PACIFIC LINGUISTICS Series B - 101

SYSTEMS OF NUMERAL CLASSIFICATION IN THE MON-KHMER, NICOBARESE AND ASLIAN SUBFAMILIES OF AUSTROASIATIC

Karen Lee Adams



Department of Linguistics Research School of Pacific Studies THE AUSTRALIAN NATIONAL UNIVERSITY

PACIFIC LINGUISTICS is issued through the Linguistic Circle of Canberra and consists of four series:

SERIES A: Occasional Papers SERIES C: Books

SERIES D: Special Publications SERIES B: Monographs

FOUNDING EDITOR: S.A. Wurm

EDITORIAL BOARD: T.E. Dutton, M.D. Ross, D.T. Tryon

EDITORIAL ADVISERS:

B.W. Bender University of Hawaii

David Bradley La Trobe University Michael G. Clyne

Monash University

S.H. Elbert

University of Hawaii

K.J. Franklin

Summer Institute of Linguistics

W.W. Glover

Summer Institute of Linguistics

G.W. Grace

University of Hawaii M.A.K. Halliday

University of Sydney

E. Haugen

Harvard University

A. Healey

Summer Institute of Linguistics

L.A. Hercus

Australian National University

John Lynch

University of Papua New Guinea

K.A. McElhanon

Summer Institute of Linguistics

H.P. McKaughan

University of Hawaii

P. Mühlhäusler

Bond University

G.N. O'Grady

University of Victoria, B.C.

A.K. Pawley University of Auckland

K.L. Pike

Summer Institute of Linguistics

E.C. Polomé

University of Texas

Gillian Sankoff

University of Pennsylvania

W.A.L. Stokhof

University of Leiden

B.K. T'sou
City Polytechnic of Hong Kong
E.M. Uhlenbeck

University of Leiden

J.W.M. Verhaar

Divine Word Institute, Madang

C.L. Voorhoeve

University of Leiden

All correspondence concerning PACIFIC LINGUISTICS, including orders and subscriptions, should be addressed to:

PACIFIC LINGUISTICS

Department of Linguistics

Research School of Pacific Studies The Australian National University

Canberra, A.C.T. 2601

Australia

Copyright © The Author

Typeset by Jeanette Coombes

Printed by A.N.U. Printing Service

First Published 1989

Maps drawn by Theo Baumann

Bound by Adriatic Bookbinders Pty Ltd

The editors are indebted to the Australian National University for assistance in the production of

This publication was made possible by an initial grant from the Hunter Douglas Fund

ISSN 0078-7558 ISBN 0 85883 373 5

TABLE OF CONTENTS

ACKNOW	/LEDGMENTS	v
PRELIMI	NARY NOTES ON TRANSCRIPTION SCHEMES	v
СНАРТЕ	R 1: HOW, WHEN, WHERE, WHY, WHAT IS A NUMERAL CLASSIFIER?	1
1.0	Introduction	1
1.1	Use of the term numeral classifier	2
1.2	Characterising the differences between numeral classifiers and quantifiers	3
1.3	Characterising the differences between numeral classifiers and nominal compounds	10
1.4	•	13
1.5		23
СНАРТЕ	CR 2: AUSTROASIATIC LANGUAGES AND HOW (OR HOW NOT) TO STUDY THEM	25
2.1	Austroasiatic language family	25
2.2	Methodology	35
СНАРТЕ	CR 3: THE CLASSIFICATION OF ANIMATES	46
3.0	Introduction	46
3.1	Mon-Khmer subfamily	46
3.2	Nicobarese subfamily	92
3.3	Aslian subfamily	94
3.4	Conclusion	95
СНАРТЕ	CR 4: CLASSIFICATION OF INANIMATES: THREE-DIMENSIONALITY	100
4.0	Introduction	100
4.1	Mon-Khmer subfamily	101
4.2	Nicobarese subfamily	116
4.3	Aslian subfamily	117
4.4	The classification of houses	117
45	Conclusion	120

CHAPTI	ER 5: CLASSIFICATION OF INANIMATES:	
	ONE-DIMENSIONALITY	123
5.0	Introduction	123
5.1	Mon-Khmer subfamily	125
5.2	Nicobarese subfamily	144
5.3	Aslian subfamily	145
5.4	Conclusion	145
СНАРТЕ	ER 6: CLASSIFICATION OF TWO-DIMENSIONAL OBJECTS	149
6.0	Introduction	149
6.1	Mon-Khmer subfamily	151
6.2	Nicobarese subfamily	174
6.3	Aslian subfamily	174
6.4	Conclusion	174
СНАРТІ	ER 7: THE GENERAL CLASSIFIER	177
7.1	Nature of the general classifier	177
7.2	Sources of the classifiers	182
CHAPTI	ER 8: CONCLUSION	184
8.1	The nature of classification systems in the Mon-Khmer, Nicobarese and Aslian subfamilies of Austroasiatic	184
8.2	Some general comments on the structure of semantic systems of numeral classifiers	190
APPEND	IX	195
BIBLIOGRAPHY		201

ACKNOWLEDGMENTS

I would like to thank Pete (Alton L.) Becker for the original inspiration to work on classifiers and Gérard Diffloth who generously shared his knowledge and data thus giving the information on Austroasiatic the quality it has. I would also like to thank Penelope Eckert for her pragmatism in helping me limit this project and Aram Yengoyan for always being encouraging. In addition, my thanks go to William Gedney, Paul Benedict and Huỳnh Sanh Thông who made careful readings of this work and offered me wise counsel on specific languages and on larger questions of crossfamily borrowing. Also thank you to the referee who made useful suggestions.

There were many people throughout this project who helped me by sending data and answering questions about their data. Among these are the Thomases, the Watsons, E. Burton, and J.O. Svantesson. I want to acknowledge their kindness. I also want to apologise in advance for any misinterpretations I may have made of their data or of that of anyone else's.

Thanks also go to many colleagues both in Linguistics at the University of Michigan and those in English at Arizona State University who helped in many countless ways. I owe a special thanks to David Strecker for drawing maps for the preliminary manuscript and to both David and Brenda Johns for seeking out obscure data. I am also grateful to those at Pacific Linguistics for doing a difficult job well and with good humour. They include Jeanette Coombes for typesetting, Lois Carrington for copy editing and Theo Baumann for drawing the maps.

PRELIMINARY NOTES ON TRANSCRIPTION SCHEMES

The data for this study are drawn from a large number of sources and are presented in the text and tables in the transcription schemes found in the original source. Employing these schemes allows other researchers easy access to the original publication. In a few cases where there are several competing schemes the most phonemic/phonetic one is used. Because variation exists among the transcription systems, this section is designed to provide the reader with a key to the different styles of representing the sound systems of Austroasiatic. In the discussion below, 'phonemic/phonetic' means that the systems employ common phonetic symbols to represent the phonemes of the language in question.

Mon-Khmer subfamily

Khasi branch

The examples from Khasi proper are drawn from Rabel (1961). Long vowels and consonants are doubled. The data are written phonemically/phonetically as are the data for Wār from Weidert (1970).

Palaungic branch

Lamet

The Lamet examples are drawn from Izikowitz (1951) whose system is basically phonemic/phonetic. The symbol \mathcal{E} is for c/\mathcal{E} and \mathcal{E} is for an alveopalatal fricative. 'after a consonant means that the consonant is 'soft' or palatalised. Long vowels are indicated by over the vowel. \mathbf{w} is used for a tensed high central vowel.

Angku

The data from U are from Svantesson (1983) and are phonemically/phonetically written. means high tone, - means middle tone and `means low tone.

The examples of classifiers from the rest of the Angku languages, Angku, Amok, and Monglwe have been taken from Scott (with the assistance of Hardiman) (1900). They do not provide any key to their transcription system.

Rumai

The data on Gold Palaung from Milne (1921) appear in a modified phonetic system. ch is for c, but slightly aspirated; sh is for s; ng is for n; and ny is for n. Aspirated consonants are written with an 'next to them, so n' is n. This is a modification of Milne's system where the `is over the consonant.

For the vowels, - indicates a long vowel, while 'indicates an abrupt vowel. a is a mid-low central lax vowel, and i is the equivalent of a high front unrounded lax vowel. o is a low back vowel as in British 'hot' or 'law'. The symbols o and o are for vowels sounding like front rounded vowels.

Shafer's data on Palaungic are also phonemic/phonetic. - is for long vowels. å means a low back vowel.

Waic

The Proto-Waic data and the Kawa (Wa-Lawa) data are from Diffloth (1977), who, in this article, provides a description of some transcription schemes of Waic by other linguists. The data from Diffloth are transcribed phonetically. c and j are for palatal stops and the palatal nasal is indicated by p. For the vowels, r is a mid back unrounded vowel and p is a mid-low back unrounded vowel.

The Tai Loi (Samtau) and the En, Son, and Wa-Kengtung (Wa-Lawa-La) are also from Scott (with the assistance of Hardiman) (1900), as are most of the data on Angkuic. They do not give any explanation for their transcription system. Moreover, they have obtained their data from numerous sources, so there is a lack of consistency among the transcription systems for the different languages.

The La and Davies' Wa data are from Davies (1909), who does not provide information on his transcription system. However, 'after a consonant means aspiration.

