* raphuum, *aphuum* 'fence'. There is also the curious case, possibly coincidental, of raid 'stunted, dwarfish', rakaid 'dumpy, short (used adverbially, as in íáid rakaid 'to waddle, like a dwarf or very short person'), which suggests a velar

ix. It is not, however, usually supposed that -Khmer languages have -k- infixes, so that such radical pairs must be regarded with caution.

Initial consonant variation

. Most instances of initial consonant variation, . pnat, tnat, and thnat (see 2.5), lend themselves interpretation in terms of prefixation, but occasionally cases are found where this interpretation does not seem plausible. Explanations must perhaps be sought in earlier sound changes such as those discussed by Maspéro (1912, 82, 85) by which Proto-VM liquid clusters have given rise in Mường to such sequences as kʃ, tʃ, or to simple aspirated plosives, sometimes to simple sibilants. (Cp. the development of seventeenth century Tonkinese bl- and tl- to fricates and fricatives in modern Vietnamese.) In light of these attested developments, it is perhaps not too fanciful to propose that there is a phonological/morphological relationship between such as the following:

n	'sturdy'	san	'to grow up'
ei	'to gush out, (bleed) profusely'	shlei	'to overflow'
iang	'to spread out (intr.)'	siang	'to spread (tr.)'
i	'moon'	shái	'to be light'
rnái	'to shine brightly'		

For parallels to the last set of forms see Maspéro 1912 and also Henderson 1966.

. The form die 'to buy' beside thied 'to sell' (see also Section 7) suggests that there may have been an earlier use of the voice/voiceless distinction as a means of grammatico-semantic differentiation reminiscent of certain processes in the Sino-Tibetan

languages. Possibly also of this type are pairs of words suggesting a former relationship (of voice versus voicelessness?) between what are now initial and h- as in *sáw haiñ* 'to flush', *sáw laiñ* 'to redden with anger'; *byrhien* 'in a moving mass', *byllien* (< *byr* + *lien*?) 'in very great numbers?' *Byrhien* and *byllien* are adverbial expressions very close in meaning. IS had difficulty in pinning down the difference between *bún byrhien* and *bún byllien*, both of which could be translated 'in very large numbers'. His impression was, however, that whilst in *bún byllien* the 'large numbers' might even be static, in *bún byrhien* there is the suggestion of orderly movement as well as large numbers, e.g. a mass of people moving in orderly fashion in one direction.

5. *Combinations of prefix and infix, or 'reinforced' prefixes?*

5.1. The relative rarity of demonstrably infixed forms in Khasi, which might in itself seem surprising is offset by the very large numbers of words of the structure $C_1(y) C_2 C_3 V(C_4)$, which have the unstressed vowel *y* in the pretonic syllable, and in which the second consonant is always either a nasal or a liquid. Such words, though phonetically disyllabic, are phonologically best regarded as $C_1 C_2 C_3 V(C_4)$ structures. (This is the treatment proposed for Khasi by Rabel and by Judith Jacob for Khmer.) If one accepts Schmidt's hypothesis that the canonical form for stems in the language is $C_3 V(C_4)$, then C_1 may be supposed to be a prefix, and C_2 an infix. Formally such words are indeed indistinguishable from infixed forms of the *bynriew*, *kyndong* type, e.g.

khyllēm	'to fall'
khyndew	'earth'
kynthei	'female'
thymmai	'new'
tyllái	'rope'
syntiew	'flower'
tyrsim	'nail, claw' etc., etc.

ns of this pattern frequently have a 'short commanding form' corresponding to the 'stem', e.g. *ewsngi* 'sunflower' (< *syntiew* + *sngi* 'sun'); *wiong* 'coal' (< *khyndew* + *iong* 'black'); *'theiiáw* 'elderly woman' (< *kynthei* + *iáw* 'old'). There seem to be no grounds for assuming either that many such words are fossilized examples of the morphological type: PREFIX + INFIX + STEM, where no simple forms happen to have survived, or that they are examples of words in which infixation has taken place between the two consonants of the initial cluster of some now defunct form. This does not account for all words of this phonetic shape, however. It is clear that some derive from former compounds in which the first element has become unstressed to the point at which it is indistinguishable from the pretonic syllable of fixed words.

