

JAH-HUT, AN AUSTRASIATIC LANGUAGE OF MALAYSIA

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Foreword

Introduction

1. Previous literature
2. Affiliation
3. Social situation
4. Syntax
5. Morphology
6. Phonology
7. Remarks on Jah Hut and Malay

FOREWORD

The present account of Jah Hut is based on several field trips I made to Malaysia in 1966, 1968, 1969, 1971 and 1973.

Each time, my work on Jah Hut was only a diversion from my main occupation: the study of Semai, Jah Hut's fairly distant, but closest relative, which will be the subject of a larger description. The total amount of direct contact I had with Jah Hut speakers is about one month, with long intervals between sessions for sorting out, comparing and thinking about the data. Most of my observations, but not all, were made by direct questioning, either in Malay or in my own hesitating Jah Hut. As my questions were not always meaningful to the Jah Hut, the answers were not always consistent. In such cases, I had to modify the question, or to rely on my experience with Semai, Temiar, Cheq Wong and Semelai to guess what the answer was likely to mean. Since my questions were also intended for comparison with Semai, I may have unwittingly introduced a pro-Semai bias in my description; for this, I alone am responsible since the Jah Hut do not know Semai. But as the two languages are related, I felt such a bias could be more

revealing than any other, if bias there must be. In such short time as I spent, I did not record much text, nor observe or participate in many spontaneous Jah Hut conversations, although these approaches would have been much more fruitful and reliable than direct questioning.

Published literature on related languages was helpful, up to a point; of the fifteen or so Aslian languages of Malaya, only Temiar, Semai, Kentaq Bong and Jahai have brief grammatical sketches; the present description of Jah Hut grammar, in spite of its many gaps and defects, is more comprehensive. As for the few other languages of the Mon-Khmer family for which we have full grammars: Khmer, Khasi, Palaung, Nicobarese, Chrau, Sre, they are too distantly related to Jah Hut to serve as guides. So nearly every single statement made here represents a step in the unknown, and a possible error.

In 1971, I was supported for travel expenses by the American Council of Learned Societies, and in 1973 I was supported by a grant from the National Science Foundation to the University of Chicago. At all stages of my research, the Jabatan Hal Ehwal Orang Asli (Department of Aboriginal Affairs, Kuala Lumpur) has been very helpful in granting me permissions to visit aboriginal areas. In 1971 and 1973, the Jabatan Perpaduan Negara (Department of National Unity) kindly gave me permission to conduct research in Malaysia. To all the Jah Hut I met, I am indebted for their hospitality and cordial assistance. This work is intended for their benefit.

INTRODUCTION

To the world outside, both in Malaysia and beyond, the Jah Hut people are practically unknown. Their language has never been written nor described, and the total amount of vocabulary printed in word lists probably does not exceed two hundred items. Yet, a study of the language will help us to understand certain problems and to raise new, more interesting questions. For instance, what does the presence of a Mon-Khmer language so far south in the Malay Peninsula mean for the linguistic history of South East Asia; or, does Jah Hut present, in the typology of ergative constructions, a kind of system which was so far unrecognized. These questions, and others, were in the back of my mind while I was studying Jah Hut, and have limited my queries.

1. PREVIOUS LITERATURE

The name Jah Hut does not appear at all in Skeat and Blagden's monumental work (W.W. Skeat, C.O. Blagden - 1906), but, by studying the Comparative Vocabulary (vol. 2, part IV) it is possible to ascertain that some groups which they included in their 'Eastern Sakai

cluster' must have spoken Jah Hut. However, within this 'cluster', one also finds groups who did not speak Jah Hut but Semaq Beri, a rather distant relative of Jah Hut. Semaq Beri is a South Aslian (and hence also Mon-Khmer) language, closely related to Mah Meri and Semelai (Benjamin, 1973a), whereas Jah Hut is a Central Aslian (or Senoic) language, whose closest relatives are Semai and Temiar. Judging from the Vocabulary, Jah Hut proper seems to correspond to what Skeat and Blagden called the 'Inner Subgroup of Eastern Sakai'. Vocabulary entries preceded by the labels: Sak. Gual, Krau Ket., Krau Tem., and Kerdau are clearly Jah Hut, while certain words entered as being Krau Em., U. Cher., and U. Tem., seem to have a Jah Hut origin.

R.J. Wilkinson (1926) rejected Blagden's inclusion of Jah Hut (which he calls 'Krau Sakai') in a special division of 'Eastern Sakai'. He collected fifty to sixty 200-word vocabularies of Aslian languages and had access to a 'very full vocabulary of the Krau dialect' collected by A.J. Sturrock, a District Officer in Temerloh (unpublished, unseen). Yet, he would not decide on the position of Jah Hut, and preferred to mention it in a chapter entitled 'Mixed and doubtful tribes' saying that it showed features of both 'Central Sakai' (i.e. Semai) and 'Jakun' (i.e. Semelai), without discussing any specific example.

Peter Williams-Hunt (1952) placed Jah Hut squarely within the Senoi branch together with Semai and Temiar; he referred to it either as 'South Eastern Senoi' or properly, as 'Jah Hut'. Unfortunately he also included Mah Meri in the Senoi branch, and used the term Jakun interchangeably with Semelai.

Robert Dentan (1964) had first-hand information on the Jah Hut language and noted the shortcomings of Williams-Hunt's classification but did not propose one of his own.

Finally, Geoffrey Benjamin (1973a) presented a full-fledged classification of Aslian languages with probable separation dates based on lexicostatistical techniques. Although we have reservations about glottochronology and the dates proposed, we agree with his language subgrouping, having reached ourselves very similar results by different methods. His subclassification of Senoic is essentially the one presented here, and the position of Jah Hut within Senoic which he proposes is confirmed by our study.

2. AFFILIATION

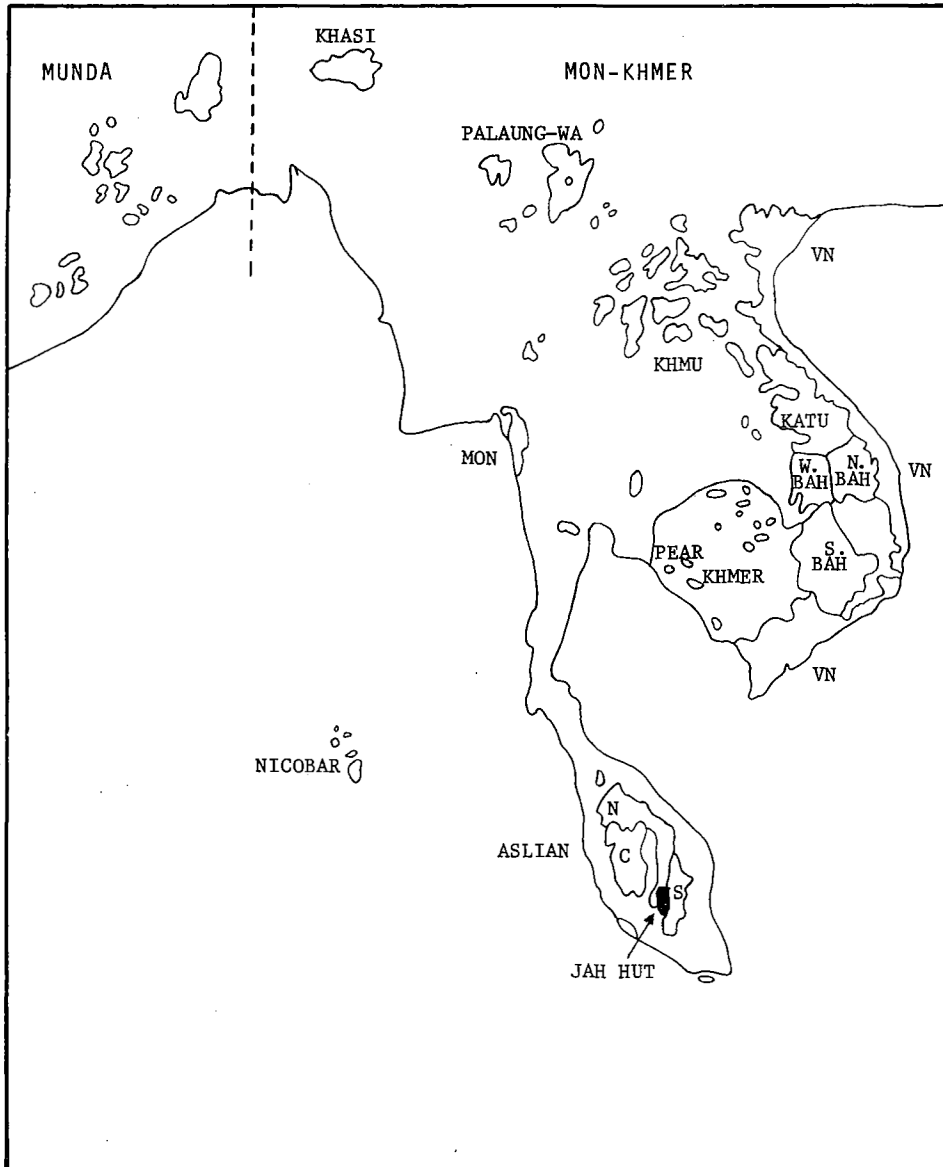
Jah Hut is an Austroasiatic language, and belongs specifically to the Mon-Khmer branch, but due to numerous internal changes, and to a good number of Malay borrowings, this fact is not immediately evident. Perhaps the most important change which has obscured the affiliation

of Jah Hut has been the loss of contrast between long and short vowels, a contrast which has been preserved in other Senoic languages (Semai, Temiar), and is found in most of the Mon-Khmer family. The only remnants of this contrast which survive in Jah Hut today are the diphthongs /ye, we, wo, wo, wa, we/ which correspond to Senoic long vowels; if these diphthongs are analyzed as clusters of consonant plus vowel, Jah Hut only has one vowel quantity, like North Aslian and Malay, but other analyses are possible (see 6.2.1.3.). As for the Lexicon, there is a tendency to use many Malay borrowings, especially when speaking to non-Jah Huts, but Benjamin's lexicostatistics (Benjamin, 1973a) show that the basic lexicon of Jah Hut remains Senoic, and therefore Mon-Khmer.

In spite of this obscured situation, there remains enough evidence of a structural nature to demonstrate the Mon-Khmer membership of Jah Hut in a fairly rigorous fashion. It is not our purpose to do that here, but one bit of evidence is worth mentioning, however briefly: the existence in Jah Hut of final palatal obstruents (/c/ and /ɲ/). These two finals are found in every single branch of Mon-Khmer and in Munda languages; they are to be reconstructed for Proto-Austroasiatic. Austronesian languages never have them, except when they were borrowed from Mon-Khmer, as in the Chamic languages of Viet Nam. They occur after any Jah Hut vowel, in words that have regular sound correspondences with Mon-Khmer cognates in Aslian, Nicobar, and all over continental South East Asia. Only a few examples will be given here:¹

- excrement* (SB: B161, D114): Jah Hut /ʔec/
 Khmer: ʔac, Proto-North-Bahnaric (238): *ʔic, Chrau: /ǎc/
 Pear: ich, Khasi: /ʔec/, Nancowry Nicobar: /ʔǎc/.
- to harvest, to pluck* (Pin. K40): Jah Hut: /kɛc/
 Khmer: /kac/, Proto-South-Bahnaric (353): *kac, Pear: khach,
 Khasi: /kʰɛc/, Nancowry Nicobar: /kéc/.
- meat, flesh* (SB: F170): Jah Hut: /sɛc/
 Khmer: /sac/, Proto-North-Bahnaric (247): *sěc, Proto-East-Katuic (340): *sâJ, Old Mon: sac, /sɔc/ (*fruit*).
- ghost* (SB: G18): Jah Hut: /kmɔc/
 Khmer: /kʰmaoc/ (*corpse, ghost*), Proto-South-Bahnaric (p.29):
 *koʔmôc (*grave*), Pear: khmuch (*corpse*), Pacoh: /kumuuyʔ/.
- to weave, to plait* (Pin. 301): Jah Hut: /taɲ/
 Khmer: bɔnda:ɲ/ (spell.: paɲa:ɲ), Proto-North-Bahnaric (94):
 *tañ, Proto-South-Bahnaric (335): *tañ, Proto-East-Katuic (640):
 *taañ, Khasi: /tʰa:ɲ/, Pear: thanh, Nancowry Nicobar: /táp/.
 The Aslian words given in SB:P126 actually mean *to braid* and

MAP 1: AUSTRO-ASIATIC LANGUAGE GROUPS



represent a different etymon, but the Mainland-Mon-Khmer words quoted are indeed cognate with Jah Hut /tap/.