The Antisdel's Wa data are from Antisdel (1911). In his system when consonants are aspirated an h- occurs before them. ny and ng are for palatal and velar nasals respectively. Not all of his vowel qualities are clearly identifiable. However, e is phonetically like e, eh like e, and er like e, i followed by a consonant is like i. oo is like e phonetically. e and e and e stands for e and e for e fo

The Drage's Wa (1907) data have aspirated consonants with the h preceding the consonant. ny is for the palatal nasal, ng for velar. -ch at the end of a word has the quality of a velar fricative. However, according to Diffloth (1977:73-74) Drage uses -it for -c and -in for the final palatal nasal, $-\tilde{n}$. \ddot{o} and \ddot{u} , according to Drage, indicate front rounded vowels. $a\ddot{u}$ is a high back rounded vowel. -a- between consonants is an unstressed mid-central vowel. The symbol a represents a low front vowel. As with o, this vowel is sometimes written with a - over the vowel and sometimes not. o indicates a lower back vowel, \bar{o} would seem to be a higher longer one. u stands for v. All the vowel characteristics are not clear, nor are they necessarily consistent.

The Lawa data are from Mitani and are written phonemically/phonetically.

As a final note, it should be pointed out here that three sources for Palaungic languages – Milne, Drage and Scott (and Hardiman) – use \ddot{o} and \ddot{u} . Two of the sources characterise these vowels as front rounded ones equivalent to German vowels. However, comparative work (see Diffloth 1977, for example) and further research could indicate that they are really central or possibly further back vowels.

Monic branch

The forms cited in the text, when available, are those of Shorto (1962, 1971). Shorto's citation forms consist of two or three parts. The first is a phonetic transcription of modern spoken Mon. The forms following in brackets are transliterations of the Mon script which represents older forms of the language. Several of the other specialists on Mon, Halliday (1922), Haswell (1901) and Low (1837), rely also on transliterations of the older script forms. In Halliday, whose forms are cited here, \mathcal{E} is a palatal stop and $\mathcal{E}h$ is its aspirated form. \ddot{a} is a back mid-low unrounded vowel. However, for Halliday (1922) and Haswell (1901), Shorto (1962:xiv-xv) points out inconsistencies in their transliterations.

Khmuic branch

Khmu

The data on Khmu (Southern Khmu) are from several sources: Smalley (1961), Delcros (1966), and Maspéro (1955). Smalley's examples are presented phonemically. The palatal nasal is represented by \tilde{n} . i represents a high central unrounded vowel. e is used for the phonetic quality [i]. The symbol ε has several phonetic variants including [e] and [e] and [e]. a represents low central allophonic variations. Long vowels are doubled. The Delcros system varies from Smalley. q is used for \mathfrak{g} and for the nasalisation of the vowel in final position. \hat{n} is used for the palatal nasal. Glottal stop is indicated by '. e stands for e, e for e, and e for e, e is a back mid-vowel. e stands for a high front unrounded vowel. Long vowels are doubled.

Maspéro describes the T'eng dialect of Southern Khmu, however, only one of his forms is different from the other two sources, so his data are not cited separately.

The data on Khmu Yuan (Kammu Yuan/Northern Khmu) are from Lindell, Svantesson, and Tayanin (n.d.). They are in phonemic form. Aspirated voiceless stops are represented by a consonant plus h. So for example, c is an unaspirated voiceless palatal stop, whereas ch is aspirated. The symbols b and d represent implosives. The symbol \tilde{n} is for palatal consonants. Long vowels are doubled. a is a mid-low vowel. 'is for high tone and ' is for low tone. High tone corresponds to voiceless initials in Southern Khmu and low tone corresponds to voiced initials.

Mal

The data for Mal (Tin) are from Wajanarat (1978) and Filbeck (1976, 1978) and are presented phonemically/phonetically. In Wajanarat \tilde{n} is for palatal nasals. Aspirated stops are followed by h in Wajanarat, but by `in Filbeck. Long vowels are doubled in both sources.

Khmer

Many of the Khmer examples cited in the text come from work by Jacob (1965, 1968) and examples are cited when they overlap with other sources. Her transcription of Khmer is phonemic using common phonetic symbols. In her system for representing consonants the symbols b and d represent voiced implosive stops; c represents the voiceless palatal stop. A glottal stop is represented by ?. The palatal nasal is represented by p and the velar nasal by p. For the vocalic system, long vowels are represented by a vowel plus:. The vowel symbols are standard. a represents a low central unrounded vowel, r a back mid unrounded vowel and e a front mid unrounded vowel. The first register (low) is unmarked and second register (high) is marked by `.

The data from Jenner and Pou (1980-1981) have two transcriptions. The one that is cited first is a transliteration of the Khmer script. Their system of transliteration '...follows closely the Anglo-American tradition for the romanization of the devanagari and other writing systems of India.' (1980-81:ix). The transcription in slashes (/) which follows the transliteration is a phonemic representation of modern standard Khmer. The system for stops and nasals is the same as Jacob except for the glottal stop being represented by q. In the vowel system, long vowels are doubled. The symbols are basically phonetic. a is a short front low unrounded vowel, a is a short back low rounded vowel. Two non-front non-rounded vowels are a and a. However, they are not in contrast in modern standard Khmer, 'but are distinguished in the transcription for reasons of symmetry and congruence' (1980-81:xiv). 'is for high register and is for low register. High register has greater closure or tongue height, pharyngeal resonance, and lowered pitch. Low register has greater openness or lesser tongue height, oral resonance and normal pitch.

A few other examples are included in the text from various sources. Maspéro (1915) employs a transliteration of the writing system. Gorgoniyev (1966) employs typical IPA symbols. However, the mid vowels with . underneath them are slightly higher than the ones without. : indicates vowel length. Ehrman (1972) also employs typical IPA symbols, but doubles the vowels for length. 'is for high register as in Jenner and Pou. Huffman (1970) uses q for glottal stop and \tilde{n} for the palatal nasal. $e \tilde{\sigma}$ represents a short diphthong, as opposed to a long one which would be written with a non-reduced second vowel. The few examples from Headley et al. (1977) follow a typical IPA system.

Bahnaric branch

Unlike the preceding branches, in Bahnaric and Katuic many of the transcription schemes rely on a modified version of Vietnamese orthography. Part of this is due to the proximity of Vietnamese and the likelihood of people being bilingual. The linguists who tend to use these

forms are those from Summer Institute of Linguistics, whose job it was to provide written texts to teach these different languages and to do Bible translation.

North Bahnaric

In Northern Bahnaric, many of the schemes represent a typical phonemic transcription with some of the orthographic conventions from Vietnamese. In Rongao (Neo and Gregerson (1974)), Hrê, Halang, Sedang, and Jeh p, t, ch, and k all represent unaspirated voiceless stops. However, Hrê has two variations. As in Vietnamese, k is used before mid and high front vowels; c is used elsewhere. In Rongao, Halang, Sedang and Jeh, ph, th, kh represent aspirated voiceless stops. These are not cited in Hrê. b, d, j, and g represent voiced consonants that are not preglottalised or implosive in all languages. In Jeh, all the preglottalised consonants are marked with ', for example, 'w, 'd, 'b. Sedang and Halang also mark preglottalisation with '. In Rongao and Hrê the transcription system is the same, except d is used as in Vietnamese, and in Rongao, u, i before a vowel are used for preglottalised semivowels. In Rongao, Sedang and Jeh, ' over a vowel indicates a glottal stop at the end of a word. Hrê uses q for final glottal stop. All five use between vowels for a glottal stop. All five languages use m, n, nh, ng, as in Vietnamese, and Sedang also uses x as in Vietnamese for an alveolar fricative.

Rongao, Hrê, Halang and Jeh all have five tense and five lax vowels, but they are marked differently. In Jeh, Halang and Hrê, the lax vowels are marked with an accent grave, for example \hat{o} . In Jeh, if the vowel is short and lax, a \tilde{a} is used over the vowel. In Hrê this symbol stands for nasalisation. In Jeh, when such vowels occur at the end of a word, they are understood to be phonetically followed by a glottal stop, which is not written. In Rongao, a short vowel has \tilde{a} over it. This is also used for Halang. Also in Rongao, the mid lax vowels are written \hat{a} and \hat{a} , the low lax vowel is written a. The two high tense vowels are written a and a and other symbols also found in Vietnamese. Hrê also has a and a whose qualities are not cited.

In Sedang there appear to be four types of vowels: normal (these are lax in other languages), laryngealised (these are tense in other languages), nasalised and naso-laryngealised. While the system uses forms similar to Vietnamese such as \hat{e} , \hat{o} , and σ , it also uses 'for laryngealised,' for nasalised, and \tilde{e} for naso-laryngealised.

For Rongao, data come from two other sources. One is Guilleminet and Alberty (1959, 1963). Their transcription system is described below for Bahnar proper (Central Bahnaric). The other is from an anonymous source, and there is no information on the transcription system.

Eastern Bahnaric

Cua in Eastern Bahnaric also follows a basic Vietnamese orthographic pattern. d is preglottalised. So also is b, but it has no diacritic. Otherwise 'is used for preglottalisation, - for a glottal stop between vowels and q for glottal at the end of words. Cua, like the Northern Bahnaric languages, has three aspirated stops, ph, th and th. For vowels, th is for th phonetically, and th are for back unrounded vowels. There are no tones, but long vowels are indicated by doubling the symbol.