Examples are:

<i>khyllung</i>	'baby'	< <i>khún</i> 'child' + <i>lung</i> 'tender'
<i>khynnah</i>	'child'	< <i>khún</i> + unidentified second element (See <i>meinah</i> 'younger aunt'; W. Khasi <i>nahlung</i> 'baby')
<i>rympei</i>	'hearth'	< <i>-rum</i> 'under' + <i>dpei</i> 'ashes'

The first two examples above are still sometimes called *khunlung*, *khunnah*. *Rympei* would be suspect as an 'infix cluster', since *rp-* does not occur

elsewhere as a permitted initial sequence. (See Henderson 1973.) Words such as nyngkong 'first', lyntang 'plank' are also suspect for the same reason. (But see Section 10.2.b.) Possibly one must also posit the existence of monomorphemic words with prefix-like pretonic elements of the structure CyN-. Only extensive and exhaustive comparisons with other AA languages can determine just how many such monomorphemic words there are in modern Khasi.

5.2. Schmidt's approach (692 ff.) to the problem is to assume two steps in the morphological construction of such words. The 'first stage' is the addition to the stem of a simple prefix, as in the examples cited in Section 2. The 'second stage' sees the infixation of a nasal or liquid between the prefix and the stem (with anaptyctic vowel between prefix and infix),⁴ thus forming what Schmidt calls a "verstärkte" form of the prefix which I will here refer to as a reinforced prefix. In practical terms, the initial sequence C₁yC₂- functions as a single prefixual element whatever its ultimate morphological origin. This is well illustrated by the pair of words jynrat 'to uproot (e.g. grass, bushes)' and kynjrat 'to uproot with force'. The first word is presumed to be an example of a nasal infix embedded in a form jrat, which could be further analyzed as j- prefix + a stem rat. There is in fact a word rat, which means 'to uproot, in the sense of demolish, e.g. a building.' (Compare Khmer rəs; Mon rəh; Viet. rē; Palaung Group riər, riəs, riə; MK of Vietnam rê, riah, reh, diyeh, hrex, reḥ, re, ria, all meaning 'root'.) In the second word of the pair, kynjrat, it does not seem plausible to postulate an intermediate state *kjrat, followed by infixation between the k and the j; the

- appears to be prefixed directly to a form jrat, which at first sight was thought not to exist. There is no such noun or verb in Khasi, and no word of this form is noted in Nissor Singh's dictionary. IS reports, however, that there is a supposedly "phonetic" adverbial form jrat, used after the verb phut 'to pull out, extract'. The expression phut jrat suggests the extraction or pulling out of something previously rooted, *e.g.* a tooth. Here, it appears, is the "missing" prefixed stem--an illustration of how careful scrutiny of forms often dismissed as "imitative" or mere "expressive" words may sometimes bring to light forms of broad historical and comparative interest. The derivation of the forms jynrat and kynjrat is assumed to be:

			C-(y)N-CVC
CVC	→	C-CVC	jynrat
rat		jrat	CyN-C-CVC
			kynjrat

3. Sometimes a 'reinforced prefix' occurs often enough in a semantic group to prompt attempts to assign a specific meaning or function to it; at other times no correlation of any kind springs to mind, and the choice and use of the prefix appears quite random. Long reinforced prefixes of the first kind are myn- (used to refer to present or past time), hyn- (used of the past only), kyn- (used to verbalize exclamations *c.*), byr- (used to 'dilute' colours and tastes), ng-/lym-/lyn- (found in a number of bird names), and, most important of all, pyn-, the prefix most commonly used to form causatives and benefactives.

(a) Examples of myn- (? < prefix m- + infix -n-)

mynmiet	'night time, at night'	Cp. ka miet 'the night'
mynsngi	'daytime, during the day'	Cp. ka sngi 'the sun'
mynta ka miet	'tonight'	

Myn- is also found before another prefix in expressions such as mynshisngi 'the day before yesterday', mynhynnin 'yesterday', and mynnymwei 'last year'. Note that in the last example the pretonic syllable nym is presumably in origin a weakened form of 'nem, the short compounding form of snem 'year'. IS pointed out that whereas Standard Khasi uses myn- to refer to present or past time, the Pnar dialect uses it for future time also, e.g. Pnar mynstep 'tomorrow'. There are, it should be noted, a number of words with a prefixed myn- which do not appear to be connected in sense with the temporal expressions above. Examples are mynsáw 'to have an accident', mynsiem 'spirit, soul', mynthna 'mithan'. There is also according to Nissor Singh ('Explanatory notes', IV) a prefix myn- used in much the same sense as nong e.g. myntúh 'thief', mynpang 'a patient'. IS recognized the existence of this but claimed that it is rarely used, as it has derogatory meaning, possibly derived from 'men, short form of tymmen 'old'. 'Mynpang' might be used to refer to a malingerer or to a patient in a repulsive condition.