-to ask (SB: A165): Jah Hut: /smap/

Old Mon: smāñ, /smap/, Khmu: /maap/, Khamet: /maap/,

Riang-Lang: -map, Lawa: /hmaiñ/.

-termite² (SB: A110): Jah Hut: /gruŋ/v/drup/

Theng: druñ, Riag (White Striped): pruiñ\, (Black): priñ\,

Khasi: krúin, Central Nicobar: daðin, Bahnar: groñ (*a small worm, causes tooth cavities*).

The morphology of Jah Hut would also provide systematic evidence for including the language in the Mon-Khmer family (see 5.1.2.4. and 6.2.1.3.).

Among the Aslian languages of Malaysia, Jah Hut belongs to the Central branch, also called the Senoic branch. This can be shown by way of elimination: Jah Hut does not have the aspirated stops which are typical of South Aslian: Semelai /tʰi/, Jah Hut /tiŋ/ *hand*; nor does it exhibit the change of Proto-Aslian *a: to /e/ and /i/ which is a North Aslian innovation: Cheq Wong /kle?/, Jah Hut /kla?/, Proto-Aslian *kla: ? *tiger*.

It is difficult to find positive evidence for assigning Jah Hut to Senoic, besides that of Lexicostatistics³. The reason may be that Jah Hut has separated from Proto-Senoic very early, soon after the three branches of Aslian themselves separated, so that few innovations could take place in all Senoic and only there.

A comparison of Proto-Senoic (hereafter PSc) vowels illustrates the position of Jah Hut: leaving aside PSc *u:, there are three PSc long vocalic nuclei in the back region: PSc *ua, *ue, and *ɔ:. The three North-Senoic languages Temiar, Lanoh and Semnam all share the innovation of having merged PSc *ua and *ɔ: in favor of /ɔ:/, with Semnam later losing vowel length contrasts. On the other hand, Proto-Semai has merged PSc *ua and *ue in favor of /o:/, with a subsequent change of all /o:/ 's to /ə:/ 's in North-East Semai. Jah Hut did not undergo any merger of these proto-vowels and is thus the only Senoic language to have kept this older three-way distinction: PSc *ua became Jah Hut /wɛ/ before palatals, /wa/ before alveolars, and /wɔ/ elsewhere, whereas PSc *ue became Jah Hut /wo/ or /wɛ/ depending on the dialect, and PSc *ɔ: became Jah Hut /ɔ/.

meaning:	<i>finger nail</i>	<i>dog</i>	<i>Ipoh poison</i>
proto Senoic:	*c(n)ruas	*cuə?	*dɔ:k
Semnam	cnyɔs	cwo?	dɔk
Temiar (SW)	cɛnro:s	cwɔ?	dɔ:k
Temiar (NE)	cɛnro:s	cwa?	dɔ:g
Semai (NW)	cŋro:s	co:?	dɔ:k
Semai (NE)	cnrɛ:s	cə:?	dɔ:k
Jah Hut (1)	crwes	cwo?	dɔk
Jah Hut (2)	crwes	cwə?	dɔk

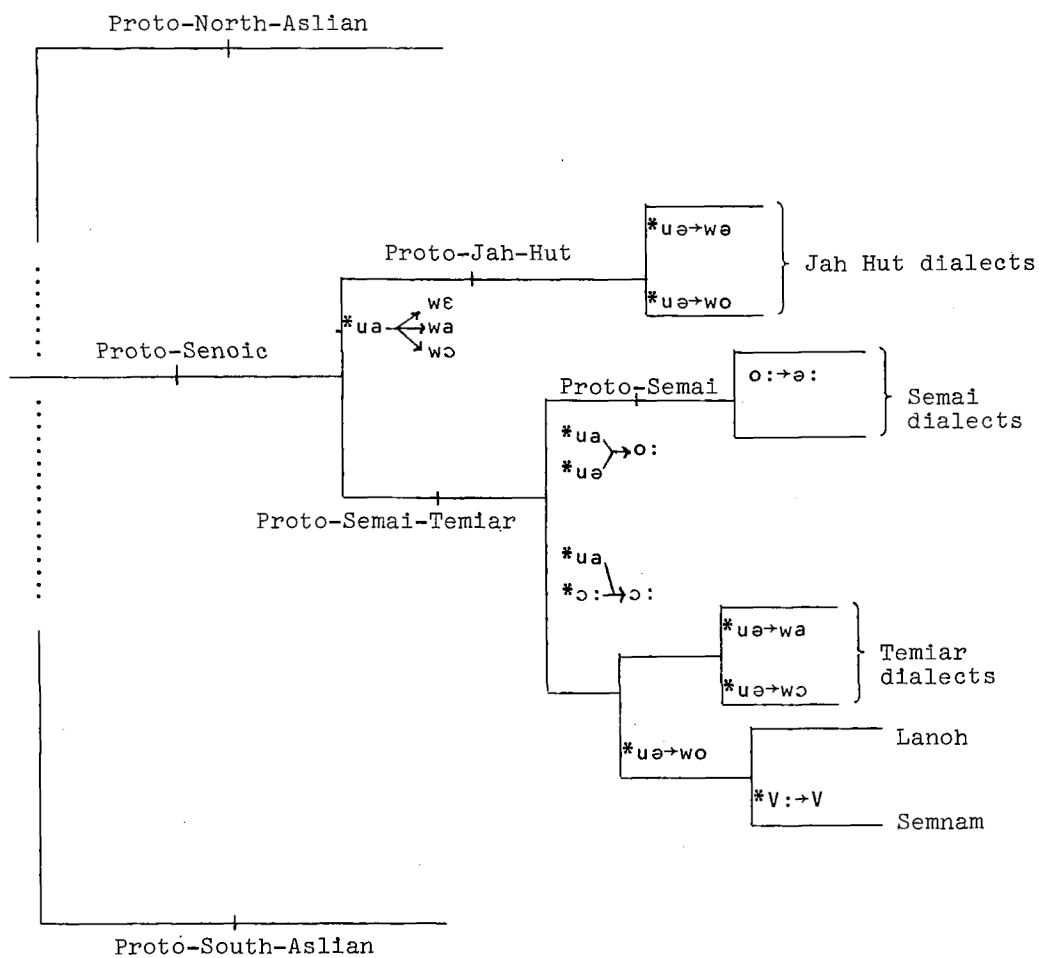
As for North and South Aslian, they have kept distinct reflexes of these proto-vowels, but with different realisations, as shown below.

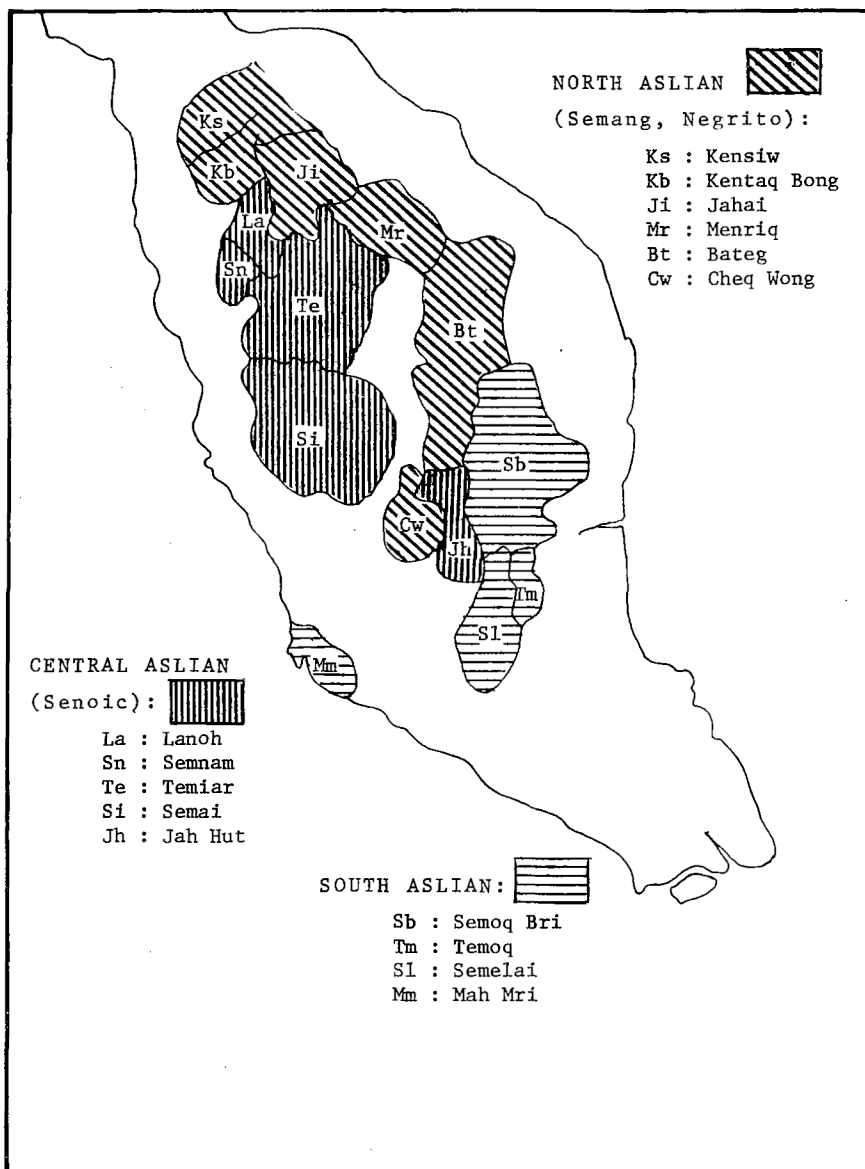
Proto Senoic	*ua	*uə	*ɔ:
North Aslian	a	ɛ	ɔ
South Aslian	o	ɔ	u

It can be seen that the modern Jah Hut reflexes are easier to relate to the modern Semai and Temiar vowel qualities than to those of either North or South Aslian.

The position of Jah Hut can be represented with the following tree diagram:

Historical position of Jah Hut in the Aslian branch of Mon-Khmer:





3. SOCIAL SITUATION

Geographically, the Jah Hut occupy a peculiar position, being cut off from their nearest relatives, the Semai, by a distance of over fifty miles, in contact with distant linguistic cousins on all sides, the Cheq Wong, the Bateg, the Semoq Beri, the Semelai, and flanked by Temuans who speak an Austronesian language, on the South-West. Speakers of Malay, also an Austronesian language, form part of the wider environment.

Such a remarkable position implies interaction between these groups, and one is not surprised to find a number of North Aslian (i.e. Semang, or Negrito) and South Aslian features in Jah Hut, both in phonology and lexicon. The very ethnonym, Jah Hut, is revealing in this respect: in /jah hət/, /jah/ means *people* and /hət/ means *no*. The neighbouring Cheq Wong, who speak a North Aslian language, distinguish all ethnic groups they know by the word for *no*, or *don't want*, or *there isn't* used in their respective languages: In Cheq Wong, the Jah Hut are called /bri? hət/ (*people no*) *the no* (hət) *people*, the Temuans are /bri? nep/, some Bateg are /bri? nəŋ/, different Semai groups are /bri? pe?/ and /bri? tɔ?/, all *no people*. The Jah Hut seem to have adopted the idea, but only for designating themselves.

Jah Hut speakers are not numerous (1300 to 1700 according to Dentan, 1964), and they live in very small settlements, traditionally composed of half a dozen or less houses near a swidden field. These settlements move every few years, but the general location of the Jah Hut remains the same: a hill tract area, ten to twenty miles deep along the right bank of the Pahang river, between Jerantut and Temerloh.