Central Bahnaric

The Central Bahnaric data are mostly from one source, Guilleminet and Alberty (1959, 1963). The transcription system of Guilleminet and Alberty for Bahnar (Central Bahnaric) has been altered slightly for presentation in this text. In their dictionary, a classifier that is found in all dialects is transcribed in capital letters. A form that is found in only certain dialects is in lower case letters with the first letter of the dialect or dialects in which it is found in parenthesis after the classifier. In this text, if a word is found in all dialects, it occurs in lower case letters. Such forms are distinguished from those with limited use in certain dialects by maintaining the usage of the first letter of the dialect or dialects in parentheses after the classifier. Therefore, in the text describing Bahnar (Central Bahnaric) the abbreviations after the classifiers refer to their occurrence in the following dialects:

- (E) = Eastern: (A) Alakong; (B) Bonom; (G) Golar; (T) Tolo
- (W) = Western: (K) Kontum; (R) Rongao; (J) Jolong

In Guilleminet and Alberty, ng is used for the velar nasal, and \tilde{n} is used for the palatal nasal. \check{c} is used for a voiceless palatal stop and dj for a preglottalised voiced palatal. ts stands for an aspirated voiceless palatal stop. For the vowels, - indicates length, \check{c} indicates shortness. Also \hat{c} and \hat{o} are as in Vietnamese. The symbol \hat{a} is used for mid front rounded vowel. u and σ are for central unrounded vowels.

The Bahnar from Pleiku dialect as represented in Banker (1973) follows a transcription system similar to those used to characterise the North, East, West and Southern systems by people working within the SIL (Summer Institute of Linguistics) tradition. Preglottalised forms have ', although d and dj are also used for the glottalised form. ch is for a palatal stop. Aspirated voiceless forms have h and the nasal system is represented as in Vietnamese: m, n, nh, ng. Preglottalised y and w are written i and o. Glottal stop is - between vowels, but it is "word finally over the vowel.

For the vowels, $\tilde{}$ indicates short. Also \hat{o} , \hat{e} , and \hat{a} work as in Vietnamese. u and σ are central unrounded vowels.

Western Bahnaric

The West Bahnaric languages of $\hat{O}i$, Brao, and Loven also have transcription systems based on Vietnamese orthography. In Brao, b and d are implosive, but have no diacritics. q is used for a glottal stop throughout. ph and th are for voiceless aspirates. For the vowel system, a long vowel is indicated by doubling the vowel. The vowel system is like IPA except for a few symbols: $\acute{e} = e$; $\grave{e} = e$; $\hat{i} = \dot{i}$; e = e; $\hat{a} = e$.

Southern Bahnaric

The Southern Bahnaric languages follow the pattern of modified Vietnamese orthography. Chrau, Mnong Preh and Stieng use the same system as Vietnamese for indicating nasals and the d for preglottalised voiced stop. (In Chrau, and probably elsewhere, when an n is prefix before a word starting with h, an ' is added so that it does not appear that the word starts with a palatal

nasal, e.g. the classifier for hair is written n'ha.) However, in Chrau, b is preglottalised and v is the bilabial lenis stop. In Mnong Preh b is preglottalised as is dj, and in Stieng b is preglottalised as is b. In Chrau and Stieng b is used for glottal stop at the end of a word. In Mnong Preh b is used word finally on a vowel to indicate a final glottal stop. This pattern has been seen elsewhere. Stieng and Chrau use - between vowels for glottal stop. Both Chrau and Mnong Preh also have aspirated voiceless stops indicated by the use of b after the consonant. Stieng has a few examples of b. In Stieng and Chrau as in Vietnamese, b is used to represent a voiceless velar stop. In Chrau b and b may also be used for voiceless velar stops.

Mnong Preh, the Mnong Rolom and Mnong Gar from H. Blood (1968), and Chrau use $\check{}$ to indicate short vowels. Mnong Preh and Chrau also use vowels symbols with the same quality as Vietnamese: \dot{r} , u, σ , \hat{a} , \hat{e} , \hat{o} . In Stieng, \hat{e} and \hat{o} are used, along with σ , u and u, the latter vowel being a high central vowel, whereas the other two are lower central unrounded vowels. In Stieng, long vowels are doubled as they are in both Eastern Mnong languages, Rolom and Gar. In Mnong Rolom and Mnong Gar from Blood \hat{e} and \hat{o} and \hat{a} also occur. σ and u also occur as midcentral and high central unrounded vowels.

Unlike the other systems described above for South Bahnaric, Koho (Sre) from Manley (1972) is written in phonemic/phonetic characters, as is the data from Condominas (1977) for Mnong Gar.

Katuic branch

In the Katuic branch, the Pacoh, Brou, Katu and Kantu orthography is based on Vietnamese except for some minor variations. Among the consonants in Pacoh dy is an alveopalatal implosive not in Vietnamese. In Brou and Pacoh d is the symbol for the alveolar implosive written as d in Vietnamese. Katu and Kantu use d as in Vietnamese or 'd. Katu and Kantu use d for the implosive bilabial. kh is an aspirated stop rather than [x] in Vietnamese; ph and th are also aspirated stops. q/- are for glottal stops; - is between vowels. In Brou and Pacoh the voiceless velar stop is written d0, except before high front vowels, where it is d1. In Katu and Kantu it is d2. In Pacoh, Brou, Katu and Kantu the nasals are written as in Vietnamese. In Brou, final d3 is written and pronounced as d4.

In Pacoh, $\check{}$ indicates a pharyngeal or tense quality to the vowel, whereas $\check{}$ indicates shortness. This same system is employed in Brou, except that $\check{}$ indicates tenseness. The vowel symbols in Brou are much like those in Vietnamese, with \hat{e} and \hat{o} for mid-vowels, and u and σ for central rather than back unrounded vowels. \check{o} represents a low further back vowel and \hat{a} represents a short central vowel that is lower than σ . The Pacoh system is essentially the same except for the fact that in addition to the vowels marked with $\check{}$, \hat{e} , \hat{a} , and \hat{o} are also considered tense. The vowel symbols for Katu and Kantu (High Kantu) are essentially the same except that long vowels are written as double.

For the few examples that occur in Kui, it is only necessary to note that tsh stands for ch/\tilde{c} and a glottal stop is presented with? The vowels are phonemically/phonetically presented.

Viet-Mường branch

The Vietnamese and Mường data are presented in standard Vietnamese orthography.

Nicobarese subfamily

North Nicobarese

The transcription system for Car Nicobarese found in Braine (1970) is phonemic/phonetic. Long vowels are written with \cdot . So for example one gets $i \cdot$, $e \cdot$, and so on. $\tilde{}$ above a vowel indicates phonemic nasalisation. f is a mid-high central unrounded vowel. f is a high central unrounded vowel. f indicates primary stress.

Central Nicobarese

These data are from Man (1889). The consonantal system is written phonemically using typical phonetic symbols with some modifications, i.e. sh and ch. In final position, the affricates and the voiceless velar consonant are unreleased. The nasals are written with \tilde{n} , ng, and $\tilde{n}g$. The final sound is a palatalised ng.

Tense vowels in Central Nicobarese are indicated by - over the vowel. The open 'o', o, is indicated by \hat{o} . The symbols \ddot{o} and \ddot{u} are for front rounded vowels. a is for a mid-low central vowel; \dot{a} is for a shorter vowel. The symbol \hat{a} is for a further back low vowel and \ddot{a} is for a front low vowel. \bar{a} is perhaps a mid-central vowel. Nasalised vowels are indicated by \dot{n} following the vowel.

Aslian subfamily

The Semai (Senoic) data from Diffloth are written in phonetic transcription. w is back high unrounded vowel. Long vowels are written by doubling the vowel.

The rest of the data on Aslian are from Skeat and Blagdon (1906). Their data are collected from a variety of other sources, and different researchers used different transcription systems. There is no consistent system. However, \check{e} is probably for \hat{e} , \hat{e} is probably for \hat{e} , and \hat{a} is probably for a short back low vowel.

Chapter 1

HOW, WHEN, WHERE, WHY, WHAT IS A NUMERAL CLASSIFIER?

1.0 INTRODUCTION

For people interested in South-East Asian languages numerical classification is a construction that sometimes puzzles and often fascinates. The typical lack of a singular/(dual)/plural distinction in the noun phrases of South-East Asian languages and the necessity of categorising objects into groups for counting strikes speakers of European languages as an unusual feature and often a frustrating semantic problem – especially when one is trying to count an item never encountered before. The best described of these systems are those in the Sino-Tibetan, Tai, Austronesian and Japanese families. The Austroasiatic languages, except for Vietnamese and Khmer – and perhaps some Munda languages – are not generally well described. In particular it has often been thought that Austroasiatic languages have only marginal classification systems. The purpose of this work is to correct that perception of the family.