(b) *Examples of hyn-*: (? < prefix s- + infix -n-)

hynnin	'yesterday'
hyndái	'in ancient times'
hynne	'a short time ago'

presumably unconnected with the above are hynroh 'older', hynmen 'older sibling', hynñiew 'seven', hynriew 'six'. In the last two, the first syllable may be a derivative of san 'five'.

(c) *Examples of kyn-*: kyn- is a very common prefixative for both nouns and verbs. There is a special subclass of verbs in which kyn- is prefixed to an exclamation of some sort, e.g. kynha 'to make a startled exclamation' (< ha an exclamation of startled surprise); kynhoi 'to shout in triumph' (< hoi an exclamation of triumph); kynphuít 'to spit with contempt' (< phuít imitative of spitting). Perhaps kynjrat also belongs to this subclass (see 5.2). The dictionary lists further forms kynsnok 'to snore'; kynkhlok 'to sniff'; kynkhlek 'to brandish, flourish' (< khlek expressive of a bright flash) (see Henderson 1955a). kyn- is also used before forms of address, e.g. kynpha 'to address (a man) with the fem. singular pronoun pha'; kynme 'to "thou" someone (male), to address with the familiar masc. sing. pronoun me.' This appears to be a live process.

(d) *Examples of byr-* (? < prefix b- + infix -r-)

Compare	lieh	'white'	byr lieh	'whitish'
	sáw	'red'	byrsáw	'reddish'
	thiang	'sweet'	byrthiang	'sweetish'
	jew	'sour'	byrjew	'sourish'
				etc.

When asked, IS said he didn't use byr- forms for personal attributes such as height (i.e. no byr- form corresponding to English 'tallish', etc.) but he felt it just possible that someone could create such forms, and that he would readily understand them. This suggests that this morphological process is not

quite dead. Other expressions which perhaps belong here are byrtun-byrtēn 'uneven, lumpy (as when one has hives)', byrngut-byrngēt 'hazily, dimly' (compare jngut 'turbid, obscure'). (For reduplication with vowel gradation see Section 9.)

(e) *Examples of lyng-/lym-/lyn-* (? < prefix l- + infix -n-

lyngdkhur	'dove'
lyntait	'swallow'
lyngngem	'turtle dove'
lymbit	'bat'

Note also langbyrkáw 'green pigeon', which IS feels to be of the same set. Langdkhur is a variant of lyngdkhur for some speakers.

5.4. *The formative pyn-*

Very active indeed is the use of the causative/benefactive formative pyn- which, whatever its origin (perhaps as a combination of the p- prefix + -n-infix), now operates as a single element, which can be prefixed to all stems. It is noteworthy that the nasal in pyn- is less liable to assimilate to the following consonant than is customary with other prefixes, unless the following consonant is l-, when the resulting form is usually pyl-.

Examples of the causative use of pyn-

beit	'straight'	pynbeit	'to straighten, correct'
iap	'to die'	pyniap	'to kill'
tieng ⁵	'to be afraid'	pyntieng ⁵	'to frighten'
hap	'to fall'	pynhap	'to fell'
long	'to be'	pynlong	'to create'
i ⁵	'to see'	pyni ⁵	'to show'

	'to arrive'	pynpoi	'to send'
t	'to be free, to escape'	pyllait	'to liberate' etc.
<i>Examples of the benefactive use:</i>			
ed	'to buy'	pynthied	'to buy through another'
	'to say'	pynong	'to deliver a message'
	'to deny'	pynlen	'to deny through another'
en	'to speak'	pynkren	'to speak through or for another'

pyn- may be affixed to recent unassimilated nouns. For instance, pyn-'repair' is used benefactively for 'to repair (a car) for someone'.

There is also a reinforced prefix byn- which might at first encounter appear to be a phonetic variant of pyn- (cp. p- and b- in 2.6). On closer examination of its use, however, it may be said to have a 'particularizing' effect rather than a causative one:

g. shet	'to put down a load, set down'	bynshet	'to set down a load'
rap	'to help'	bynrap	'to side with, contribute to, etc. (i.e. a specialized kind of help)'

IS found it very difficult to express the subtleties of the difference between shet and bynshet, but feels that the latter is more commonly used.