Dialect variation in Jah Hut is not very great; having rapidly sampled most of the Jah Hut speaking area, except for the more remote parts of the Krau valley, I have found only one systematic dialect difference: in the village of Paya Mendoī (lower Krau valley) the reflex of Proto-Senoic *ue is /wo/, while it is /wə/ elsewhere. There are other differences associated with this: in the /wo/ dialect, the first person pronoun is /ʔihã?/, but /ʔihãh/ in the /wə/ dialects. There is also a great deal of variation in the whole Jah Hut area in the pronunciation of initial *cl-, *jl- and *sl- clusters: while they are intact in Paya Mendoī, they change to /tɪ-/ , /dɪ-/ or /gɪ-/ , and /hɪ-/ respectively, in other dialects. Ex. Paya Mendoī: /jlep/ *red*, elsewhere: /dlep/ or /glep/. There are even individual speech mannerisms: three men in Kyol village (and only three) are famous for saying /ʔihšh/ instead of /ʔihãh/ for *I* and /ʔimšh/ instead of /ʔimãh/ for *you* Sg. In microsocieties like those of the Jah Hut where individualism is appreciated, language change can be a matter of deliberate

personal creation. Such societies, and such values, may have been common-place in the Austroasiatic past.

4. SYNTAX

What we know of Jah Hut syntax confirms the Sinoic character of the language; most statements made in this section, including those about ergativity, have precise equivalents in Semai.

4.1. INDEXICAL WORDS

Jah Hut has a large number of words which are not used in statements, but indexically (Jakobson, 1966). In a statement, the speaker asserts the truth of what he says; indexical meanings, on the other hand, have little to do with truth, but accompany the state of mind of the speaker and indicate it. There are at least three categories of indexical words in Jah Hut: Verb clitics, Exclamations, and Expressives.

4.1.1. Verb Clitics

A verb clitic can be added immediately after a verb, before any complement or any other word. It indicates the attitude or the role of the speaker in the given speech situation; for instance, /meh/ accompanies a gentle protest:

- (1) /ʔihãh ʔaken meh/ *I, not-want, Clitic:*
'I don't want (to do it)...What do you think!'

or a mild command:

- (2) /pɕɛk meh ʔiwã? hɛ? dɔh/ *put-to-sleep, Clitic, child, our, this:*
'Why don't you put our child to sleep, dear!'

This clitic is very similar in meaning to the Malay particle *lah*; in fact, *lah* itself is often added to /meh/ in Jah Hut:

- (3) /ʔihãh ʔaken meh lah/ *same meaning as (1).*

The clitic /meh/ can also be used at the end of a Sentence (see Predicate clitics 4.2.1.3.); and it may be placed just after an Auxiliary and after the Negative /hɛt/. In this last case it signals the attitude of the speaker with regard to the Negation (for example that it is obvious, not worth arguing over). Thus, Auxiliaries and the Negative function in some ways like verbs.

Another verb clitic is /bɛh/, the question marker, also placed immediately after the verb:

- (4) /yɔn hət yɔn ca? bəh ka? dɔh/: *you, not, you, eat, Clitic, fish, this:*
'Won't you eat this fish?'

4.1.2. Exclamations

Exclamations are sufficient in themselves to identify the emotion which they accompany, so, they may be used alone. They may also be followed by complete sentences. For example, /ʔes/ in the following dialogue between speaker A and speaker B:

- (5) A: /ʔimāh cip we? tuy/: *you, go, to, there:*
'Go over there!'

B: /ʔes, hāh ʔakən mɛh lah sbap hāh bhec/: *exclamation, I, not-want, clitic, clitic, because, I, afraid:*
'Forget it! I don't want (to go), I am scared.'

Another exclamation is /tɛʔ/, *enough said, let's go!* Exclamations and Verb clitics are invariable.

4.1.3. Expressives

Expressives, on the other hand, have a derivational morphology of sorts. They are also extremely numerous. An Expressive signals the presence of certain sensations in the speaker. These sensations may be due to activities the subject is bodily undergoing (e.g.: loss of balance) or simply observing (e.g.: visual pattern). Expressives are generally iconic: that is, there are elements in common between the sensation signalled and the sensation produced by uttering and hearing the Expressive.

/lpuŋ/: 'sound of heavy fruit falling on the ground'. Ex: /dyew/: 'loss of balance (due to oscillations of a bridge or flexing the knees)'

The Expressive may be repeated, indicating that the sensation is repeated in time: /dyew dyew/, a morphological (or syntactic) process which is also iconic.

It may take certain prefixes indicating plurality:

/dyɔp/: 'visual impressions of a wave rolling'

/slaʔdyɔp/: 'impressions due to several waves at the same time'

This /slaʔ-/ or /hlaʔ-/ prefix contains an /-l-/ infix which cannot always be isolated but indicates intensity or great numbers: /saʔbyar/: 'visual impression of dishevelled hair', /slaʔbyar/: 'id., with hair longer and more plentiful'.

There is a good deal of individual variation in the meanings and forms of Expressives, e.g. some prefer /dew/ to /dyew/ *loss of balance*.

Expressives are used either alone, or, like Exclamations, at the beginning of a sentence:

- (6) /hla?yaŋ, mna? ntaŋ ?eh nin/: Expressive, *big, ear, his, there:*
'(large ears!) his ears are large',

or directly preceding a Noun phrase, like a Stative verb:

- (7) /glihuŋ mat ?eh nin/: Expressive, *eye, his, there:*
'(caved in!) are his eyes',
- (8) /sla?dew sla?dew n?cip jah nin de?/: plural-losing-balance,
 plural-losing-balance, *the-act-of-walking, people, those, now:*
'those people walk like drunks'.

4.2. STATEMENTS

Statements are assertions of truth. There are three types of statements: Equational sentences, Stative sentences and Process sentences.

Equational sentences consist of two Noun Phrases where the second normally constitutes the predicate: /NP₁ - NP₂/: 'NP₁ is a NP₂'. It is possible to have the predicate first but it must then be followed by a predicate clitic like /meh/:

- (9) /təl cnu?oŋ jah meh doh/: *trace, act-of-making-fire, people,*
clitic, this:
'these are traces of fire making (of some people)'.

Jah Hut does not have an overt Copula corresponding to English *is*, but it has an overt Negative Copula: /?iwəŋ/: *not to be* distinct from the ordinary Negative /hət/.

- (10) /?ihāh ?iwəŋ jah cina?/: *I, NOT-BE, person, China:*
'I am not a Chinese'.

Note that the predicate, here: /jah cina?/, can optionally be preceded by the Verb phrase particle /na?/:

- (11) /?ihāh ?iwəŋ na? jah cina?/: (same meaning). This particle is homophonous with the Contemplated Aspect particle /na?/ which is borrowed from Malay (written *hendak* or *'nak*), and with several Jah Hut prepositions (see Ergative Construction).

Stative sentences normally have the order: Predicate-Topic:

- (12) /mna? kəy māh/: *big, head, your:*
'your head is big'.

The reverse order: Topic-Predicate is also possible when the Topic is newly introduced in the conversation.

Process sentences have the order: Topic-Predicate:

- (13) /yeh kdi? kay syẽ?/: *he, stay, in, house:*
'he stayed at home'

The other order, with Predicate, or at least Verb, in first position is also possible (see 4.2.4.).

4.2.1. Predicate

The Predicate consists of a Verb Group followed by Complements, and optionally followed by a Predicate Clitic.

4.2.1.1. The Verb Group

The Verb Group consists maximally of one or more Auxiliaries, a Personal Prefix, a Verb, and a Verb Clitic, in that order.

Among Auxiliaries we find: /me?/ or /na?/ 'Contemplated Aspect', /dah/ 'Perfective' (cf. Malay sudah).

- (14) /?ihãh na? cip cwom kyey/: *I, Contemp.-Asp., go, dig, tuber:*
'I am going (somewhere) to dig up tubers'.

Personal Prefixes agree in Person, Number, and Respectability with the Agent or the Experiencer, depending on the type of verb; note for instance /yeh/ '3rd Pers.' and /hãh/ '1st Pers.' in the following sentences:

- (15) /cwe? yeh m?mus/: *dog, 3rd-Pers., growl:*
'the dog growls'
- (16) /?iwã? nin het yeh sre?/: *child, this, Negative, 3rd-Pers., know:*
'this child does not know'
- (17) /?ihãh het hãh sre?/: *I, Negative, 1st-Pers., know:*
'I don't know'

As in (16) and (17), the Personal Prefix is very commonly used after the Negative /het/. This is true even if the Experiencer is a Pronoun, as in (17).

These Personal Prefixes are phonologically reduced forms of the Personal Pronouns with which they may agree.

	Personal Pronouns	Personal Prefixes
<i>I</i>	?ihãh (v?ihã?)	hãh (vhã?)
<i>We (Exclusive)</i>	?ibɔ?	bɔ?
<i>We (Inclusive)</i>	?ihe?	he?
<i>You (Sg. Casual)</i>	?imãh	mãh

	Personal Pronouns	Personal Prefixes
<i>You</i> (Sg. Respectful)	?ihɨ?	hi?
<i>You</i> (Plural)	yɔn	yɔn
<i>He</i>	yəh	yəh
<i>They</i>	?igen	gen

It is worth noting that the Personal Prefixes are identical to the Possessive Adjectives: /häh/, *my*, /mäh/, *your*, etc..., with the exception of the third person singular: /?əh/, *his* (for other uses of /?əh/ see: Predicate Clitics; see also 5.2.1.2. regarding the Prefix ?i-).

Not all Verbs can have Personal Prefixes: for some of them, which we can call Process Verbs, the Personal Prefix is used, but is optional; for others, which we can call Stative Verbs, the Personal Prefix cannot be used at all. Process Verbs and Stative Verbs constitute the two major subclasses of Verbs.

Examples of Stative Verbs:

- (18) /plə? nin kdek/: *fruit, that, BITTER*:
'that fruit is bitter'
- (19) /?ihäh dah k?ot/: *I, Perfective, EXHAUSTED*:
'I am exhausted'

4.2.1.2. Complements

Complements other than the Direct Object are introduced by Prepositions, of which there is only a small number:

-/ge?/, also /gwe?/ or /we?/ *to, with movement*

- (20) /b?jɔk ge? syɛ? pay/: *move, TO, house, near*:
'move to a new house'

- 21) /yəh cruh ge? tɛ?/: *he, fall, TO, earth*:
'he fell to the ground'

-/kay/ *towards, with movement*

- (22) /?imäh ?ageh pɪca? kay jah ?asiɲ/: *you, give, food, TO(wards), people, other*:
'you gave food to other people'

- (23) /?imäh smap kay yɔn/: *I, ask, TO(wards), you*:
'I asked you'

- (24) /yəh dlɛh kay ?ihäh/: *he look, TO(wards), me*:
'he looked in my direction'

-/na?/ *at, with movement*

- (25) /yəh ŋʔŋɔk na? dɔh/: *he, sit, AT, this:*
'he is sitting here'

-/lam/ *inside, with or without movement*

- (26) /yəh crəh lam tow/: *he, fall, IN, water:*
'he fell into water' (cf. Mal. dalam *inside*)

-/han/ *with (Instrumental or Associative)*

- (27) /ʔihāh na? cɔp rap tuy han bulus/: *I, will, stab, boar, that,*
WITH, spear:
'I'll stab that wild boar with a spear'

It is not always possible to translate a Jah Hut sentence with a parallel one in English because the Verb and its accompanying Preposition do not always divide up the total meaning in the same way in both languages:

- (28) /pɛɛm ge? tuy/: *near, TO, there:*
'It is near there'
- (29) /bilɪt kay nhɔʔ/: *wrap, TOWARDS, tree:*
'wrap (it) around the tree'
- (30) /yəh krpuh han krpa?/: *it, open, WITH, wings:*
'It opened its wings'

Some Prepositions can also be used without a main Verb, and function as the Verb itself:

- (31) /ge? pat ʔimāh nin dɔh/: *TO, where, you, here, just-now:*
'Where are you going?'
- (32) /ʔihɪ? dɔh na? we? pat ʔɛh/: *you, just-now, will, TO, where,*
Clitic:
'Where do you want to go?'