As an example of the lack of information about Austroasiatic, Jones in his influential 1970 article, 'Classifier constructions in Southeast Asia', bases his theory about the spread of numeral classification throughout South-East Asia on the notion that the Mon-Khmer systems are marginal and probably not native systems. He recognises that Vietnamese has a large inventory of classifiers and that many Austroasiatic languages are in a geographic position that could have made Mon-Khmer influential in the spread of the construction, but he excludes the group from consideration as a source of influence. The reasons that he gives are as follows: (1) in many Mon-Khmer languages, the word order of the classifier phrase is variable and classifiers are optional; (2) many of the languages in the group do not have classifiers and given the fact that so many other languages around them have classifiers, it is unlikely that these Mon-Khmer languages have lost them; (3) the classifier for 'animal' in many of the Mon-Khmer languages is a Tai word. He excludes other language families for a variety of reasons and suggests the Tai languages 'as a possible source of influence in the spread of the use of classifiers' (1970:11).

This study will demonstrate that many more Austroasiatic languages have classifiers than Jones reported. For example, he claimed that Pacoh (Katuic) does not have classifiers when, indeed, it has a large set of them. In the three subfamilies under consideration here, only three languages in the available data do not have classifiers. They are Pear (Pearic:Mon-Khmer) and Riang and Davies' P'uman (Palaungic:Mon-Khmer).

This work will also address the issue of the borrowing of classifiers in the Mon-Khmer, Nicobarese, and Aslian subfamilies. As we saw above, Jones argues that the widespread occurrence of a Tai classifier in Mon-Khmer is another indication that Mon-Khmer classification is a system based on those of other language families. As far as it has been possible this work identifies the source of classifiers, either native or borrowed. In this way the amount of influence of Tai as well as other language families on the Austroasiatic classifier systems can be evaluated. The influence of Austroasiatic on other languages is also identified.

To adequately characterise native versus non-native aspects of the Austroasiatic classification system, the semantic bases of classes will also be described as fully as possible. This kind of description helps in identifying native versus borrowed classifier concepts as opposed to just identifying borrowed lexical items. This information is important since languages can borrow categories of meaning and systems of meaning independently of the morphemes representing these concepts. The work on the origin and spread of classifiers can only be aided by such information. Jones himself points out that his own hypothesis is based on purely structural information which is inadequate. Both Becker (1975) and Tsou (1976b) also discuss the importance of comparative studies of the semantic structure of the set of classifiers.

At this stage, no definitive answers to the questions of where classifiers first came from and how they spread throughout the area can be supplied. But the material presented here will help to further refine discussions on this topic as well as to provide insights on the nature of numeral classification systems in general. And finally it will add to the slowly growing literature on Austroasiatic.

1.1 Use of the term numeral classifier

It is important at this point to explain what type of syntactic/lexical structure the term 'numeral classifier' will refer to in this text. In the literature, numeral classifier sometimes refers to different phenomena. In addition, the same phenomenon has many other labels besides 'numeral classification'.

One way of labeling the forms in question is to consider all the items that occur in a particular slot as equivalent to each other, or of the same type. Take for example the following phrases in Chrau, a Mon-Khmer language, South Bahnaric subbranch.

- (1) pe vôq so
 3 classifier dog
 for animals
 ('head')
 'three dogs'
- (2) du lĭch daq 1 litre water 'one litre of water'

One could claim that in languages like Chrau there is no distinction between count and mass nouns and that the form $v\hat{o}q$ functions like the form $l\tilde{i}ch$. They both occur in the same slot and are in a paradigmatic relationship.

Many authors, such as Burling (1965b), and Nguyền Dình Hòa (1957), use the term 'numeral classifier' to refer to all these lexical items that occur in the slot adjacent to the number. This means that the label applies to measure terms such as 'litre', as well as to the forms that occur in phrases such as number (1) above. Other authors also group these forms together, but under a different name. For example, Huffman (1970) refers to all of them as 'specifiers'.

On the other hand, in some linguists' work, the application of the term 'numeral classifier' has a more limited range. It refers to only a subset of items that occur in the slot after the number. This difference in usage is perhaps due to the fact that they perceive greater differences in behaviour among the items occurring in this slot than the linguists mentioned above do. Both Becker (1975) and T'sou (1976a and 1976b) are examples of this latter style of usage. They use the phrase to refer to items like 'head' in example (1), which is used to count 'three dogs'; that is, they use it for those forms which occur with nouns which could be considered as count nouns in English. In this work, the term will be used in the same way that Becker and T'sou employ it. The term 'quantifier' will be used to refer to measure items that occur in this same slot.¹

1.2 Characterising the differences between numeral classifiers and quantifiers

There are good semantic and structural reasons for considering numeral classifiers and other morphemes in this slot as different structures. Much of the research on classifiers concerns itself with describing the similarities and differences among all the items that can fill this position. However, many of the attempts to do so, while capturing certain distinctive characteristics, miss others. Table 1.1 lists the kinds of items that can occur in the classifier slot in South-East Asian languages. They include in addition to classifiers, repeaters, unspecified amounts, temporary amounts, measures and type/kind morphemes.

1.2.1 Semantic differences

With any object or group of objects, there is generally more than one kind of numeral phrase that can be used to refer to the object. Take for example the representation of a real world item in Figure 1. This real world item could be alternately be referred to as: (a) five 'classifier' carrot, (b) one bunch of carrots, or (c) one point two (1.2) pounds of carrots. Or take as another example the objects in Figure 2. There are several different ways that this group of items could be referred to – for example: (a) four 'classifier' book, (b) a set of books, (c) a stack or pile of books, (d) five pounds of books (for mailing purposes). What form one chooses depends upon the meaning one wants to convey.



Figure 1: Carrots to be counted



Figure 2: Books to be counted

Table 1.1: Examples of possible classifier/quantifier slot fillers

- (1) Repeaters (S.E. Asian) 'one village (of) village'
- (2) Classifiers

 (a) South-East Asian forms
 'person (of) sister'
 'body (of) dog'
 shape
 function
 (b) English forms
 'head of cattle'
 'sheet of paper'
- 'sheet of paper'
 'grain of rice'
 (3) Unspecified amounts
 'branch of tree'
 - 'stalk of banana'
 'bunch of carrot'
 'herd of cattle'
 'brood of chicken'
- (4) Temporary amounts 'cupful of juice' 'loop, coil of rope'
- (5) Measurements 'gallon of juice' numbers: '10's, 1/2'
- (6) Type/kind 'type of juice' 'kind of dog'

The semantic dimensions that Burling (1965b), Greenberg (1972), and T'sou (1976) suggest as distinctive of classifiers as opposed to other morphemes in the slot all have to do with the notions of individuality, wholeness, and the number 'one'. These authors are concerned with the 'individualising' aspect of classifiers.

However, there are some problems with the schemes of Burling (1965b) and Tsou (1976b). The major problem is that they do not clearly specify what aspects of the behaviour of classifiers and non-classifiers are being labeled in this slot. It is difficult to determine if they are trying to characterise the meaning of the classifiers and non-classifiers; the co-occurrence restrictions between the classifiers and non-classifiers and the nouns they occur with; or the nature of the referent which is being counted. Take Burling's labels 'individual' and 'amount' (1965b:259-260), for example. 'Individual' refers to the fact that the objects being counted are of that nature as well as to the fact that one is considering them in those kinds of amounts. So one can see this term as referring to the item itself as well as to the meaning of the classifier. The other term for the quantifier morpheme 'amount (+ or - specified)' does not really say anything about the items counted, just about the kinds of amounts. For example, included under 'amount' are objects which are also individuals such as humans and animals which are grouped together in herds, for example. T'sou (1976b:1217) is the only one to try and recognise the difference between these two aspects by employing the terms 'exact' and 'entity'. 'Entity' refers to the nature of the object in question, i.e. whether it is a 'discrete physical entity'; and 'exact' to the meaning of the classifier and non-classifier term, i.e. the type of quantity.

T'sou's labels are not without problems either. The dimension '+ or - entity' when referring to the object being counted does not adequately serve to distinguish between classifiers and measure terms. While the term may generally be appropriate with mass nouns, which are not entities, the examples of the carrots and the books given above help to demonstrate the difficulties. In the case of example (d) with the books in Figure 2, T'sou would describe five pounds of books as +exact and -entity. However, books do not change their state when weighed, they are still 'discrete physical entities'. What has changed it that the individual aspect of the books is no longer important here. In this case, the term '-entity' applies to the meaning of the measure term, not to the item itself. Hashimoto (1976) also points out the difficulty with terms like 'individual' and 'whole physical entity' in the characterisation of classifier behaviour even with 'count nouns'. The problem is that such phrases confuse types and tokens, since in reality one could have only half a person, but still use the same classifier as when they were whole.

The dimension proposed by Allan (1977) to distinguish between classifiers and non-classifiers, 'inherent/non-inherent', is of a different nature from that of Burling, Greenberg and T'sou. He is dealing with the meaning of the classifiers, which he perceives as describing basic attributes or even defining attributes of the items being counted. Allan's dimension does not concern itself with the 'count' aspect of classifiers as those of Burling, Greenberg and T'sou do. He is concerned with the type of information that classifiers predicate about the referent.³ Allan (1977:298) defines inherent features, which classifiers refer to, as the same as Locke's (1689) 'primary qualities of bodies': extension, motion or rest, number and figure. These qualities are the ones, Allan holds, which are perceptible by the two senses of sight and touch. Other features of bodies such as

colour, taste, odour and sound are only secondary features perceptible by one sense and not used for nominal classification.