He has companion pyn- forms for both bynshet and bynrap in which the pyn- is benefactive in effect, e.g.

pynshet 'to help someone to put down a load'
 pynrap 'to help someone to do something'

5.5. Common reinforced prefixes in which the hypothetical infix is -r- are illustrated below:

dúh	'to lose'	kyrdúh	'to lack'
shán	'to support'	kyrshán	'to prop up'
shut	'to whet'	kyrshut	'to rub'
sei	'to emit'	kyrsei	'to ooze'
tied	'to strike'	kyrtied	'to thunder'
beit	'to be straight'	kyrbeit	'to be warped, distorted'
shang	'to wander'	pyrshang	'to try out, to explore'
i-thúh	'to recognize'	pyrthúh	'to imitate'
súh	'to thrust into'	tyrsúh/ kyrsuh	'to bore (with a awl)'

6. *Short-form compounding*

6.1. This phenomenon in Khasi appears to be a much simplified version of a type of word-formation that was being investigated three or four years ago by Zide and Shapiro (1968). Zide and Shapiro report that in the Munda languages it was found that certain nominal roots appear in two distinct forms: a long form which can be either monomorphemic or bimorphemic and which occurs in free position; and a shorter combined form derivable from the longer one by certain regular morphophonemic rules. (See also Zide, Arlene 1973.) This describes the position in Khasi very well. Nominal roots so affected always have a long form which is either disyllabic (usually of the type CyN/LCV(C) where N/L = 'either a nasal or a liquid') or which begins with a consonant cluster. Whether one regards such words as monomorphemic or bimorphemic depends upon whether one accepts the view that the elements

preceding the final CV(C) are separable morphological elements or not (see Sections 2 and 5). The rule for the formation of the short form is extremely simple: the short form consists of the last CV(C) sequence of the long form. This sequence is not necessarily the same as the stem without affixes, since if the second consonant of a CC- initial cluster is an infix, this fixed consonant will appear as the initial consonant of the short form (see examples at 6.3 below).

2. The commonest kind of short-form compound is one in which the first only of the two elements (usually nouns) is in the short form:

Examples of CCV(C) → short form CV(C):

aisngi	'daily wages'	< sbai	'price, value' + sngi 'day sun'
biat ksew	'canine tooth'	< bniat	'tooth' + ksew 'dog'
ipdeng	'middle finger'	< kti	'hand' + pdeng 'middle'
áw bah	'forest'	< khláw	'jungle' + bah 'big'
angbrot	'sheep'	< blang	'goat' + brot 'bronze' (?)
a-bám-briew	'man-eating tiger'	< khla	'tiger' + bám 'eat' + briew 'man'
siang khláw	'wild pig'	< sniang	'pig' + khláw 'jungle'

6.3. *Examples* in which the infixed consonant becomes the initial consonant of the short form:

'nongrim	'site of abandoned village'	< shnong	'village' + rim 'old'
'namphiah	'single-headed arrow'	< khnam	'arrow' + phiah 'split'

6.4. *Examples* of CyN/LCV(C) → CV(C)

'dewiong	'coal'	< khyndew	'earth' + iong 'black'
'khangksiar	'golden fern'	< tyrkhang	'fern' + ksiair 'gold'
'thei-iáw	'elderly woman'	< kynthai	'woman' + iáw 'old'
'lengkha	'fresh egg'	< pylleng	'egg' + kha 'to be born'

Note that masi 'cow, bull, ox' has a short compounding form 'si which perhaps supports the view that the ma- is to be regarded as a prefix. (See 2.9.)

6.5. Occasionally noun-noun compounds are found in which both elements are in the short form. Such compounds are very much rarer than the compounds described above in which only the first noun is shortened.

Examples of $C_1C_2V(C) + C_1C_2V(C) \rightarrow C_2V(C) + C_2V(C)$

'langñiuh	'bearded grass'	< phlang	'grass' + shñiuh 'hair'
'mat'ti	'finger joint'	< khmat	'eye' + kti 'hand'
'ñiuh'mat	'eye lashes'	< shñiuh	'hair' + khmat 'eye'

a'liar	'top leaf'	< sla	'leaf' + kliar ₆ 'top'
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6. Also infrequent are compounds in which the second element only is shortened. Examples:

pwái	'outer bark of areca-nut tree'	< dop	'bark' + kwái 'areca nut'
mat	'eyelids'	< ir	'?' + khmat 'eye'
ngkor	'back of the ear'	< dong	'angle, corner' + shkór 'ear'
ongdongjat	'heel'	< syngkhong'	'to support from below' + dong 'angle, corner' + kjat 'foot'

I have so far been quite unable to discover what are the rules which govern the types at 6.2, 6.3, 6.4, 6.5 above and determine which form of compounding all take place. A possible reason for the shortening of the second rather than the first element in the type at 6.6 is that the first elements in all these compounds have only one initial consonant (the consonant preceding *ir* is glottal onset) and so cannot be shortened in the usual way.