Only one Complement does not require any Preposition: the Direct Object. While in many cases the Direct Object construction serves to convey the meaning 'target' of the action:

- (33) /səh ba?/: *pound, RICE:*
'to pound rice'

or the meaning 'prey' of the action:

- (34) /wəh tow/: *drink, WATER:*
'to drink water'

it also has many other meanings:

- (35) /cwə? jʊl jah/: *dog, bark, PEOPLE:*
'the dog barks at people'
- (36) /yəh bhec ?ihǎh/: *he, afraid, I:*
'he fears me'
- (37) /?ihǎh na? kɔy/: *I, sick, HEAD:*
'I have a headache'
- (38) /?imǎh c?cyek syẽ? hǎh/: *you, sleep, HOUSE, MY:*
'you are coming to sleep at my house'
- (39) /bey-kɔ? mpǎc nina? hǎh/: *don't, step, MAT, MY:*
'don't step on my sleeping mat'.

4.2.1.3. Predicate Clitic

There is a variety of Predicate Clitics which are not absolutely required by rule, but are nevertheless extremely common. Jah Hut speakers feel that without a Predicate Clitic a sentence is not 'wrong' but is not 'full' either. We know practically nothing about the semantics of these clitics.

-/ɲɛc/ *only (?)*

- (40) /?ihǎh mrɲah ɲɛc/: *I, restless, ONLY:*
'I am just restless'

-/naŋ/ or /nan/ *for a while*

- (41) /he? bra?do? na? dɔh nan/: *we, stop, at, here, FOR-A-WHILE:*
'we'll stop here for a while'.

4.2.2. Noun Phrase

In the Noun Phrase, be it Subject or Complement, the head-Noun can be preceded only by a Quantifier; it may be followed by Adjectives, Possessives and Demonstratives, in that order.

4.2.2.1. Quantifiers

The Quantifier is either a Quantity Modifier, e.g. /ba?lɔ?/ *many*, /mrəm/ *how many?*, or a Numeral, e.g. /ni?wey ~ niwey/ *one*.

Only Count-Nouns can occur with a Quantifier; these are either Nouns having an inherent durational meaning, e.g. /nahun/ *year*, /kntɔ?/ *day*, /dɔy/ *night* (as a time span) or Nouns used as standards of measurement: /del/ *three dimensional object*. Mass Nouns cannot occur with Quantifiers. In case they need to be counted this must be done mentioning the standard of measurement being used: ex. /nar del syẽ?/ *two, three-dimensional-objects, house*, (=two houses). This construction

is very similar to the Malay use of so-called 'numeral classifiers' and has the same word order: Number-Classifier-Noun.

4.2.2.2. Possessives, Adjectives and Relatives

Possessives and Adjectives are directly added after the head Noun without any grammatical marker. This is also true of Relative Clauses.

- (42) /ʔidoh pləʔ kom kəʔ caʔ/: [*this*]_{NP} [(fruit)_N (CAN, WE, EAT)_{Rel}]_{NP}:
 '*this is a fruit which we can eat*'.

In this example, the Relative Clause /kom kəʔ caʔ/ is directly added to the head Noun /pləʔ/. Sometimes the Relative Particle /yaŋ/, a borrowing from Malay, is inserted between the head Noun and the Relative Clause:

- (43) /ʔidoh syẽʔ hãh yaŋ kʔnar/: [*this*]_{NP} [(house, my)_N (Rel. Part, second)_{Rel}]_{NP}:
 '*this is my second house*'

4.2.2.3. Deictics

Definiteness in Noun Phrases is indicated by Possessives: /syẽʔ hãh/ *my house*, /syẽʔ ʔəh/ *his house*, or by Deictics, of which there are five:

- /doh/ *this here*, (near speaker)
- /nin/ *that there*, (near addressee, or not too far from speaker)
- /tuy/ *that out there*, (far from both speaker and addressee)
- /teh/ *that up*, (higher than speaker)
- /reh/ *that down*, (lower than speaker)

The combination of a Possessive and a Deictic is possible, with the Possessive first:

- (44) /ʔiwãʔ hẽʔ doh/: *child, our, this*:
 '*our child here*'

The Possessive also precedes Relative Clauses (see ex. 43) and the Deictic always comes at the end of the Noun Phrase.

4.2.3. Temporal and other Clitics

A number of clitics indicating punctual times are added to Noun Phrases, Verb Phrases or full Sentences. Several of them are translated into Malay as meaning *tadi*, *just now*: /dyeh/, /baʔ/, /deh ~ deʔ/, others appear to be generally deictic: /rəʔ/ *this*. When used with a Noun Phrase, they exclude the Deictics mentioned above.

- (45) /bila? j?jut ?inin, yeh dyeh pr?du?/: *when, startled, clitic, he, JUST-NOW, run:*
'When thus startled he runs away'
- (46) /tapi? hət yeh dleh kay ?ihāh rɔ?/: *but, not, he, look, at, me, Clitic:*
'but he did not look at me'
- (47) /bila? dapat na? yeh ?inin ba?, tr?wə?/: *when, get, by, he, this, Clitic, feverish:*
'When he gets it, he becomes feverish',⁴

We may also mention here the Clitic /?əh/ which occurs in phrase final position when the sentence contains a question word like /pat/ *Where ?*:

- (48) /cwɔm kyey pat ?əh/: *dig, tubers, where, Clitic:*
'Where shall (we) dig up tubers?'
- (49) /?ihi? dɛ? na? wɛ? pat ?əh/: *you, just-now, will, towards, where, Clitic:*
'Where are you going?'

This /?əh/ Clitic being the bound form of the Third Person Pronoun, it may be possible to interpret (49) as meaning 'You will go somewhere, Where is IT?', with 'it' (/?əh/) referring to the omitted indefinite 'somewhere'.

4.2.4. Permutations

We have outlined, so far, only those constructions which we considered basic. From this order of constituents, it is possible, by permutation, to obtain other constructions.

4.2.4.1. Subject permutation

In both types of Declarative Sentences (NP-NP and NP-VP) it is possible to place the Predicate in front. There seems to be no obvious change of meaning in this permutation.

- (50) /?inin meh bes kra?bɔ?/: *that, Clitic, SPIRIT, FOOD MIXING*
'the food-mixing taboo spirit is like that' (with the Subject, /bes kra?bɔ?/ at the end of the Sentence).
- (51) /gmac bəh plə? nin/: *good, Interrog., FRUIT, THIS:*
'Is that fruit good to eat?'

4.2.4.2. *Ergative construction*

With a large number of Process Verbs, the Agent, if placed after the Verb, must have the Preposition /na?/, which also has the meanings 'from' and 'at', as well as other functions (see ex. 11, 14).

- (52) /brce? meh na? ?imäh ra?wä? dɔh/: *delouse, Clitic, AGENTIVE, you, infant, this:*
'delouse this child, won't you'

The Preposition /na?/ can be called Agentive because it is restricted to Animate or personified Nouns, and is used only with certain Sentences whose Subject is, semantically, an Agent. In such Sentences, there is a choice to place the Agent in post-verbal position and mark it with /na?/, forming what will be called an Agentive Subject, or to place it before the Verb, without any marking, like other kinds of Subjects.

Transitive Sentences can have Agentive Subjects:

- (53) /cu?oŋ na? pah ?əh ka? nin dɛ?/: *cook, Agentive, who, Clitic, fish, that, just-now:*
'Who just cooked that fish?'

This remains true even in semantically transitive Sentences whose Object is not overtly mentioned:

- (54) /k?ku? na? ?ihäh/: *vomit, Agentive, I:*
'I was vomiting (something)'

Certain Intransitive Sentences also may have Agentive Subjects, if they mention, or imply, a direction toward or from something other than the Subject himself:

- (55) /jwɔŋ na? ?ihäh/: *stand-up, Agentive, I:*
'I stood up'
- (56) /yok na? ?ihäh meh/: *return, Agentive, I, Clitic:*
'I just went back'

But Intransitive and Directionless actions like to shiver, to be sleeping, cannot have Agentive Subjects:

- (57) *(tr?wə? na? ?ihäh): **(I am shivering)*
- (58) *(c?cyek na? ?ihäh): **(I am sleeping)*

Note that Agentivity is not simply determined by the Verb, but by the meaning of the whole sentence: the same verb /c?cyek/ which cannot have an Agentive Subject in (58), can have one in (63) because a Direction is meant. A very similar situation is found in Semai (Diffloth, 1974).

It is difficult to find out what nuance of meaning is introduced by having the Agent placed in post-verbal position. Since it is especially common in answers to 'Who?' questions, we may assume that it is the preferred position when the Agent represents 'new information' (Chafe, 1970):

(59) Speaker A: /*ṇah səh ba?*/: *who, pound, rice:*

'Who pounded the rice?'

(60) Speaker B: /*səh na? ʔihǎh*/: *pound, Agentive, I:*

'I pounded it'

The reasons for calling such constructions 'Ergative' are given below (4.2.4.3.).

4.2.4.3. Complement permutation

Any Complement can be permuted to pre-verbal position. If there is a Case-marking preposition it remains with the Noun Phrase; the position of the Subject is independent of such permutations.

Locative permutation:

(61) /*na? dɔh mɛh ʔimǎh kr?di?*/: *AT, HERE, Clitic, you, stay:*

'You'll stay here, won't you'

Object permutation:

(62) /*cyək nin dah yəh ca?*/: *BANANA, THAT, Completive, he, eat:*

'he already ate that banana'

Direction permutation:

(63) /*syǎ? hǎh dɔh c?cyək mɛh na? ʔimǎh*/: *HOUSE, MY, HERE, sleep, Clitic, Agentive, you:*

'Come to my house to sleep, won't you'

This last example shows that it is possible to have both Complement permutation and an Agentive Subject in the same Sentence. The two are independent of each other: to sentence (62) where the Object is permuted and the Agent, being pre-verbal, has no Agentive marker /*na?*/, corresponds sentence (64):

(64) /*cyək nin dah ca? na? ʔihǎh*/: *banana, this, Completive, eat, Agentive, I:*

'I already ate the banana',

with a permuted Object, and an Agentive Subject.

To sum up, in Intransitive and Complementless sentences like (51), it is possible to have a Subject without Case marker, regardless of its position in the sentence. The Object of transitive sentences

behaves in exactly the same way: no Case marker, regardless of position.

In transitive sentences, or sentences with Complements, the Agent receives a special Case marker /na?/, which is lost only if the Agent is in pre-verbal position.

This amounts to saying that sentences (52-56), (60), (63) and (64) are instances of Ergative constructions of a new kind (see Golab, 1969, and Silverstein, 1973, on the typology of ergativity).

It might be objected that sentences like (64) represent a Passive construction in Jah Hut. Such an analysis can be rejected on three accounts: first, as we showed above, the placement of the Subject and the Object in relation to the Verb are independently variable, second, when the Agent and the Object exchange positions, the Verb does not undergo any morphological change which would indicate a change of Voice, third and more crucial, when the Verb has a Personal Prefix, it always agrees with the Agent, whatever its position in the sentence is, and regardless of the position of the Object:

- (65) /cyək nin dah hāh ca? na? ?ihāh/: *banana, that, Completive, 1st-Person-Prefix, eat, Agentive, I:*
'I already ate the banana'

If (65) was a Passive, the permuted Object '*banana*' would become a superficial Subject, and the Verb would agree with it; we would have the Personal Prefix /yeh/ (3rd-Pers.) instead of /hāh/.

Jah Hut Ergativity is not simply a formal syntactic device, devoid of meaning: being restricted to actions with a Direction or a Complement located outside the Agent, it overtly manifests an important semantic category of the language.

A similar system is also found, and easier to see in Semai, but Temiar lacks any sort of Agentive Subject; whatever its history in Senoic may be, Jah Hut and Semai are the only Mon-Khmer languages in which Ergativity has been found so far.

4.2.5. Dependent Clauses

Dependent clauses, introduced by Conjunctions, are usually placed before the main clause. The last word of the dependent clause is often a Deictic Pronoun which appears to have no semantic relation with either the main Verb or the Verb of the dependent clause; its sole function seems to consist in marking the end of the dependent clause:

- (66) /bila? j?jut ?inin yeh dyeh pr?du?/: *when, startled, pronoun, he, just-now, run:*
'When he is startled he runs away'

Thus all Deictic words have boundary marking functions: Deictics mark the end of Noun Phrases (see ex. 44) and Deictic Pronouns mark the end of Dependent Clauses.