Examples of 'primary quality' classifiers are those that concern themselves with the size and shape of objects, as well as animacy. However, contrary to what Allan argues, some quantifiers also rely on these characteristics. Take for instance the measure terms of length and width which deal with artificially occurring amounts or with amounts corresponding to the length of real world objects, e.g. 'arm span'. In this case, classifiers would be concerned with the relative size of the whole object, while quantifiers' usage could be based on the measured size of parts of the object or the whole object. In the case of 'shape', another primary quantity, it is not uncommon for amounts to distinguish between round piles and linear arrangements of the same item. Another category that Allan includes in his inherent features of primary qualities is classes of animates. However, as with the other examples, there are many cases where morphemes for amounts distinguish between animates and inanimates, e.g. 'herd'. Allan's dimension of inherent/non-inherent fails then to adequately capture the distinction between classifiers and non-classifiers.

Becker's (1975) methods of characterising the difference between classifiers and non-classifiers is quite distinct from the others described above. He feels that the different meanings of the classifiers in the set of classifiers in a language are organised on a deictic semantic axis which has a centre point and points along the axis moving away from this central point. This notion of deixis as an organising semantic principle is one that Becker credits to Leach (1966). In Leach's discussion of animal abuse terms and in Becker's characterisation of inanimate classifiers in Burmese, the deictic dimension used is a 'self/other' dimension. According to Becker, inanimate classifiers in Burmese distinguish classes on an axis that has a human self centre point, and a non-self end point. There are different classes for items depending upon how close (physically near in the environment) or how similar the items are perceived to be to humans. No one else has approached a definition of the distinction between classifiers and non-classifiers in this particular manner and it remains to be demonstrated that there is no notion of a deictic dimension among the set of quantifiers.

Becker's (1975) notion of a 'self/other' dimension differs from that of Allan's even though both are concerned with the kind of semantic information that classifiers categorise by. Becker, rather than claiming that items are classified by physical attributes as Allan does, allows for cultural and contextual variability in what are considered important attributes for classification. For example, Becker also proposes a Buddhahood/animal deictic dimension for organising animates in Burmese. This is a very culturally specific class.

Becker (1975) and Allan (1977) have argued that the classifier and non-classifier constructions consider different characteristics of the referents in order to locate them into categories. Burling (1965), Greenberg (1972), and T'sou (1976) have argued that the two kinds of constructions occur with different kinds of referents: i.e. those that are somehow 'natural' units as opposed to those that are not. In addition, they attribute to the classifier the meaning of an amount, that of an 'individual'.

The two different emphases of Allan and Becker, as opposed to Burling, Greenberg and T'sou, show that numeral classifiers indeed fulfill two functions: one having to do with predicating

something about the referent and the other with indicating quantity. Moreover, considering only one aspect of the function of classifiers can lead to mis-characterisation. Greenberg (1972, 1974) claims that one major difference between classifiers and non-classifiers is that classifiers add no information or have no meaning other than 'unit' in a numeral phrase. Greenberg considers classifiers as 'unit' counters which represent, according to him, the 'one natural method' of quantifying (1974:88). In his 1974 article, 'Studies in numerical systems, 1: double numeral systems', Greenberg utilises the notion of 'natural unit' so exclusively that he defines classifiers as items 'which are shown to be *redundant* when translation into a non-numeral classifier language like English is carried out' (1974:84) [italics are mine].

In Greenberg's scheme then, classifiers add no meaning to the number phrase other than 'times one' and hence are quite distinct from the majority of measure terms. He partly bases this view of classifiers as only meaning 'times one' on evidence from Burmese that is presented in Burling (1965b). In Burmese when the powers of ten occur in a number phrase they fill the classifier slot and either the classifier does not occur or it becomes part of a compound.

Burling reports in regard to the most common unit counter of Burmese (1965b:262), the so-called general classifier -khu, that it is included by some BURMESE speakers 'in the same series of classifiers for the powers of ten...-khu indicating only one individual object'. It was noted earlier that multiples of higher numerical units often do not take classifiers. This occurs in BURMESE and shows clearly the function of the unit classifier as meaning 'times one'.

(Greenberg 1972:11)

The step to treating all other classifiers besides the general classifier as meaning 'times one' is an easy step, especially since he views classifiers as generally having no translation.⁴

There is no doubt that Greenberg's claim that classifiers have the meaning 'unit' or number 'one' is important and useful for understanding other uses of the classifier. For example, in demonstrative phrases in Thai or in other languages, the occurrence of the classifiers indicates that the referent is singular. In fact, it can be claimed that classifiers are the only nouns in Siamese which are marked for number. However, there are two problems with Greenberg's formulation as it stands. First, it is possible to argue that in those languages where the set of classifiers is lexically unique, i.e. that classifier morphemes have only this function and none other, that the classifiers themselves actually mean 'times one'. However, in many languages, Vietnamese for instance, classifiers also function as nouns. In such cases one determines their function in the sentence by the slot they fill. In such languages, it is the slot, not the form itself, that has the implication 'times one'.

The second problem with Greenberg's analysis is really the major one. First of all, classifiers do function like non-classifiers in that they say something about the kind of natural unit the object in question is, e.g. its shape or function. Secondly, while there are 'cliche' ways of referring to an object, e.g. 'sheet of paper', 'a body of dog' and hence redundant ways in Greenberg's terms, classifiers can be manipulated to say different things about the object in question. In discussing the inadequacy of regarding classifiers as redundant information, Becker (1975), Burling (1965b), Allan (1977) and Adams (1986a) point out that nouns can occur with more than one classifier.

Becker argues that the basis on which a particular item is classified can shift with the topic under discussion or the attitude of the speaker/hearer. He refers to the choice as depending on the 'universe of discourse'.

Becker (1975) provides an interesting example of the variety of ways a noun can be classified. He shows the noun 'river' in Burmese alternately classified as a 'place', 'line', 'section', 'distant arc', 'connection', 'sacred object', 'conceptual unit' and 'river', depending upon the topic. As Becker points out, there are a few limitations in the data he used for analysis. Since his data is based on literary texts and on data from linguistically creative speakers, he recognises that speakers' ability to use alternative classifiers varies and that there can be a high degree of predictability between the classifier and the noun. In addition, this kind of alternative style may also be more common in some languages than others, but this needs to be demonstrated. Even so, Becker's examples refute Greenberg's claims.

Benton (1968) is a rare attempt to systematically look at data on the number of classifiers a noun can occur with and the resultant change of meaning that a change in classifier entails. Benton (1968:110-111, 139) reports that in Trukese of the 821 nouns in his data: 39 (5%) were uncountable, 554 (67.5%) were normally associated with only one classifier, 100 (13%) could occur in constructions with more than one classifier without any resultant change in meaning, and 16% of the nouns occurred with more than one classifier with a resultant change in meaning. Again, this last figure (16%) is some indication of the fact that classifiers are more than just a morpheme meaning 'times one'.

A second difference between classifiers and non-classifiers in the same slot also has to do with semantic considerations. Classifiers are not redundant information, but they also say something about the objects in question. However, how one determines the meaning of what they do say differs for classifiers and non-classifiers. Burling (1965b:250) claims that 'In conformity with the conclusions of the last section they [the categories of classifiers and quantifiers] are defined by the meaning of the objects which they classify, rather than by a list of nouns with which each can be used' (italics mine). However, as one reads over Burling's groups, it becomes clear that he has not consistently applied this method. It is applied to those items referred to as classifiers here, but not to those which have been called quantifiers (or at least not to measures). In the latter case, the groupings are based on the actual meanings of the quantifiers. This is a fundamental difference. For example the Burmese classifiers for royalty, deities, saints, and monks is pa, meaning 'close', and is part of a group of classifiers dealing with relative sanctity. On the other hand, one has – thau? which means 'the length of a grain of rice' and is used with anything that one wants to measure this way (1965b:250, 253).

In fact, many of the persistent questions in classifier research are ones that apply to classifiers and not to quantifiers. The following two questions are examples of this type. First, what is the meaning of a particular classifier? In this case, classifiers often do not have a transparent lexical meaning. Even when they do, the meaning can be modified according to the kinds of items they classify as in the above example of the Burmese classifier. A second question is what kinds of semantic relationships are there between the items used with one classifier? As an instance of this second question, in Thai, some claim that one uses tua 'body' for classifying tables as well as animals because of a metaphoric extension of the notion of having legs. The problem of

'metaphoric extension' seems to be much more important to the analysis of classifiers than to that of most quantifiers.

1.2.2 Syntagmatic differences

Besides the considerations on the semantic interpretation of classifiers, there are also syntagmatic differences in the behaviour of classifiers and non-classifiers. One difference is that classifiers' occurrence in number phrases is not always obligatory. For example, classifiers in Khmer are associated with more standard, formal language and are optional in informal conversational language. This optionality in many languages may be the result of a couple of aspects of the function of classifiers: one that they occur with units that are 'naturally countable'; and secondly, that there can be 'cliche' classification.