7. Yet a fourth compounding process must be mentioned here, namely one in which neither element of a noun-noun compound is shortened:

e.g.	ksangk̄ti	'forearm'	< ksang	' ? ' + kt 'hand, arm'
	kjatsngi	'sun's ray'	< kjat	'foot' + sngi 'sun'
	ksehblei 'sehblei	'yew tree'	< kseh	'pine' + blei 'god'
	bniat-hati	'ivory'	< bniat	'tooth' -- hati 'ele- phant'
	shnongkyndong	'out of the way'	< shnong	'village'- kyndong 'corner'

(ksang here may possibly be connected with ksang in 'dewksang 'tightly packed subsoil', hence ksang may refer to something hard and potentially powerful.)

All the elements in the above except hati, which is an Indic loan, have regular short compounding forms. Why these should not be used in these particular words is unexplained. Sometimes variation in the compounding process is a means of differentiating meanings. It is possible, for instance, that the first element of shnongkyndong 'out-of-the-way village' is not shortened so as to keep it distinct from nongkyndong 'inhabitant of an out-of-the way village'. Compare here mihsngi 'sunrise' with mih'ngi 'east', both derived from mih 'to rise' + sngi 'sun'; similarly sepsngi 'sunset' and sep'ngi 'west', from sep 'to go down' + sngi 'sun'. Note that there could in any case be no short form of the first element here, as there is only one initial C. The differentiation, if any, must therefore come in the second element.

Suffixes and final consonant variation

1. Suffixation was dismissed by Schmidt (681) as being non-Khasi and, in fact, non-Mon-Khmer. This depends, I suppose, upon what one means by suffixation.

Khasi has a number of deictic and locative forms which occur suffixed to the 'prenominal particles' referred to in Sections 2.2 and 2.3, or to one of the particles *ka* (feminine), *u* (masculine), or *i* (diminutive). Examples after the particle *ha-* include: *haei* 'here?', *hajan* 'near', *halor* 'on, over', *hano* 'to', *hom?* 'under, within', *harum* 'below', *hato* 'in front of', *badien* 'behind, after', *haduh* 'up to, as far as', *ha-*.

Examples after the article *ka* include: *kaei* 'what?', *kane* 'this', *kano* 'which?', *katai* 'that', *thie* 'that down there', *katei* 'that up there'. I do not propose to examine these forms further in this paper.

2. A morphological feature of more comparative interest is provided by the future and negative forms *yn* and *ym* which are suffixed to pronouns, *e.g.*

U[n] *sa wan* He will come presently.

Cp. *U wan* He's coming.

Ki jingthung baroh ki[n] duh
All the plants will die.

Balei u[m] wan shuh katta ruh?
Why has he not returned yet?

3. The way in which these asyllabic suffixes alter the syllable structure of the words concerned, in a morphological process which is still very much alive, provides a possible clue to the understanding of certain other forms in which the syllable-final consonant is otherwise unexplained.

Compare: kti 'hand' with btin 'to lead by the hand', rtin 'clinging', kynti 'to pound with the fist'. There is a strong suggestion here that the stem ti 'hand' forms the base for all these forms, which show the remains of obsolete affixation in their initial and final consonants, viz. kti = prefix k- (see 2.3) + ti; btin = prefix b- (see 2.6) + ti + suffix -n; rtin = prefix r- + ti + suffix -n; kynti = prefix k- + infix -n- + ti. It is not of course implied that the hypothetical suffix -n in two of these words is to be equated with the still active future suffix described in 7.2.