There are two Jah Hut constructions to express the notion 'to do S_1 in order that S_2 ': the Purposive and the Prospective.

4.2.5.1. Purposive

The Purposive construction indicates two consecutive actions carried out by the same Agent, the first action being a prerequisite for the second: 'Agent does VP_1 so that HE can do VP_2 '. The Agent, being the same in both clauses, is deleted in the second, dependent clause:

- (67) /ʔihāh naʔ cip cwəm kyey/: I, will, go, DIG, TUBER:
'I want to go (in order to) dig up some tubers'.
(68) /yeh səh prah naʔ bwat rəm/: he, pound, perah, WILL, MAKE,
FERMENTED-PASTE:
'he pounded perah nuts⁵ in order to make fermented perah paste'

4.2.5.2. Prospective

The prospective construction indicates an action carried out by someone on an object (or a person) so that this object (or person) reaches a certain state: 'Agent does V to Object so that Object is Stative'.

The dependent clause is introduced by the Prospective particle /ʔeʔ/, and the Object of the main verb is not repeated in the dependent clause:

- (69) /tin nɛm ʔeʔ cmaʔ/: sharpen, knife, Prospective, SHARP:
'sharpen the knife (so it becomes) sharp'

Sometimes the Object is not mentioned at all and the construction Verb-ʔeʔ-Adj. becomes a compound verbal unit expressing both the Action and its Result:

- (70) /bəʔ ʔeʔ lajuʔ/: throw, Prospective, far:
'throw (it) far'

5. MORPHOLOGY

The Senoic branch of Mon-Khmer is unique in the family in having a relatively rich and productive morphology, and Jah Hut seems to have preserved some archaic patterns lost in the rest of Senoic. These two facts combine to make Jah Hut one of the most interesting Mon-Khmer language to study, if morphology is of any help in linguistic pre-

history. The following is a rough outline of a delicate subject, and should not be considered complete nor definitive. In this section we present the meanings and syntactic functions of various affixes; the phonological rules governing the shapes and variants of some of these affixes will be found in the second part of the next section (see Morphophonemics, section 6.2.).

5.1. VERB MORPHOLOGY

Outlined here are several affixes which can be added to Verb Roots to produce either derived Verb forms or derived Nouns.

5.1.1. Derived Verb Forms

5.1.1.1. Reduplication

All Process Verbs have a reduplicated form (see Reduplication, 6.2.1.) which indicates, among other things, that the action is in progress.

Ex. /ca?/ *to eat*, reduplicated: /c?ca?/ *to be eating*
 /k!uŋ/ *to speak*, reduplicated: /kŋ?!uŋ/ *to be speaking*
 /j!eħ/ *to look*, reduplicated: /j?!eħ/ *to be looking*

Certain Verbs are found only in the reduplicated form; in such cases, the reduplication does not seem to have any semantic consequence, and the form is used as a Verb root:

Ex. /k?rɔ?/ *to intoxicate fish*
 (the simple form /kɔ?/ does exist but it is an unrelated Noun meaning 'the back').

The reduplicated form is often used when the Object is non-specific:

(71) /bey j?!eħ jah n?na?/: *come, Redup-look, people, sick:*
'let's inspect the sick'; here, 'look' is reduplicated because the object does not refer to any specific sick person or persons (in which case it would have a deictic).

When the Verb is in the reduplicated form, it is unacceptable to use an Agentive Subject. From (65), one cannot derive *(72):

*(72) *(cyek nin c?ca? na? ?ihāh)

In other words, it is impossible to have the Progressive Aspect with the Ergative construction, a restriction found in many languages that have Ergatives.

5.1.1.2. Causative

Many Verbs, especially Stative Verbs, have a corresponding Causative

/cyek/ <i>to sleep</i>	/pcyek/ <i>to put someone to sleep</i>
/ca?/ <i>to eat</i>	/ppca?/ or /prca?/ <i>to feed someone</i>

/mna?/ to be big	/pmna?/ to enlarge sth.
/bhec/ to be afraid	/prbhec/ to frighten
/tlas/ to escape	/pnlas/ to release

Syntactically, the main difference between Causatives and the corresponding (Active) Verbs lies in the Causatives having an additional Agent, the Causer. Because of this, the Case assignments associated with the Active Verb are modified as the Verb becomes Causative.

If the Active Verb is intransitive, its Subject becomes the Direct Object of the Causative; for instance, the Direct Object /?iwā?/ in ex. 2 would be the Subject of the Active Verb /cyek/ to sleep.

If the Active Verb is transitive, its Direct Object remains Direct Object of the Causative, while its Agent becomes an Indirect Object, marked with the particle /kay/; for instance, from:

- (73) /ra?wā? dōh dah yēh ca? cyək nin/: CHILD, THIS, Completive, 3rd-Pers., EAT, banana, that:

'this child ate that banana' one derives:

- (74) /?ihāh pŋca? cyək nin kay ra?wā? dōh/: I, Caus.-EAT, banana, that, TO, CHILD, THIS:

'I fed that banana to this child'

In all cases, the Causer is, semantically, an Agent, and, like all Agents, can be placed after the Verb with the Agentive particle to form ergative constructions:

- (75) /pcyek na? nah ?ēh/: Caus.-sleep, Agentive, who, Clitic:
'Who put (him) to sleep?'

There are other possibilities: a Verb like /bhec/ to fear has a Direct Object which is semantically the origin of the fear:

- (76) /kuciŋ bhec cwə?/: cat, fear, DOG:
'the cat fears the dog'

In the Causative, this 'origin-object' becomes the Subject:

- (77) /cwə? prbhec kuciŋ/: DOG, Caus.-fear, cat:
'the dog frightens the cat'

thus embodying the idea that this 'origin' is semantically the same as the 'Causer' of the fear.

5.1.1.3. Superlative

Stative Verbs generally have a derived form with a Superlative meaning and the same syntactic behavior as the original Stative Verb:

/num/ ripe	/ra?num/ very ripe
/hɪək/ heavy	/sra?ɪək/ very heavy

5.1.2. Derived Noun Forms

5.1.2.1. Action nominalisation

Nearly every Verb has a corresponding Gerund Noun form. With Process Verbs, the Gerund refers to the fact that the action took place, or to the way it did; with Stative Verbs it indicates the State.

Ex. /ca?/ to eat /n?ca?/ the act of eating
 /bhec/ to be afraid /bnahec/ the feeling of fear

The gerund may be followed by all the complements that accompany the underlying verb, the whole construction functioning like a Noun Phrase. The former Subject of the underlying Verb becomes the possessive of that Noun Phrase and is, therefore, placed at the end:

(78) /lambat n?cip ?əh/: slow, Gerund-walk, HIS:
 'his walking is slow'

5.1.2.2. Agent nominalisation

Most Verbs have a corresponding Noun with the meaning: 'the one who does V', often with the added connotation of an habitual or excessive action:

/lyɛp/ to plait palm leaves /mlayɛp/ one who plaits
 /cyɛk/ to sleep /m?cyɛk/ one who usually sleeps
 /ca?/ to eat /m?ca?/ one who eats too much

Sometimes, upon questioning, Jah Huts will say that these forms with initial /m/ also have another use similar to that of the Malay *məŋg-* forms, which they take to mean 'to be in the process of doing something'. Whether this is actually true of the Jah Hut language or is only a commonly held stereotype, I am not sure: it is not always easy to parse Jah Hut sentences unambiguously. There are many cases however where the /m-/ forms are clearly Agent Nouns:

(79) /?ihãh ?iwɔŋ na? jah m?ca?/: I, not-to-be, Preposition,
 person, Agent-EAT:
 'I am not a big eater'

where /jah m?ca?/ is a Noun-Noun construction just like /jah cina?/ in example (11), an exact parallel to example (79).

5.1.2.3. Object nominalisation

Transitive Verbs have a corresponding Noun designating 'the thing which is V-ed'.

Ex. /ca?/ to eat /pɲca?/ food
 /phɔm/ to breathe /pɲ?hɔm/ breath

This affix is no longer productive at present, and it is not always

easy to disambiguate it from other Nominalised Verb forms: whereas /pɛcaʔ/ is not ambiguous, as a Noun, /pɛʔhɔm/ can also mean: *the act of breathing*.

5.1.2.4. Instrument nominalisation

Some verbs yield a Noun form meaning 'the object with which V is done'

Ex. /kʔrɔʔ/ *to intoxicate fish* /knɔʔ/ *the root used for intoxicating fish*
 /tɔs/ *to knock fruits down* /tnalɔs/ *pole for knocking fruits*

Here again, such forms are often, but not always, homonymous with other Nominalisations, especially Action Nominalisation.

The phonological forms of the various types of Nominalisations found in Jah Hut indicate a basic two-way contrast between forms with an /m/ for Agent Nominalisation, and forms with an /n/ for all others. The same contrast, expressed by the same sounds /m/ and /n/ is found in the Nicobarese languages, (Radhakrishnan, 1970), a group of Austro-Asiatic languages whose exact relationship to Mon-Khmer and Munda has not been determined yet.

5.2. NOUN MORPHOLOGY

The morphology used with basic Nouns is less productive than that used with basic Verbs, and does not form a neat system. The meaning elements expressed in Noun morphology are usually detailed and specific. Only two such affixes have a more systematic meaning: the Quantifier infix and the Verbaliser.

5.2.1. Derived Noun Forms

5.2.1.1. Quantified nouns

As we saw earlier (section 4.2.2.), the majority of Jah Hut Nouns are Mass Nouns, and only a few Noun sub-classes can be used directly with a Numeral or a Quantifier. But it is possible to create Count Nouns from Mass Nouns by morphological derivation:

/kɔʔ/ *day light* /knɔʔ/ *day (unit of time)*

This is certainly an ancient morphological pattern as it is found in all branches of Aslian; but in Jah Hut, it is being displaced by a curious pattern of suppletion; the Malay equivalent of most duration Nouns is known to the Jah Hut, for instance, /hariʔ/ *day* (Mal. hari) is equivalent to /knɔʔ/, and /malam/ *night* is equivalent to /dɔy/; in Numerals, Jah Hut uses Mon-Khmer words only for *one* (/niʔ/~niʔwey/), and *two* (/nar/) (Diffloth, to appear) while Malay borrowings, e.g. /tigaʔ/ *three* are used for higher figures; in a construction, if the

last numeral is 'one' or 'two', the Mon-Khmer Count Noun is used, otherwise, the equivalent Malay one: /ni? kntɔʔ/ *one day*, /nar kntɔʔ/ *two days*, but: /tigaʔ hariʔ/ *three days*, and similarly: /ni? doy/ *one night*, /nar doy/ *two nights*, but /tigaʔ malam/ *three nights*. Thus there is agreement between Noun and Numeral with regard to the 'original' vs. 'borrowed' distinction. A similar case is found in Theng (Maspero, 1955) with Thai borrowings (see mak entry). As there are only two remaining original numerals, original quantified Nouns are being phased out and replaced by equivalent Malay count nouns.

5.2.1.2. Existential nouns

Several small classes of Nouns have a prefix /ʔi-/ which can still be isolated in most cases.

With kinship terms, /ʔi-/ indicates a reference term as opposed to the bare root which is a term of address:

/ʔitaʔ/	<i>someone's grand father</i>	/taʔ/	<i>grand pa!</i>
/ʔiʔɛm/	<i>someone's elder brother</i>	/ʔɛm/	<i>elder brother!</i>
/ʔideh/	<i>someone's parent's yo. sis.</i>	/deh/	<i>parent's yo. sis.!</i>
/ʔiwǎʔ/	<i>someone's offspring</i> (parents usually address their own children by name, but see /raʔwǎʔ/ <i>child, infant</i> below).		

The prefix /ʔi-/ is also used to form pronouns from Possessives and personal prefixes, e.g. /ʔihǎh/ *I*, /ʔibɔʔ/ *We Excl.* (see section 4.2.1.1.), and from deictics, e.g. /ʔidɔh/ *this one here* (see section 4.2.2.2.).