Another aspect of classifier and non-classifier behaviour is not usually noted in the literature. This is that 'count' nouns can occur with all types of forms in the classifier/quantifier slot. However, 'mass' nouns cannot occur with classifiers. A third difference is that the size of the number can affect the appearance of the classifier in a number phrase. For example, in some languages, classifiers only occur with small numbers. In Burmese with numbers that are powers of ten, they do not occur. In Thai, unless the speaker wants to imply that items were counted individually, large numbers like 1000 are treated like estimates and classifiers are not used (Adams and Conklin 1974). The explanations for the latter two examples have to do with the function of classifiers as individualisers. There may be perceptually a size of group, perhaps around or above ten, where one can no longer estimate well the number of individuals involved. In the latter example, in Thai, we saw that with large numbers if one treats the items individually then the classifier is used. On the other hand, the size of the number never seems to affect the occurrence of quantifiers. The information they provide is not optional in cases like this.

In addition to the above discussion of environments where the classifier is optional, there are also co-occurrence differences between classifiers and quantifiers and other morphemes in the number phrase. Greenberg (1974) points out that in some classifier languages, for example Yurok and Ojibwa (Denny and Odjig 1973), there are different sets of numbers or at least different forms for the number 'one'. One set is used for classifiers and one set for quantifiers. T'sou (1976b:1212-1220) also points out that there are differences in the kinds of numbers, for example fractions and ordinals, with which classifiers and quantifiers can occur. However, Greenberg points out that it is necessary to make sure that these differences are ones that distinguish classification from all other processes, not counting from measuring. Hashimoto (1977) makes this very mistake when he argues that classifiers can be modified by adjectives and non-classifiers cannot. This is incorrect since quantifiers of the type 'bunch' or 'herd' can also be modified, although it is true that measures are usually not.

Some of the differences between classifiers and non-classifiers in the same slot have been discussed here. However, several aspects of the problem have been left imprecise. Throughout most of this section, classifiers have been contrasted with measures, but as Table 1.1 shows, there are several different kinds of forms that fill this slot. Some of them may act more like classifiers and some more like measures. A closer study of the behaviour of these forms might mean that

certain statements would need modification to include their presence. In another sense, the topic itself is imprecise. Burling (1965b) discusses in detail the problems of categorising and analysing these forms. Probably some notions of a 'squish' would be helpful. In addition, data on syntagmatic and discourse differences between the items in the slot are not common in the literature. This is especially true for instances where classifiers appear outside the number phrase with demonstratives, relative clauses or adjectives, as they do in Vietnamese.

1.3 Characterising the differences between numeral classifiers and nominal compounds

Many of the forms which function as numeral classifiers are also nouns which frequently occur as head nouns in nominal compounds in the same language. This topic is one which is not widely discussed in the numeral classifier literature. It is mostly to be found in the work of linguists who describe the systems of Vietnamese, Tai and Chinese. Discussions of the problems are found, for example, in Baron (1973), DeLancey (1986), Emeneau (1951), Goral (1978), Hashimoto (1977), Nguyễn phú Phong (1975), Thompson (1965), and T'sou (1976a). It is an important topic for consideration, however, since the decision as to whether to treat the two phenomena as different or the same accounts for the disagreement among linguists working on Vietnamese, Khmer and Gold Palaung about the size of the set of classifiers. For example, some claim that Vietnamese has only two true classifiers *cái* and *con*, while others claim that there exist up to two hundred of them. In Khmer, several sources might list a morpheme as a classifier, where another, e.g. Jenner and Pou (1981) call it a generic head word.

A reason for the confusion of types in South-East Asian languages is that classifier morphemes are generally drawn from the set of nouns in a language. Allan (1977:285-286) argues that one can consider a language to be a 'classifier language' if it has a set of lexical items some of which have only classification as their function. However, the degree to which classifiers are a unique lexical set varies in South-East Asian languages. In Burmese, for example, many classifiers have a nominal source, but their function is generally limited to classification. However, in Thai, for example, and especially in Vietnamese, classifiers are also commonly occurring nouns. This fact should not be surprising when one considers the nature of the languages involved. They are isolating languages, where lexical forms are frequently not identified with a particular functional class, but can occur in a variety of grammatical functions.

Allan recognises that classifiers can be nouns also; however, he treats examples like these as supporting his claim because he argues that the meaning of the noun changes in its classifier function. Allan claims, for example, that the Thai classifier for animals, furniture and some clothes, tua, meaning 'body' as a noun, no longer has its literal meaning in the classifier slot. However, it is possible to view this form as meaning something like 'body of dog' when counting dogs, although this definition might be stretched in its use with tables, chairs, etc. But, it is not a requirement for this modification to take place for a form to function as a classifier. An example of a case where it does not is the classifier for people in Vietnamese nguời which also means 'person'. This morpheme occurs in the classifier environment, as an independent noun and as part of nominal compounds all with the same meaning.

This confusion of type, i.e. nouns, head nouns in nominal compounds and classifiers is particularly common in a language such as Vietnamese where the word order of the classifier phrase is number-classifier-noun. In languages such as Thai, where the order is noun-number-classifier and the classifier slot is separate from the noun, function is clarified by position. In Thai, the repetition of the classifier and noun forms are possible: a category of classification generally referred to as repeaters. In addition, it is also possible for there to be partial repeaters in Siamese where the noun is a compound, one of whose members is identical to the classifier. However, in most languages like Vietnamese, where the classifier directly precedes the noun, these so-called repeaters and partial repeaters do not exist. Therefore, within the number phrase itself in Vietnamese, the identification of an item as a classifier or as part of a nominal compound is structurally impossible:

```
m\hat{\rho}t ngu\hat{\sigma}i la = 'a stranger' one 'person' strange
```

Người-'person' is the general classifier for people in Vietnamese, but here it is also a member of a compound meaning 'stranger'. The compound and a classifier phrase even have similar stress patterns; weak stress on người. In cases like this Vietnamese example, it may be that one has to posit an 'archimorpheme' as it were.

In Vietnamese, where the overlap between numeral classifiers and head nouns in nominal compounds is especially great, a great deal of the literature concerns itself with determining which class an example falls into. Goral (1978:18) suggests that anything following the number and preceding a noun should be considered a classifier, thus allowing for an extremely large set of items to be considered classifiers including some which should not be. Among the latter such examples are forms known as additive nouns, an example being the word for furniture: bàn-ghế (table chair). It is difficult to give 'table' an amount reading here or to treat it as a head noun, and to do so would contradict most interpretations of such compounds. Another solution, which is the most commonly suggested one, is to argue that if the nouns in the number phrase can occur in a non-numeral phrase, without the classifier/head noun with the same meaning as it had in the numeral phrase, then one has an example of a classifier and not a member of a compound.

The fact that the classifier forms also frequently function as a member of a compound should not be distressing. However, when the large majority of occurrences of a morpheme are of the compound nature and only a couple of the classifier nature, it would make one wonder if it was not the compound that served as the model for development and not vice versa. This is an especially important question since most discussions treat classifiers as deriving from measure forms (see Greenberg 1972).

One task in analysing the data in a language where there are areas of overlap between classifiers and head nouns of nominal compounds would be to characterise as much as possible the difference between the behaviour of the two. One possible difference was described above: whether the noun in question (i.e. the second non-number morpheme) occurs alone outside the numeral phrase with the same meaning. A second consideration is whether there is a difference in the stress marking of the two. An additional aspect to consider would be their behaviour as

anaphora. DeLancey (1986) also notes that in Tai they interact with a different range of nouns. The work that DeLancey has started for Tai is well worth pursuit in other languages.

Another problem in understanding the relationship of classifiers and nominal compounds has been discussed in work about the development of classification. T'sou (1976a) and Hashimoto (1977) both suggest that classifiers arise through a need to disambiguate morphemes in monosyllabic languages with a limited number of syllable types. Hashimoto maintains that the development of both classifiers and polysyllabic nouns can function to disambiguate morphemes and, therefore, tension might exist between the two. In the example he discusses, he maintains that the development of polysyllabic nouns is effectively shrinking the size of the classifier set. In Adams and Conklin (1975), we describe for Siamese the interaction of repeaters and partial repeaters with respect to the deletion of the form in either the classifier or in the noun slot. In addition to these two kinds of constructions, it would seem important to examine the interaction of classifiers and other types of compounds where classifiers are not a member. For example, in Vietnamese, the occurrence of an additive noun such as bàn-ghé 'furniture' usually precludes the appearance of a classifier. More in-depth studies of this kind might help to clarify the interaction of the two constructions and their possible common origin, or their antipathy for each other.

The phenomenon under consideration here can also be treated as part of a larger concern: the strength of the bonds between the number, the classifier and the noun in a numeral classifier phrase. The general claim, for example Allan (1977) and Greenberg (1972, 1975), is that the parsing is (number-classifier (noun)), with the tightest bond between the number and classifier. This tight bond, both Allan and Greenberg claim, is why there are 'never' phrases such as number noun classifier and classifier noun number where the classifier and number are separated from each other.8

In addition, the number plus classifier often function as a pro-form for the whole noun phrase. The following examples from Chrau, a South Bahnaric language, show classifiers in pronominal usage. The example dialogue is from Dajao Jaken (Thời) and D. Thomas (1974:18-19).

- (1) Cô gĕh vra hâng? grandfather (you) have bushknife question 'Do you have a bushknife?'
- (2) Gěh, ănh gěh var tong have I have two 'handle' classifier for tools 'Yes, I have two.'
- (3) An ănh nham du tong....
 permit (give) I borrow one classifier....
 'Let me borrow one...'