7.4. A handful of other examples of final consonant variation may perhaps also have a morphological origin.⁷ Compare:

~ [-t] (For initial consonant alternation, see 4.2. For implications of spelling -d, see 1.1.)

die	'to buy'	thied	'to sell'
plie	'to open'	plied	'to prise open'
bthi	'to stick'	bthit	'sticky (e.g. of gum)'

[?] ~ [-t]

khmih	'to look'	khmied	'to look up'
bsúh	'to penetrate, push one's way in'	bsùt	'to force a way in, to pene- trate with force'

8. *Vowel gradation*

8.1. There are hints here and there of the remnants of some system either of vowel ablaut used directly as a morphological-cum-semantic device, or perhaps of vowel umlaut, i.e. a process in which the vowel variation is to be accounted for in terms of phonological laws relatable to other features in the phonological

environment, now disappeared. The few examples noted include alternations of quality only, as [a] ~ [e], quality correlated with quantity as in [i] ~ [e], [i] ~ [o]⁸, or, before a final palatal, of quantity one, *e.g.* [a:] ~ [a], [u:] ~ [u].

Examples: (For final consonant variation, see 7.4.)

[i] ~ [e]

khmih 'to look', khmied 'to look up'
khim 'narrow, compressed', khem 'to squeeze', skhem 'firm, tight, compact.' (For initial s- here, see 2.8.)

[u] ~ [o]

bsùt 'to penetrate with force, force a way in', bsùh 'to penetrate, push one's way in'

[a] ~ [e]

ngam 'to sink', sngem 'moist, damp'

[a:] ~ [a]

ksháid 'waterfall', kynshàit 'to gush out'

[u:] ~ [u]

tuid 'to flow', btùid 'to slip', syntuid 'to slide'

2. Khasi is enormously rich in reduplicative (see section 9) and adverbial expressions containing a considerable degree of sound symbolism both in consonant sequences and in the vowels used. Some of this sound symbolism is probably universal, *e.g.* the use of [i] to refer to small, light things, and young persons; some of the symbolism, however, seems to be specific to Khasi and is apparently readily recognized by Khasi speakers, even in expressions hitherto unfamiliar to them. Following J.R. Firth (1935), I shall use the term 'phonaesthetic' to apply to this

symbolic use of sounds, since the reference is not only onomatopoeic but relates also to size, age, weight, bulk, height, clumsiness, daintiness, etc. Lili Rabel (1961, 113) has made the only serious attempt so far to pin down the general meaning of these phonaesthetic vowel alternations and suggests the following rough guide to usage:

- [i] refers to small and light things, young persons.
- [ɛ] refers to tall or big things and persons, grown-ups.
- [a:] refers to ungainly and stout persons or objects.
- [ɔ] refers to small and feeble things, animals, objects.
- [u] refers to big, heavy, old persons, animals, and things.
- [ia] refers to attractive persons or things.
(Cp. discussion in 2.7.)

Phonaesthetic phenomena of this kind will be familiar to anyone working in the AA or Sino-Tibetan field, and are closely linked to reduplication which will be briefly dealt with in the following section.

9. *Reduplication*

9.1. Reduplication is an extremely productive morphological process in Khasi, as in many other languages of the Indo-Pacific area. Looking through the forms listed in Nissor Singh's dictionary (which can only contain a small proportion of those in current use) I have found that my Khasi informants (a) did not always recognize them, but could readily conceive of the general sense in which they would be used; (b) recognized them in the given form, or a form very close to

but with a slightly different meaning from that given in the dictionary, and (c) were often inspired to produce further variants on the same theme, together with fairly specific indications of the contexts in which they would be used. This suggests to me that the process is still very much alive and that whilst there are certain generally accepted guidelines, the finer details of association and reference are to some extent idiosyncratic. The whole topic deserves far more serious attention than I have been able to give it, both from the stylistic and semantic points of view, and also from the historical point of view, in that some of the "meaningless" partners in such expressions may, as Lili Rabel points out, be survivals of older free forms now extinct. The most detailed and systematic account of such expressions so far undertaken is Rabel (1968) of "Redundant Expressions in Khasi", to which readers are referred for further information and a wealth of examples.

2. A special kind of reduplication mentioned in Rabel (1961, 104) is illustrated by the expressions given below:

(a) nano-re-nano	'from someone or other' cp. nano-nano 'from anyone'
haei-re-haei	'somewhere or other' cp. haei-haei 'anywhere'
kumno-re-kumno	'somehow or other' cp. kumno-kumno 'anyhow'
(b) hai-pa-hai	'slowly, bit by bit'
jai-pa-jai	Ditto
suki-pa-suki	'slowly and gradually'
leh-pa-leh	'to carry on doing something (e.g. when asked not to)'

- | | | |
|-----|------------------|---------------------------------|
| (c) | junom-la-junom | 'from age to age' |
| | pateng-la-pateng | 'from generation to generation' |
| (d) | tik-shi-tik | 'incessantly' |
| | tam-shi-tam | 'more and more' |
| | leh-shi-leh | 'to do something incessantly' |
| (e) | hak-na-hak | 'uselessly, without purpose' |

Rabel refers to the formatives *re*, *pa*, *la* and *shi* above as 'interfixes'. It is possible that the interfix *pa* in 9.1(b) is to be identified with the iterative prefix *pa-* mentioned in 2.9 above; *la* in 9.1(c) perhaps to the perfective preverb *la*. The others are unexplained, but the usage is plain.