In all cases, the /ʔi-/ prefix asserts the existence of the entity to which it is added. This prefix is historically related to the Semai Definite Article /ʔi/ which is also a third person Possessive, and to the Temiar particle /ʔi/, a Subject marker (Benjamin, 1973b).

5.2.1.3. Expressive nouns

A number of animal names contain a recurrent /-lʔ-/ sequence which cannot be isolated as a morpheme in present-day Jah Hut:

/klʔbak/	<i>butterfly</i>
/hlʔdeʔ/	<i>cockroach</i>
/klʔjɛh/	<i>a small bird sp.</i>

This appears to be a remnant of a Proto Senoic infix /-l-/ which probably meant 'step by step' and was used to derive Expressives from Stative Verbs. We saw (section 4.1.3.) that an /-l-/ infix can still be isolated in some Jah Hut Expressives, and the very same /-lʔ-/ sequence can be found, but not isolated, in many other Jah Hut Expressives: /klʔpɔr/ *big mouth!*, /blʔhir/ *blue-green* etc. It is probably not a coincidence that the animal names where /-lʔ-/ is found designate

animals with rapid jerky movements. These names thus appear to be former Expressives used to describe the 'step by step' movements of these animals. This is clearer in Semai where every animal species has a large number of nicknames referring to movements, habits and appearance, many of which are drawn from the grammatical class of Expressives.

5.2.1.4. Reduplicated nouns

Many Jah Hut Nouns have the same phonological structure as reduplicated Verb forms;

/tntyɛn/ *bridge*

/sɲʔwiŋ/ *skies*

/cʔcek/ *house lizard* (cf. Mal. *chichak*)

/tntwɔŋ/ *a bird sp.*

Since the corresponding monosyllabic forms are not found in Jah Hut today, these forms are not analysable; but such roots are often found in related Senoic languages, e.g. Semai /swi:k/ *skies*. In any event, the Reduplication affix only applies to Verbs; but as the phonology of these Nouns follows exactly the phonological pattern of reduplication in Verbs, they will be made to undergo the same phonological rules, even though they do not contain a morpheme 'Reduplication'.

5.2.1.5. Superlative nouns

The superlative /raʔ/ affix (cf. section 5.1.1.3.) is another case of a Verb morpheme unexpectedly found in some Nouns; for instance, the word /raʔwǎʔ/ *child, infant* (cf. /ʔiwǎʔ/ section 5.2.1.2.). The Nouns 'woman' and 'man (male human)' also contain this affix:

/kraʔkəŋ/ *woman* from /kəŋ/ *female*

/kraʔkɔŋ/ *man* from /kɔŋ/ *male* (e.g. /ʔiwǎʔ kɔŋ/ *son*)

The prefixed reduplication of the initial /k/ in these two words does not fit any regular morphological pattern, but see section 6.2. The term superlative Noun was suggested by the overt similarity to Superlative Verbs, but it might also be justified semantically, e.g. a woman is female par excellence.

5.2.2. Derived Verb Forms

Verbs may also be derived, sporadically, from basic Nouns:

/ceʔ/ *louse* /brceʔ/ ~ /bɲceʔ/ *to delouse someone*

/sek/ *rotan* /brsek/ *to look for rotan*

/rudɔŋ/ *friend* /brudɔŋ/ *to accompany*

The similarity of this pattern to the Malay *bĕr*-Noun: 'to have Noun' construction, in both form and function is quite striking. However, the Malay prefix is more productive. In Jah Hut, the meanings of derived Verb forms are as varied as 'to take Noun from someone', 'to get Noun', 'to take someone as Noun', each Noun producing a different sort of Verb; such information has to be included in the Lexicon, as in the case of other idiomatic compounds, and yet the phonological forms are as regular as in any normal morphological pattern.

6. PHONOLOGY

6.1. ROOT STRUCTURE

Jah Hut, like other Mon-Khmer languages, has prefixes and infixes but no suffixes; the end of the word is therefore unaffected by morphophonemic alternations, and usually constitutes the root; it is also the only part of the word to receive stress. In describing Jah Hut phonology, it is therefore appropriate to start from the end of the word and move backwards to the initial; rhyming dictionaries are a must for all Mon-Khmer languages, and are more informative than initially ordered dictionaries of the traditional European type.

6.1.1. Finals

All Jah Hut words and roots end in one, and only one consonant. When Malay words ending in a vowel are borrowed, they receive a final glottal stop: /tuhaʔ/ *old* (Mal. tua), /saʔluʔ/ *always* (Mal. selalu).

All Jah Hut consonants, except voiced stops, can be used as finals:

	p	t	c	k	ʔ
Jah Hut Finals:	m	n	ɲ	ŋ	
	w	r, l	s, y		h

Besides /-uw/, /-uw/ and /-iy/, which are excluded, there seem to be very few restrictions between the final consonant and the preceding vowel. This makes Jah Hut a very useful language for reconstructing Proto-Mon-Khmer finals as even /-is/ and /-es/ are preserved, while only /-ih/ and /-eh/ are normally found in other languages of the family.

There are only four Velar and Post-Velar finals in Jah Hut, but they represent nearly half of the vocabulary, almost as much as the eleven other finals. The glottal stop is mostly responsible for this imbalance.

6.1.2. Vocalic Nuclei

A Vocalic Nucleus consists of a simple vowel or a diphthong; there are twelve diphthongs which may become vocalic nuclei: /yɛ/ /wo/ /wə/ /wa/ /we/ /wɔ/ and their nasalised counterparts. Other types of diphthongs function as sequences of Semiconsonant + Vowel; thus, /cyɛk/ *to sleep* has only one initial consonant and a /yɛ/ vocalic nucleus, whereas /cyək/ *banana* has two initial consonants and a single /ə/ vowel. The reasons for distinguishing two kinds of diphthongs are morphophonemic (see section 6.2.1.3.).

Simple vowels form a three by three system:

i	u	u
e	ə	o
ɛ	a	ɔ

For many speakers, /u/ and /ə/ are not distinguished, but others do maintain this old contrast consistently; e.g. /sʔup/ *sweat* vs. /grʔəp/ *to burp*, /kbus/ *to be dead* vs. /bəɓ/ *to throw away*.

All vocalic nuclei have nasalized counterparts, but they are not very frequent (around 6% in Lexicon frequency).

Ex: /cɔr/ *to burn a swidden* vs. /cɔ̃r/ *a squirrel* sp. (*Sundasciurus lowii*), /sɛc/ *flesh* vs. /ʔisɛ̃c/ *a bird* sp. (*spider hunter*).

Nasal vowels can occur before every final consonant, and after every consonant except /g-/. There seems to be no simple way of predicting their occurrence, even by setting up appropriate nasal consonants in 'underlying' phonological representations.

The great frequency of nasal vowels in Expressives suggests in many cases the presence of a separate morphological element. But it also appears that Expressives do not have affixes in the traditional sense (Diffloth, 1973).

6.1.3. Initials

In considering the sounds which precede vocalic nuclei, we can distinguish three types of roots: Simple roots, with only one initial consonant, complex roots, with two initial consonants, and disyllabic roots with an unstressed syllable, the 'Minor', preceding the stressed, final, 'Major' syllable.

6.1.3.1. Simple roots

Every Jah Hut consonant can occur as the initial of a simple root; this includes all the consonants which can be final, plus a full series of Voiced stops:

b d j g

Ex: /got/ *hungry*, /gam/ *to winnow*, /jɔŋ/ *foot*, /jɔn/ *to send*, /den/ *bamboo*, /duʔ/ *to run away*, /bam/ *mouth piece of blowpipe*, /baʔ/ *rice* (*padi*).

6.1.3.2. *Complex roots*

At the beginning of complex roots, most combinations of two consonants can occur, with the following restrictions:

- No clusters of two identical consonants.

There are apparent counter-examples: /kkēr/ *brush-tailed porcupine* (*Atherurus macrourus*), /ʔʔak/ *crow* (*Corvus* sp.); but they are actually Reduplicated Nouns which have lost the infix /-ʔ-/ normal in such forms. /kkēr/ has a free variant /kʔkēr/ (see also Cheq Wong /krkēr/ *brush-tailed porcupine*), as for /ʔʔak/, the normal reduplicated noun form should be /ʔʔʔak/ ([ʔəʔʔak]), which is automatically simplified to [ʔəʔak]: /ʔʔak/ by a phonetic rule.

- No clusters of homorganic stops. This rule excludes the following clusters: gk-, kg-, jc-, cj-, dt-, td-, bp-, pb- in addition to the ones already excluded by the rule above. There are two apparent exceptions in our data: /bput/ *to blow* which probably contains a b- prefix (see Sema /pu:t/ *to blow*) and /tduh/ *evening* which is a Malay word perhaps not used in everyday Jah Hut. Non-homorganic Stop clusters are not restricted: /tkak/ *palate*, /dkaŋ/ *bamboo rat*, /tgəh/ *solid*, /pkaŋ/ *a spirit*, /bku/ *grey*, /bgək/ *goitre* etc...

- No clusters of homorganic Stop plus Nasal. This rule excludes: kŋ-, gŋ-, cŋ-, jŋ-, tŋ-, dŋ-, pŋ-, bŋ-. But non-homorganic clusters are not restricted: /dŋəy/ *straight*, /kneʔ/ *rat*, /jnes/ *arm*, /bnum/ *high mountain*, /kmat/ *gizzard*, /cmaʔ/ *sharp*, /tmoʔ/ *stone* etc...

- Clusters of Nasal plus Stop must be homorganic. Ex: /mpāc/ *to step on*, /ntaŋ/ *ear*, /pəcəm/ *near*, /ndum/ *ripe* (v/num/). There is one apparent exception: /mcək/ *Yellow-throated marten* (*Martes flavigula*). The glottal stop does not function as a Stop in this rule since it has no homorganic Nasal: /mʔun/ *comfortable to sit in*, /nʔəs/ *firewood* (historically derived from the Jah Hut word for *fire*: /ʔəs/).

- With two Stops, combinations of Dentals and Palatals are excluded: this rule further prohibits: ct-, cd-, jt-, jd-, tc-, tj-, dc-, dj-.

This rule also extends to clusters with -s- in second position: ts-, ds-, cs-, js-, are excluded.

A further extension of this rule could also explain the instability of cl-, jl-, and sl- initial clusters; even ty- clusters are unstable and alternate freely with cy-: /cyək/ *to sleep* is sometimes pronounced /tyək/; (the t- is historical and attested in other Mon-Khmer languages: Semnam /tsk/ *to sleep*, Khmer /deic/, (spell.: te:k) *to lie down*).

- No clusters of Liquids. This restriction can be seen as another extension of the rule just above.

- The initial of a cluster cannot be a Semi-Vowel (w,y), nor a

Laryngeal (h,ʔ). The only exceptions are clusters of h plus Voiced continuants (hm-, hn-, hp-, hŋ-, hr-, hl-); the first four are unstable, with the initial h- freely disappearing: /hŋɛm/ ~ /ɲɛm/ *knife*, /hmus/ ~ /mus/ *to sniff out*; the last, hl-, varies freely with sl-: /hlaʔ/ ~ /slaʔ/ *leaf* (Proto-Senoic and Proto-Mon-Khmer *sla:ʔ), /hlay/ ~ /slay/ *swidden, ladang* (Proto-Senoic *sla:y, Khmer /sla:y/ *fallow land*), while the hr- cluster could be analysed as a single unit (see section 7.).

There are other clusters that would appear to be impossible from our limited collection; some may simply be very rare possibilities e.g. clusters with initial Nasals, others may represent true restrictions on the language, other still, accidental gaps. Somewhere among these possibilities lies the historical explanation for the appearance of Nasal Vowels.