Examples of these forms also occur in first mention. This is especially true when the classifiers refers to a general class such as 'people', 'living things', or 'inanimate things'. The following is an example of this, also from Chrau (Dajao Jaken (Thời) and D. Thomas 1974:20). This sentence is the beginning of a short monologue.

(1) Ndau gĕh var ndu pĭq play yesterday have two cl. for people pluck fruit 'Yesterday two people were picking fruit.'

Goral also notes this occurring in Vietnamese (1978:12):

Con áy là con gì? cl. for living thing that is cl. what 'What is that?' (This form is followed by the response: 'a duck')

It is not really possible, for example in Goral's case, to argue that any noun has been deleted here. And such examples would argue that there is a tight bond of number plus classifier.

However, given the above discussion, it does seem possible to argue that for some languages, there is a strong nexus between the classifier and noun. In various historical/comparative discussions (Smith 1975; Benedict 1972), there are references to an animal prefix on nouns referring to animals in Tibeto-Burman languages. These forms with the prefix are similar to nominal compounds. Baron (1973:8-9), has attempted to relate this prefix form and numeral classifiers as different stages of the same form in a number classifier noun language. He argues that the prefix is an example where fusion between the classifier and noun has occurred. This implies a 'nexus' between the morphemes classifier and noun, which disagrees with Greenberg's and Allan's interpretation. Baron's interpretation is worth investigating and it might be possible to evaluate it by a discussion of synchronic processes in languages with the number classifier noun order. However, it might also be an irresolvable proposal, since the same lexical item can function both as a classifier and as a morpheme in nominal compounds.

1.4 Analysing the semantic dimensions underlying classifier systems

In a previous section, the kinds of semantic dimensions underlying classifier systems were described for the purpose of contrasting them with quantifiers. This section is devoted solely to the discussion of the analysis of the semantics of numeral classification. Some of the issues considered in the previous section will be developed further here, and additional issues will be introduced. The major issues dealt with here are as follows: first are the specific examples of the proposed dimensions, as well as claims about the universal or the culturally relative nature of these dimensions underlying classification. Second, the methodology proposed by various linguists to 'discover' dimensions will be described.

1.4.1 Nature of dimensions underlying classification systems

Most authors, including Allan (1977), Denny (1976), Friedrich (1970), Lyons (1977), T'sou (1976b), and Adams and Conklin (1973), agree that there are recurring similarities in the types of classes that appear in different numeral classifier languages. In addition, Allan, Denny, Dixon (1968) and Friedrich have shown that these similarities are to be found in several different types of nominal classifier systems besides numeral classification. Allan claims, however, that numeral classifiers are the 'paradigm' type. He states '...there are no classifiers shared by the predicate,

concordial, and intra-locative classifier languages which are not found in numeral classifier languages' (1977:307).¹⁰ Some of the dimensions that recur in different languages are for what Lyons (1977) terms as 'natural kinds'. Examples of 'natural kinds' are separate classes for humans, for animals, for trees, etc. Also, some noun classes have as an organising principle some kind of function. For example, kinds of food may be grouped together. Other kinds of dimensions that different languages have in common are ones based on perceptual features such as shape, size and consistency. These kinds of dimensions are ones that are sensed by both sight and touch, as several authors including Allan (1977), Denny (1976a), and Adams and Conklin (1973) have noted. In fact, Allan argues that there is a universal requirement that nominal classes be based on dimensions having to do with features perceived by two senses (1977:297-298). Thus dimensions based on colour, taste, smell and sound which would require perception by only one sense, do not occur. As we shall see below, however, observing that similarities in dimensions exist in different languages does not mean that all languages can be expected to have exactly the same dimensions, or combine them in the same way, or that they classify the same nouns by these dimensions. In addition, one cannot expect that systems will be limited to utilising only these commonly occurring dimensions.

1.4.1.1 Animacy

Many classes based on notions of animacy are examples of 'natural kind' categories. Instances of this type are general classes for human, general classes for animals or just general animate classes. Animacy is a ubiquitous dimension in classifier systems. Adams and Conklin (1973) found that in the South-East Asian area, if a language had only two classifiers, the categories would always be human/non-human. (However, there are classifier systems based on configuration elsewhere. See Klein (1975) on Toba.) However, the particular subdivisions among animates can depend on the language in question. In many cases, these subdivisions are not 'natural kinds' since these divisions frequently mirror social divisions within the society. For example, in Burmese, as Becker (1975) and Burling (1965b) point out, the five divisions into which animates are classed are based on 'relative sanctity' as Burling calls it, or 'distance from center (Buddhahead)' as Becker refers to it. On the other hand, one finds in Saul's description of Nung (1965) that kinship categories are the basis for dividing humans into different classes. Adams and Conklin (1973) also found that the animate divisions 'human vs non-human' as opposed to 'animate vs non-animate' seemed to follow language groupings based on genetic boundaries.

In addition to the differences in the way animacy is subdivided, nominal classifier systems in different languages can also vary according to what animates are included in animate classes. On one hand, the divisions into which animals are placed does seem to have some degree of predictability. Four-legged, warm-blooded animals are most likely to be treated as animates. Creatures such as snakes and turtles are more likely to be put into other classes that also include inanimate items. But again, these divisions are only tendencies.

While some treatments of living non-human creatures may seem predictable or of the 'natural kind' treatment, the grounds for inclusion of certain groups of animates within classes, can be

quite opaque to people outside a culture. Dixon (1968:120-121) points out the importance of, and indeed the priority of, cultural criteria in determining the class in which an item or a group of items will be included. Dixon explains, for example, that in Dyirbal, an Australian language with noun classes, the role of an item in myth can account for its inclusion in a different class from the expected one. Thus, for instance, in Dyirbal, there is a class which includes animates and masculine humans. One would expect that birds, which are animate, would be subsumed in this class. However, they are actually classed in another class which includes female humans. Birds in Dyirbal are associated with woman because they are viewed as spirits of dead women. But this reclassification does not apply to all birds: for example, one type of bird, wagtails, are believed to be mythical men and so are in the class of men and other animates. Other types of birds have other associations.

1.4.1.2 Inanimacy

There is a multiplicity of styles for the grouping of inanimates. There are groupings based on such notions as 'natural kinds' and function, but many linguists do not agree on how to treat these groups. Allan's treatment is the least detailed in that his term 'inanimate material category' subsumes several different kinds of relationships. Included in Allan's article (1977:300) as examples of this category of classification are the following different classes of inanimate objects: bladed or pointed objects, body parts, food, implements, liquids, boats, vehicles, trees and wooden objects. He describes these different classes as of the same nature because each of the groups is based on the idea that the members of the class share the same 'essence'.

However, the notion of 'essence' is inexplicit in Allan's work, and in other linguists' treatments of inanimate groups Allan's examples are divided into more than one type. For instance, Lyons (1977:465) distinguishes between 'natural kinds' and 'functional' categories. Allan's examples of body parts, liquids, and trees could be treated as 'natural kinds' in Lyons' terms. Examples of Lyons' function classes could include Allan's foods, implements and vehicles. Adams and Conklin (1973) also refer to functional classes, while Burling (1965b) designates some of the same examples as having a 'cultural' basis. Denny and Creider (1975) refer to 'artifacts'. Sometimes, the distinctions between artifacts and functions might be difficult to discern. For example, boats and bladed objects are made by humans and for this reason are 'artifacts'. Describing them as functional is possible since both of these kinds of items have functions. However, the emphasis in these examples does not seem to be on this aspect of their existence, since for example, bladed objects are only a subset of implements, and boats are a subset of vehicles. Perhaps in such cases, where only one kind of artifact is included in a class, Denny and Creider's term 'artifact' is more neutral and appropriate than function.

Finally, there is an additional example in Allan's 'inanimate material category' which may be considered as a separate third type. This example is 'trees and wooden objects'. In this case, a natural object and man-made artifacts are combined into one class. It seems appropriate here to use the term 'material' literally, and to argue that classifier languages also group inanimates according to the material from which they are produced.

A final question to be considered in this section is the universality of such types of inanimate classification. Lyons' (1977) label 'natural kinds' presupposes a degree of universality. However, with both 'natural kinds' and 'functional' classes or 'cultural artifacts', the specific types depend on what occurs in the culture in question. For example, many languages will have food and vehicle categories; however, only those with literary traditions will have classifiers specifically associated with written materials.

1.4.1.3 The perceptual basis of classification

The classification of objects on the basis of perceptual features such as shape, size, consistency (e.g. rigid vs flexible) is extremely common in all kinds of systems of nominal classification. There do seem to be some regular claims that can be made about these features independently of the language in which they occur. First of all, it appears that dimensions of size and consistency are generally secondary dimensions that subcategorise shape. Also, Allan (1977:301) has found that of the languages he looked at, all of them had classifiers for one and three dimensional (i.e. long and round) objects, except Australian languages. These two dimensions then are the most frequent to occur. However, as with the categories described above, shape dimensions and dimensions of size and consistency vary cross-linguistically.

Denny (1976a:31-32) discusses this problem of cultural vs non-cultural aspects of shape dimensions and concludes as follows:

A last question I want to comment on is the degree of universality and of cultural variation which these findings imply. I began with a putatively universal variable, extended configuration, [i.e. shape categories] and found that this variable 1) had different values in different cultures, 2) was differentiated by different secondary variables in different cultures, and 3) was associated with another configuration, outline figure, in certain cultures. If it is universal for humans to pay attention to the extendedness of objects, it certainly undergoes considerable cultural shaping --so much so that one should perhaps speak of a universal capacity for assessing extendedness which is realized in culturally specific cognitive systems.