10. *Sound symbolism*

10.1. The phonaesthetic use of variations in vowel quality has already been referred to briefly in section 8.

Such vocalic symbolism is often accompanied by a similar symbolic use of certain initial consonant clusters and final consonants. Sometimes the consonant clusters involved are restricted to expressions of this kind (see Henderson 1973), and may be regarded as constituting a morphological process of a rather special kind.

10.2. Clusters beginning with *l-*, which are rarely used in the rest of the lexicon, are especially popular in phonaesthetic adverbial expressions, and are selected here for exemplification purposes.

- (a) *ld-* '(used to express dangling, especially helplessly)'

ldang 'lying helplessly on its back (e.g. of a fish floating)'

lding 'lying helpless with a swollen abdomen'

{ ldai 'dangling' (used of a variety of
ldet objects, with appropriate vowel
ldit grade. See 8.2.)
ldoi (e.g. a small ball on a string)

ldui 'dangling, hanging' (of big things
such as a full sack)

ldat 'hanging helplessly' (e.g. a bird
caught by its feet in a trap)

Compare also lyndang 'on the back, supine'

(b) lt- (expressive of something stretched
out full length)

ltar (of something thin, like a sick
emaciated person in bed)

ltir (e.g. a small caterpillar)

lter (e.g. a snake)

With back vowels and a final palatal nasal, the
reference is to things long and round at both ends,
y.

ltúĩñ (e.g. a large snake, like a python)

ltoiñ (e.g. a sausage, or a dachshund)

ltaĩñ (e.g. a flat board with rounded
ends)

There are some words beginning with the sequence
nt- which may belong here, viz. lyntang 'plank',
nter 'a line, a length'.

(c) lp- (with a front vowel, expresses
lying in a relaxed way)

lping lying lazily, e.g. a pig after
eating

lpen lying still, like a snake on a
path

- (d) lph (with back vowels, straight, like a post or column)
- lphong 'like a small straight post or tree'
- lphung 'like a big straight post or column'
- lphur 'like a fleshy (not rigid) upright mass'
- (e) lj- (hanging down, as of meat hung on a wire, cp. ld-)
- ljang (e.g. a thin flattish piece)
- ljeng (a more substantial piece than ljang)
- ljing (a stringy long piece)
- ljong (a roundish shovel-shaped piece but small)
- ljung (a large, longish piece)
- (f) lm- (with final -m = fleshy, fatty)
- lmam-lmam (e.g. a short, stocky person)
- lmem-lmem (e.g. a stocky but taller person)
- lmum-lmum (e.g. someone taller and bigger than the other two)

(with final -t = yellow-coloured)

- lmet-lmet (e.g. a pale beautiful yellow)
- lmit-lmit (a brighter yellow than 'lmet-lmet')

(g) The sequence lyngsn- which expresses the general notion 'lying flat' is illustrated by Rabel (1961, 115) as follows:

- lyngsnap 'the way a moth "lies" on a window pane'
- lyngsnep 'the way a butterfly or frog lies'
- lyngsnop 'the way a [cute and sweet] baby chick sits'

lyngsnup 'the way a turtle sits'

lyngsniap 'the same as lyngsnap but
"cuter"'

IS describes lyngsniap as descriptive of something more delicate and thinner than that described by lyngsnap, e.g. a beetle's wing or a flake of bark.

lyngsnej 'the way a slug crawls' (IS says it suggests stickiness and slowness.)

3. Among other phonaesthetic initial sequences are - (big and muscular), mt- (in a heap or lump), jl- (sugusting, nauseating), pt- (sticky), tk- (fat and tender, plump), bl- (pale, insipid), shd- (showing the teeth, as in laughing and grinning). For example, a pig would be mthin, a fat bull would be mthun; a large swelling caused by a hornet sting would be mthun, a smaller one caused by a gnat bite would be mthun. Blar-blar and blaid-blaid are used of pale things, blier-blier and bleid-bleid of pale yellowish things. Shdai implies the showing (in a grin, etc.) of small regular teeth, shdei implies larger, possibly irregular teeth.