6.1.3.3. Disyllabic roots

A number of roots contain more than two segments before the main Vowel. These include roots with three initial consonants, the second of which is vocalic (a Nasal or a Liquid): /smpaʔ/ *durian*, /grtɛʔ/ *a tick*, /plʔəŋ/ *lukewarm*. Such roots may contain obsolete infixes, but they are no longer analysable in contemporary Jah Hut. Other roots contain a true vowel after the initial consonant. These are, for the most part, borrowings from Malay: /suraʔ/ *to sing* (Mal. *suara voice*), but some have no known Malay source, and have Semai and Temiar cognates which are also disyllabic (see: Diffloth 1973b):

/makoʔ/ *pregnant* (Semai, Temiar: /makɔ:ʔ/)

/kabok/ *Monitor lizard* (Semai: *kabuk*/, Temiar: /kabug/)

/baŋkeŋ/ *a bird sp. woodpecker?* (Semai: /maŋki:k/, Temiar: /maŋke:k/)

6.2. MORPHOPHONEMICS

6.2.1. Reduplication

Reduplication is a productive process in Verbs (see section 5.1.1.1.); in Reduplicated Nouns, it is not a morphological process at all (see section 5.2.1.4.); and yet, the two follow exactly the same complicated phonological rules.

Reduplication takes several forms depending on the root type: for complex roots, it simply consists of 'Final infixation'; for simple roots it is better described in two steps: first, 'Initial copying', then 'Final infixation'.

6.2.1.1. Initial copying

Reduplicated forms of simple C_iV C_f roots always contain two occur-

rences of the initial consonant C_i :

/jɔl/ → /jʔjɔl/ to be barking
 /rɛp/ → /rɔʔrɛp/ to be gnawing
 /hɛy/ → /hiʔhɛy/ to be waking up
 /cip/ → /cʔcip/ to be walking

the following rule is therefore needed: $C_i V C_f \rightarrow C_i C_i V C_f$

It creates non-existing intermediate forms: jjɔl, rɛɛp, etc...which are similar to complex roots in having initial clusters, and are thus suited for the application of the next, 'Final infixation' rule.

6.2.1.2. Final infixation

Reduplicated forms of complex roots show that, during Reduplication, something is inserted between the two consonants of the initial cluster:

/jleɪ/ → /jʔleɪ/ to be seeing
 /kɪɪŋ/ → /kɔʔɪɪŋ/ to be speaking
 /cwɔm/ → /cɔʔwɔm/ to be digging
 /syɔc/ → /sʔyɔc/ to be whistling

In a first approximation, this 'something' is most conveniently described as a copy of the final consonant, followed by a glottal stop:

$C_i C_m V C_f \rightarrow C_i - C_f - C_m V C_f$

This rule produces intermediate forms like: j-hʔ-leɪ, k-ɔʔ-ɪɪŋ, c-mʔ-wɔm, s-cʔ-yɔc; it also applies to the outputs of the 'Initial copying' rule, to produce new intermediate forms:

jjɔl → j-lʔ-jɔl
 rɛɛp → r-ɛʔ-rɛp
 hhɛy → h-yʔ-hɛy
 ccip → c-pʔ-cip

Several adjustments are necessary to produce the actually observed forms:

- Clusters consisting of C-yʔ- are syllabified as Ciʔ-:

h-yʔ-hɛy → /hiʔhɛy/ to be waking up
 n-yʔ-wey → /niʔwey/ one

One would expect C-wʔ- clusters to be syllabified as Cuʔ- initials, but no clear example has been found yet.

- Clusters consisting of $C_i - N - C_m$ where N is 'any Nasal', are simplified to: $C_i \eta C_m$, unless C_m is a Stop:

c-mʔ-wɔm → /cɔʔwɔm/ to be digging ([cɔʔwɔm])
 r-ɛʔ-rɛp → /rɔʔrɛp/ to be gnawing ([rɔʔrɛp])
 k-ɔʔ-ɪɪŋ → /kɔʔɪɪŋ/ to be speaking ([kɔʔɪɪŋ])

- Finally, all remaining clusters created by the 'Final infixation' rule lose the consonant preceding the glottal stop:

- j-h?-leh → /j?leh/ *to be seeing* ([ji?leh])
 s-c?-yɔc → /s?yɔc/ *to be whistling* ([si?yɔc])
 j-l?-jɔl → /j?jɔl/ *to be barking* ([ji?jɔl])
 c-p?-cip → /c?cip/ *to be walking* ([ci?cip])

this rule also affects clusters where C_m is a Stop, and the infix is -N?-:

- t-n?-tin → /t?tin/ *to sharpen*
 g-m?-gum → /g?gum/ *to winnow* (I heard once a /gm?gum/ variant).

There are a few forms with an extra, optional, adjustment rule, one that deletes the infixed -?-:

- k-r?-kër → /k?kër/v/kkër/ *brush tailed porcupine*
 t-ŋ?-twɔŋ → tŋtwɔŋ → /tntwɔŋ/ *a bird sp.: large racket-tailed drongo* (*Dissemurus paradiseus*)
 s-ŋ?-wiŋ → /sŋ?wiŋ/v/sŋwiŋ/ *skies*

this rule is apparently found only among Reduplicated Nouns, but it may be spreading in some dialects; e.g. in Kuala Krau in casual speech.

Finally, disyllabic roots reduplicate by having 'Final infixation' after the first vowel:

- /sura?/ → /su?ra?/ *to be singing*
 /mati?/ → /ma?ti?/ *to be dying*

but as both examples are Malay borrowings, there may be some other pattern.

6.2.1.3. Diphthongs in reduplication

The operation of reduplication rules shows that the sequences /ye, wo, wə, wɔ, wa, wɛ/ may be considered as single vocalic nuclei, whereas other sequences of semi-consonant plus vowel, e.g. /yɔ/ or /wi/, function as if they contained one consonant and one vowel. Thus, the root /cyek/ *to sleep* is reduplicated, not as a complex CCVC root, but as a simple CVC one:

- /cyek/ → ccyek → c-k?-cyek → /c?cyek/ *to be sleeping* ([ci?cyek])
 (there is no */c?yɛk/ parallel to /s?yɔc/ or /sŋ?wiŋ/)

The explanation for this is historical: Jah Hut /ye/ comes from a Proto-Senoic diphthong *iə, Jh. /wo/ and /wə/ come from *uə, and Jh. /wɔ/, /wa/ and /wɛ/ come from *ua; all three units *iə, *uə, *ua function in Proto-Senoic, Semai and Temiar as single vocalic nuclei, and their reflexes still do in Jah Hut today.

However, as w and y are pronounced in present-day Jah Hut as semi-consonants, Reduplication creates very long consonantal clusters:

- /jwɔŋ/ → j-ŋ?-jwɔŋ

these can be reduced by the usual adjustment rules:

j-ŋʔ-jwɔŋ → /jʔjwɔŋ/ *to be standing* ([jiʔjwɔŋ])

but also, optionally, by an early deletion of the infix -ʔ- mentioned above:

j-ŋʔ-jwɔŋ → j-ŋ-jwɔŋ → /jɲjwɔŋ/ ([jinjwɔŋ]) or /ɲɲjwɔŋ/ ([ɲinɲjwɔŋ]).

There are also a few cases where a /wɔ/, for instance, is treated as containing a consonant, in spite of its historical vocalic origins:

/cwɔm/ *to dig* (Semai /co:p/) → /cŋʔwɔm/ *to be digging*.

Reduplication itself is a very ancient process: all Sino-Tibetan languages have it, and both North and South Aslian have similar processes. In non-Aslian Mon-Khmer, 'Initial copying' is a prominent feature of Khmer morphology (see 'Prefix /R-/', Jenner, 1969, p.63 ff.), and 'Final infixation' has a strikingly close parallel in Nancowry Nicobar (see 'Root duplication', Radhakrishnan, 1970, p.149 ff.).

6.2.2. Affixation of n

Action nominalisations (section 5.1.2.1.), and Quantified Nouns (section 5.2.1.1.) have affixes with a variety of forms all containing an /n/.

Here again, Simple roots must be distinguished from others; in simple roots, nʔ- is prefixed:

/coy/ → /nʔcoy/ *act of gutting* ([niʔcoy])

/səh/ → /nʔsəh/ *act of pounding* ([nəʔsəh])

/cip/ → /nʔcip/ *act of walking* ([niʔcip])

but in complex roots, -nʔ- is infix after the first consonant:

/tɬɔs/ → /tnʔɬɔs/ *act of knocking fruits* ([tənəʔɬɔs])

/jket/ → /jnʔket/ *act of tying* ([jənəʔket])

and we also find that roots with /yɛ, wɔ/ etc. are treated as simple CVC roots:

/cyek/ → /nʔcyek/ *act of sleeping* ([niʔcyek]) (not *(cnʔyek))

/cwɔm/ → /nʔcwɔm/ *act of digging* ([niʔcwɔm]) (not *(cnʔwɔm))

Disyllabic roots simply infix an -n- after the first consonant:

/bilit/ → /bnilit/ *act of wrapping*

/cuʔɔŋ/ → /cnuʔɔŋ/ *act of cooking*

but there are initial consonants which do not allow infixation of nasals and simply have an n- prefix:

/rʔoh/ → /nrʔoh/ *act of sweating* ([nəroʔoh])

/mpăc/ → /nʔmpăc/ *act of stepping on*

/ʔagan/ → /nʔagan/ *goodness*

/lajuʔ/ → /nlajuʔ/ *distance*

/hawac/ → /nhawac/ *stinginess*

These examples suggest that this affix was originally a simple n- prefix and not an infix. The glottal stop in forms with an nʔ affix

is probably the remnant of an application of the 'Final infixation' rule. There are a few forms which can only be explained in this fashion:

/həy/ → /niʔhəy/ *act of waking up* must be derived from n-yʔ-həy
(cf. /hiʔhəy/ *to wake up* from h-yʔ-həy)

Such forms are rare and limited to -y finals; roots with final Nasals do not have a nŋʔ affix, as an application of the 'Final infixation' rule would produce:

/plum/ → /pnʔlum/ *day after tomorrow* and not *(pnŋʔlum).

6.2.3. Affixation of m

Not enough is known about this process to propose rules for it, but the following examples suggest that it is similar to 'Affixation of n':

/caʔ/ → /mʔcaʔ/ *eater*

/cyek/ → /mʔcyek/ *sleep*

/ʔudot/ → /mʔudot/ *smoker*

This Agent nominalisation affix must be distinguished from the m-'Progressive' affix which nasalizes initial stops according to the Malay pattern;

/cunəŋ/ → /mpunəŋ/ (*teeth*) *are protruding*

but otherwise contains a single m-:

/ʔudot/ → /mʔudot/ *be smoking* (the Malay rule would have produced *(mŋudot)).

6.2.4. Miscellanea

There is a rich variety of affixed forms about which little is known at the moment; these include many forms with an -a- infix:

/creŋ/ *long* → /cnareŋ/ *length*

/sŋec/ *cold* → /snaŋec/ *the cold*

/hɪlək/ *heavy* → /snaʔlək/ *weight*

/rŋap/ *red* → /nrŋap/ *redness*

/bhec/ *afraid* → /bahec/ *afraid (?)*

/lyep/ *to weave* → /nlayep/ *act of weaving*, /mlayep/ *be weaving*

Patterns in Semai and Temiar morphology suggest that this -a- infix could be a separate morpheme, but its meaning in Jah Hut is not apparent so far.

Causative morphology also contains unknown elements: the regular affix is either p- or pr-:

/caʔ/ → /prcaʔ/ *to feed*

/cyek/ → /pcyek/ *to put to sleep*

but there are also Causatives in *tr-* and *kr-*:

/hus/ (clothes) loosen → /trhus/ to undress

/lay/ to be inside → /krlay/ to put inside

6.3. PHONETICS

The notation in // used in the present work is a fairly abstract one, but, together with phonetic rules, is sufficient to predict phonetic details of the words represented. Some of these phonetic rules are given below.

The long consonant clusters at the beginning of many Jah Hut words would be unpronounceable without syllabification rules which insert vocalic segments in appropriate places;

/pnʔlam/ → [pənəʔlam]

Without trying to be exhaustive, one can say that:

- in C_1C_2V - initials (V being a vocalic nucleus), a vocalic segment is inserted between C_1 and C_2 , unless C_2 is a liquid or a semi-vowel,
- in $C_1C_2C_3V$ - initials, two vocalic segments are inserted ($+C_1vC_2vC_3V$ -), unless C_2 is a glottal stop, in which case only one segment is inserted, after C_1 ($+C_1vC_3V$ -).