Morphological 'Sets'

In conclusion, I list below some 'sets' of words which have some semantic content in common, which it seems unreasonable to suppose were also formerly linked by enough morphological processes of which now only fossilized traces remain. These traces have been discussed for the most part in earlier sections but the sets are assembled here for convenient reference.

(a)	bit 'to stick'	bthi 'sticky (of fat)'	bthit 'sticky (of gum)'	byrthit 'viscous'
	thit	bthing	dambit	
(i)	'bird-lime'	'wax'	'to stick, adhere'	
(ii)	'grease that covers new- born babies'			
(b)	tuid 'to flow'	btuid 'to slip, slippery'	syntuid 'to slide'	
(c)	'ti (short 'hand' form of kti)	kti 'clinging'	rtin 'to lead by the hand'	kynti 'to pound with fist'
(d)	shong 'to sit, dwell'	shnong 'village, town'	jingshong 'seat'	pynshong 'to seat (some- one)'
(e)	lait 'to be free, to escape'	plait 'to open out, to clear a way'	pyllait 'to set free'	
(f)	loit 'to undo'	bloit (phonaes- thetic word sug- gesting something becoming detached)	pynloit 'to undo' (for someone)	khloit 'to come out of the sock- et; to be dislo- cated'
(g)	súh 'to thrust, sew'	bsúh 'to in- trude, push one's way in'	bsút 'to enter by force, force one's way in'	kyrsúh, tyrsúh 'to bore with an awl'

'nat (short form of tnat)	tnat 'branch, twig'	pnat 'forked branch, prong'	thnat (i) 'with a branched finger or toe' (ii) 'cock- spur'
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'náí (short form of bnái)	bnái 'moon'	phyrnáí 'to shine brightly'	shái 'to be light'
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her 'to fly'	snér 'feather, wing'	per 'to float'
(?) úd 'to com- plain, moan'	kyn(?) úd 'to hum'	kyr(?) úd 'to murmur, grumble'

tied 'to strike, hit'	patied 'to keep on hitting'	kyrtied 'to thunder'
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rung 'to enter'	phrung 'to pene- trate'	pynrung 'to insert'
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(ia)roh 'to praise'	kroh 'to coax'	pynroh 'to flatter'
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-teng 'occasion, time'	pateng 'genera- tion; joint, link'	bteng 'to join'
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pajut 'to drag'	kynjut 'to pull with force'
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(q)	tawiar 'in a circle'	lyngwiar 'circle'		
(r)	rwiang 'luck'	tyrwiang (i) 'halo round sun' (ii) 'hair whorl' associated with notions of good luck, etc.	rymwiang 'fishing hook'	
(s)	-neng 'above'	bneng 'heaven, sky'	kneng 'still and lofty' (in leng kneng 'to stand still and tall')	tneng (variant of kneng)
(t)	bit 'fitting, proper'	tbit 'skilful, tactful'		
(u)	dong 'angle, corner'	kdong 'corner (in sense of place ambush); opportun- ity'	kyndong 'corner'	
(v)	rat 'to demo- lish, to extirpate'	jrat (in phut jrat 'to extract s. rooted')	jynrat 'to uproot'	kynjrat 'to uproot with force'

ngam	sngem	sangam
'to sub-merge'	'damp, moist'	(thick under-growth, usually wet (in jungle)'

¹In modern usage, according to IS, klong by itself means 'a vessel, gourd'. 'Heart' is klong snam, 'blood vessel'.

²Not, of course in the case of pnat above, where appear to have an example of a 'different' prefix.

³Notice the length of vowel in pláit. The true sative here is pyllait 'to liberate'. See Section

⁴In IS's pronunciation, particularly of 'in-er r', the epenthetic vowel was frequently heard after the infix, viz. [kr'imen] for kyrmen. This underlines the point that the infix is essentially a labial consonant, and that the accompanying y vowel plays no part in the underlying structure of the word.

⁵I have used current spellings in these words instead of the older forms ting, ih etc. used by Ursor Singh.

⁶IS pointed out that Schmidt mistakenly interprets la liar as a word with a la- prefix, not recognizing its compound form.

⁷Compare the morphological use of final consonant variation in the verb in some Tibeto-Burman languages, such as Chin. See, for example, Henderson 1955b pp. 72-89, and Stern 1958.

⁸The reader is reminded that [e] and [o] are always longer in closed syllables than [i] and [u].
e 1.1.

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