The quality of these epenthetic vocalic segments is subject to the following rules:

6.3.1. Suprasegmental laryngeals

When a laryngeal (h or $ʔ$) immediately precedes a major vowel, the preceding epenthetic vowel takes on the quality of the major vowel:

/jʔaŋ/ bone → [jaʔaŋ]

/nhʕʔ/ tree → [nʕhʕʔ]

/sʔʔt/ rotten smell → [sʔʔʔnʔ]

the major vowel thus seems to be anticipated by the epenthetic vowel. Actually, from the point of view of articulation, this 'anticipation' is only a notational illusion: Laryngeals and Vowels are articulated independently and can be superposed in time: there is only one articulatory gesture for the vowel, not two separate and identical ones; the laryngeal intervenes at some point during the execution of the vocalic gesture; these laryngeals are in fact suprasegmental. But phonologically, they function as 'main consonants' (C_m) in our description of root structures and morphophonemics.

6.3.2. Epenthetic high vowels

A similar sort of 'anticipation' occurs in some C_1vC_3V - initials: if C_3 is a palatal, v takes on the quality $[i]$, if C_3 is a labial,

v takes on the [u] quality:

- /n?ca?/ → [ni?ca?] *act of eating*
- /p?nar/ → [pi?nar] *to be noisy*
- /snt?yɔ̃l/ → [sənti?yɔ̃l] *unhealthy (way of walking)*
- /p?bar/ → [pu?bar] *to be two*
- /w?wec/ → [wu?wec] *to be climbing*
- /tr?wə?/ → [tru?wə?] *to be feverish*

here again, 'anticipation' is only illusory; the [i] and [u] segments are part of the articulatory transition from a vocalic segment to a palatal or labial consonant, the suprasegmental glottal stop intervening late in the middle of the transition, without affecting it.

In C_1C_2V - initials where C_2 is a palatal or a labial, the epenthetic vowel is not quite so high (nor front or back) as in $C_1v?C_3V$ - initials:

- /tbul/ → [tebul] *a bee*
- /pceh/ → [pəceh] *to leave food*

the reason seems to be that in C_1C_2V - initials, the epenthetic vowel is not syllabic, and often hardly audible, whereas in $C_1v?C_3V$ initials the epenthetic vowel is syllabic.

Other epenthetic vowels have the neutral quality [ə].

6.3.3. Decomposed final stops

Jah Hut final Stops are checked, or unreleased, as in most languages of the Southern Far East. However, when final stops are preceded by nasal vowels, or by vowels preceded by Nasals, they are decomposed into two phonetic segments; the first is a Nasal homorganic with the Stop, the second is a glottal stop:

- /ŋok/ → [ŋɔ̃ŋ?] *to sit*
- /hla?ŋac/ → [hla?ŋǎŋ?] *to be shy*
- /?isēc/ → [?isēŋ?] *a bird sp; (spider hunter)*
- /mat/ → [mǎn?] *eye*
- /s?īt/ → [sī?īn?] *rotten smell*
- /ʔaŋ?hlēp/ → [ʔaŋ?hlēm?] *sound of breathing, of the creation of the world*

The final glottal stop preserves the checked character of the stop and maintains the contrast with final nasals.

This could be seen as an indication that all Jah Hut final stops, regardless of what precedes, have a glottal closure in addition to the oral one, a feature which would not surprise Mundaists; but experimental evidence is wanting.

7. REMARKS ON JAH HUT AND MALAY

Speakers of Aslian languages have been in contact with speakers of Austronesian languages for several centuries. Bilingualism across these two language families is not rare, and, probably, many present-day speakers of Austronesian languages like Temuan, Belandas and Jakun are descendants of Aslianophones. It is perhaps through such people that a good deal of linguistic interaction took place. So little is known about Temuan, Belandas, Jakun, and even Malay dialects, that we can only speculate. But two bits of evidence will illustrate the problem.

Modern Malay has lost intervocalic /h/ at an early date. The /h/ is sometimes found in the orthography, e.g. *mahu want*, sometimes not, e.g. *tiang house pole*. Temuan has preserved these h's: Temuan /*tihan*/ *house pole*. Jah Hut has borrowed the word, not in the Modern Malay form, but in the more archaic Temuan form: Jah Hut /*tihan*/ *house pole*, and this is not an isolated case; but Jah Hut could also have borrowed it from Malay when the /h/ was still pronounced.

There are other surprising h's in Jah Hut, especially in front of /r/: Jh. /*hraket*/ *raft* (Mal. *rakit*), Jh. /*hrbus*/ *to boil* (Mal. *rebus*). Since Semai and Temiar have similar occurrences, the explanation must be sought in the past. Temuan, and colloquial Malay dialects in Malaysia, generally have a voiced velar fricative [ɣ] for /r/, some dialects even have a uvular fricative, and many simply have a breathy [ɦ], especially in final position. Semai and Temiar, on the other hand, and most probably Proto-Senoic, have a distinctly trilled alveolar /r/. In modern Jah Hut, the /r/ is an alveolar approximant, articulated without friction with the tip of the tongue. In order to explain Jah Hut /*hraket*/ and /*hrbus*/ one would need to go back in time when Jah Hut still had a trilled /r/ and borrowed Malay or Temuan words with a velar [ɣ] or a post-velar; the sequence /h/ plus /r/ would be a good analysis, in Jah Hut terms, of that unfamiliar sound. Or was it Temuan which introduced the /h/ for similar reasons?

N O T E S

1. In this comparative vocabulary, the abbreviation 'Pin.' followed by a Number refers to the entry in Pinnow 1959, 'SB' followed by a letter and a number refers to the Vocabulary in Vol. II of Skeat and Blagden, 1906. Proto-North-Bahnaric words are from Smith, 1972; Proto-South-Bahnaric words are from Blood, 1966; Proto-East-Katuic words are from Thomas, 1967. The numbers in parentheses for the last three sources refer to entries in their vocabulary lists. Chrau words are from Thomas, 1971; Bahnar from Guilleminet 1959; Pear from Morizon, 1936; Nancowry Nicobar from Radhakrishnan, 1970; Central Nicobar from Man 1889; Riang from Luce 1965; Old Mon and Riang-Lang from Shorto, 1971; Theng from Maspero, 1955; Khmu from Smalley, 1961; Khamet and Lawa from Mitani, 1965. Khasi, Khmer and Jah Hut words are my own recordings.
2. The Khasi cognate is from N. Singh, 1906; the Jah Hut, Bahnar and Theng forms show that the initial stop must have been voiced in Proto-Mon-Khmer. If so, here is a case of the Khasi *g → k innovation which Haudricourt had expected but not found a good example of in 1965.
3. The Jah Hut retention rates (Benjamin, 1973a) are higher with Semai (38-40%) than with the other Senoic languages. If one assigns this to borrowings, as Benjamin does, the average retention rate between Jah Hut and the rest of Senoic would be around 27%, as compared to an average 25% with North Aslian and 24% with South Aslian.
4. Examples 45-46-47 were given to me by Duncan Holaday who did original and inspiring anthropological fieldwork among the Jah Hut in 1969.
5. *Elateriospermum* sp.

6. The plant, a *Derris* sp., is called /jnu?/ in Jah Hut (Mal. tuba jenu).

7. In Malay, such animals often have fully reduplicated names:
kupu-kupu *butterfly*, anai-anai *termite*.

BIBLIOGRAPHY

BENJAMIN, G.

- 1973a 'Austroasiatic subgroupings and prehistory in the Malay Peninsula'. *Austroasiatic Studies, Oceanic Linguistics*, Special Publication No.13. Hawaii. University of Hawaii Press. In press.
- 1973b 'An outline of Temiar grammar'. *Austroasiatic Studies, Oceanic Linguistics*, Special Publication No.13. Hawaii. University of Hawaii Press. In press.

BLOOD, H.F.

- 1966 *A Reconstruction of Proto-Mnong*. Summer Institute of Linguistics. Grand Forks. University of North Dakota.

CHAFE, W-L.

- 1970 *Meaning and the Structure of Language*. University of Chicago Press.

DENTAN, R.K.

- 1964 'Seno1-Semang'. *Ethnic Groups of Mainland South-East Asia* 176-86. New Haven. HRAF Press.

DIFFLOTH, G.

- 1973a 'Expressives in Semai'. *Austroasiatic Studies, Oceanic Linguistics*, Special Publication No.13. Hawaii. University of Hawaii Press. In press.
- 1973b 'Minor syllable vocalism in Senoic Languages'. *Austroasiatic Studies, Oceanic Linguistics*, Special Publication No.13. Hawaii. University of Hawaii Press. In press.

DIFFLOTH, G.

- 1974 'Body moves in Semai and in French'. *Papers from the 10th regional meeting*. Chicago. Chicago Linguistic Society.
- Forth- 'Mon-Khmer numerals in Aslian languages'. *Linguistics*.
coming In press.

GOLAB, Z.

- 1969 'Subject as a linguistic category'. *General Linguistics* 9.

GUILLEMINET, P.

- 1959 *Dictionnaire Bahnar-Français*. Tome I. Paris. Ecole Française d'Extrême-Orient.
- 1963 *Dictionnaire Bahnar-Français*. Tome II. Paris. Ecole Française d'Extrême-Orient.

HAUDRICOURT, A.

- 1965 'Les mutations consonantiques des occlusives initiales en Mon-Khmer'. *Bulletin de la Société de Linguistique de Paris* 60:160-72.

JAKOBSON, R.

- 1966 'Quest for the essence of language'. *Diogenes* 51. Montreal.

JENNER, P.N.

- 1969 *Affixation in Modern Khmer*. Ph.D. Dissertation. University of Hawaii.

LUCE, G.H.

- 1965 'Danaw, a dying Austroasiatic language'. In: G.B. Milner and E.J.A. Henderson (eds.) *Indo-Pacific Linguistic Studies*, Pt.1:98-129. Amsterdam. North-Holland Publishing Co.

MAN, E.H.

- 1889 *Dictionary of the Central Nicobarese Language*. London.

MASPERO, H.

- 1955 'Matériaux pour l'étude de la langue T'eng'. *Bulletin de l'Ecole Française d'Extrême-Orient* 47:457-507.

MITANI, Y.

- 1965 *Descriptive and Comparative Study of the Khamet Phonology.*
Kyoto University. Tonan Ajia Kenkyu. 3/3:22-51.

MORIZON, R.

- 1936 *Essai sur le dialecte des populations Pears des Cardamomes.*
Paris. Etudes Internationales.

PINNOW, H.J.

- 1959 *Versuch einer historischen lautlehre der Kharia-Sprache.*
Wiesbaden. O. Harrassowitz.

RADHAKRISHNAN, R.

- 1970 *A preliminary descriptive analysis of Nancowry.* Ph.D.
Dissertation. University of Chicago.

SHORTO, H.L.

- 1971 *A Dictionary of the Mon inscriptions.* Oxford University
Press.

SILVERSTEIN, M.

- 1973 *Hierarchy of features and ergativity.* Paper read at the
January 1973 meeting of the Chicago Linguistic Society.

SINGH, N.

- 1906 *Khasi-English Dictionary.* Shillong. Eastern Bengal and
Assain Secretariat Press.

SKEAT, W.W. and C.O. BLAGDEN

- 1906 *Pagan Races of the Malay Peninsula.* 2 Vols. London.
Macmillan.

SMALLEY, W.A.

- 1961 *Outline of Khmu Structure.* American Oriental Essays, No.2.
Baltimore. American Oriental Society.

SMITH, K.D.

- 1972 *A phonological reconstruction of Proto-North-Bahnaric.*
Santa Ana, California. Summer Institute of Linguistics.

THOMAS, D.D.

- 1971 *Chrau Grammar, Oceanic Linguistics,* Special Publication
No.7. University of Hawaii Press.

THOMAS, D.M.

- 1967 *A phonological reconstruction of Proto-East-Katuic.* M.A.
Thesis. Grand Forks. University of North Dakota.

WILKINSON, R.J.

- 1926 *Papers on Malay Subjects. Supplement: The Aboriginal
Tribes.* Kuala Lumpur. Federated Malay States Government
Press.

WILLIAMS-HUNT, P.D.R.

- 1950 *An introduction to the Malayan Aborigines.* Kuala Lumpur.
Government Press.