('Extendedness' is Denny's term for shape. Rather than using the terms round, long and flat, he prefers, along with Friedrich (1970), to use the terms 'non-extended' or 'extended' in 'one' or 'two dimensions' respectively.)¹²

Part of the purpose of Denny's work is to try and explain what features of a cultural affect the use of shape and consistency categories. However, Denny's discussion of the interaction of shape classifiers and specific cultural attributes or material objects is not unique in classifier literature. For instance, Allan (1977:302) argues that classifications based on 'material categories' are prior to those based on shape and consistency in classification systems. Allan's argument for the primacy of material classification is based partially on the fact that linguistic consultants often describe classes as 'rope-like', 'fabric-like', 'leaf-like', 'boat-like', etc. Allan says:

It seems likely that the original criterion for noun classification was material, but as the application of the classifier was extended from identical to similar entities (cf. the suffix -like on all these labels) the material connection weakened in significance to be superseded by the configurational parameters of shape, consistency and size implicit in the paradigm constituents of the class.

Another example of the interaction of shape and material objects is found in Adams and Conklin (1973). There, we argue that many of the shape classifiers in South-East Asian languages are based on plant part metaphors: fruit for round, leaf for flat, and tree or trunk for long.

However, Denny (1976a), in 'The extendedness variable in classifier semantics', discusses the relationship of shape categories and materials in much greater depth than the others. He also considers other aspects of material environment and cultural behaviour besides just certain types of naturally occurring materials or manufactured materials which occur in a culture. Denny argues that the differences between the treatment of shape dimensions in different languages can be correlated with certain physical and economic features of the cultures. His description of the Eskimo system of classification which occurs in locatives can serve as an example.

Denny claims that Eskimo has a 'distal' type of classification system or one that is based on 'classification at a distance' as opposed to a proximal one. A distal system of classification has several important characteristics. First, it is a system where features of consistency, such as flexible or rigid, do not occur because these features require physical manipulation and physical manipulation requires intimacy of course. Secondly, in a language with a distal system, the length that an item must have in order to be classified as extended in one dimension (or as 'long') is much larger than in a language with a non-distal system. So, for example, in Eskimo, pencils and pens which are often classified as 'long' in other languages are in the 'round' or 'non-extended' class in Eskimo. Objects which are in the 'extended in one-dimension' (or 'long') class in Eskimo are at least the length of brooms. In addition to these characteristics, Eskimo noun classification is also restricted to objects that are in view. Denny says of this fact:

If interaction at a distance is central to classification then a concern with whether objects are in view or not becomes pertinent....[this also] seems congruent with placing the boundary between extended and non-extended at a bigger value of extendedness....(1976a:12-13).

Denny claims that there is an environmental correlation with distal style of classification in the Eskimo language. According to him, the 'open' treeless and uninterrupted environment of the Eskimo has influenced their usage of distinctions of length.

The distal style of classification is contrasted with a 'proximal' one in Denny's scheme. Examples of proximal styles which Denny describes are found in Athabaskan and Algonquian. As with Eskimo distal style, he claims that the proximal style in these languages is influenced by the envionment in which the speakers of these languages live:

The Athabaskans and Algonquians, who hunt in closed forest environments, employ a proximal style in which classification is embedded in verbs of handling, proximal variables such as hardness and flexibility occur, and the extended variable has proximal values (1976a:18).

Denny (1976a) also argues that other dimensions which interact with the shape dimensions of non-extended and extended in one or two dimensions are associated with economic style and habitat styles. A dimension of this type is the one that Denny calls 'interioricity' [sic]. This dimension is applied to 'Objects with distinctive interiors bounded by an outline...' (1976a:20). Denny claims that this feature comes about in societies with 'permanent dwellings and permanent division of productive land' (1976a:25). Examples of languages with interioricity dimensions which Denny cites include Burmese, whose classifiers kwing and pau? Denny says distinguish rings from holes. Another dimension which interacts with a shape dimension has to do with flexibility. For instance, Denny claims that the combination of sheet-like (or extended in two dimensions) with the characteristic of 'rigid' occurs in societies which use hard flat objects such as planks, flat stones, and flat bricks for building.

The arguments of Denny on those cultural characteristics which affect the perceptual dimensions that occur in classifier systems are far-ranging in their implications. To thoroughly prove such arguments would require extensive data. Samples from languages spoken in a variety of places with 'uninterrupted' vistas and with interrupted vistas or 'closed' vistas would need to be studied. In analysing such data, it would be necessary, of course, to consider issues such as the inheritance or borrowing of forms and also the migration of the speakers of the languages in question.

1.4.1.4 Other kinds of dimensions

Dimensions based on 'kind', function, shape, consistency, etc. make up only part of the possible distinctions that occur in classification systems. In some languages like Burmese and Vietnamese, there are also classifiers for abstract concepts and places; and in Thai and Burmese, there are 'repeater classifiers'. In addition, as T'sou points out (1976b:1226) there are always idiosyncratic classifications in languages. For example, there is a special classifier for elephants in Siamese which means 'rope', which refers to the way elephants were led around. However, far more important than these kinds of idiosyncratic classifiers is the style of classification described in Becker (1975). Becker argues that unlike the dimensions described above which are based on features of the items themselves, it is also possible to have dimensions based on relationships between items. For instance, Becker claims that in Burmese, the classifier 'loung and the classifier cha? classify items that are related to each other through an upper/lower or a 'sitting on top of' relationship. For example, cup is classified with 'loung and saucer with cha?; letter with 'loung and page with cha? Chair to mat and post to floor are classified in the same manner.

It is important here to be explicit about how one distinguishes these relational dimensions from the kinds of dimensions described in the previous section. One can argue that some of the perceptual dimensions described above are examples of relational dimensions, or that, at least, some of the dimensions are clearly related to each other. So for example, given two classes that distinguish rigid from flexible items, there is one continuum in operation between these two classes, a rigid to flexible continuum, and the concepts are understood by their contrast to each other. In Becker's example, there is also one continuum under consideration, an upper to lower one. The distinction here lies in the nature of the objects included in the classes. In Becker's example, cups and saucers, or letters and paper are units of items that belong together; therefore, the two different classes that they belong in also should be considered as a unit. However, it could be possible to have two classes, for example, rigid vs flexible, where none of the different items that were included in the two classes, were related to each other as a unit.

Other work on classification systems can be criticised for ignoring possible relational dimensions among items in noun classes. Denny and Creider's 1975 work on Bantu noun classes, 'The semantics of noun classes in Proto-Bantu', is an example of this. This article focuses on shape or 'configurational' dimensions as the primary organising principles and does little with other possible types of interactions between classes and items classified. For instance, in the Bantu class 5/6 for count nouns, there are listed numerous body parts: breast, nose, navel, stomach, buttock, kidney, cheek, eye and tooth; and also things on the body such as freckles, boils and carbuncles. This class Denny and Creider label as 'rounded, protruded and bunched' (1975:155). In class 6 for mass nouns which is treated as 'cohesive' liquid by Denny and Creider, there are numerous substances which can be seen as liquid or fluid products of the above body parts: milk, nasal mucus, intestines, excreta/urine, spittle and pus (1975:160). It is not my intention to argue here that shape features are not important in Bantu classes; however, the labels of 'rounded, protruded, bunched' and 'cohesive' liquid miss an interesting interaction among the items in class 5/6 for count nouns and class 6 for mass nouns.

Dixon (1968) describes another interesting kind of relational basis for classification which, unlike those that Becker describes, is abstract in nature. In Dyirbal, if a particular subset of items is viewed as 'harmful', the subset is put in the class opposite from what would be expected. Creating a conflict between the class meaning and the included items gives a new meaning. The relationship between the items in this case is one of opposition which implies negative attributes.

Becker (1975) also argues that another relational dimension underlies the whole Burmese system of classification. This is the 'self-other' continuum which arranges people, objects and ideas on a near to far continuum. As mentioned above in section 1.2.1, the attribution of near or far can be based on both physical and psychological considerations. Becker argues that this dimension operates in human classification, as well as in the classification of inanimates. However, in this case, 'person' or 'human being' is the centre or near point with inanimates arranged along the continuum depending on their nearness to the self. For example, clothes would be nearer to a person than chairs, which in their turn would be nearer than vehicles; and each of these items would be classified in different classes. In Becker's analysis of Burmese, this continuum does not supplant other dimensions, but provides another organising dimension. Becker does not state that the self-other is a universal dimension in classification systems, but Leach's description of it includes the notion that it plays a central role in organising linguistic and social behaviour in all societies.

In summary then, there appear to be two major types of dimensions that occur in classification systems: those that have to do with physical or material aspects of the items themselves; and those that have to do with different kinds of relationships that hold between items in different classes. While it was pointed out that many linguists feel that several of the same semantic features underlie classification in different languages and can be considered universal, it was also demonstrated that there are clear cultural factors influencing the structure of these systems. Lyons (1977:466) interprets such factors as follows:

[many of the] principles of sortal classification...appear to be universal, being based upon the ontological scheme of natural kinds and the perceptual or functional salience of certain criterial attributes. How the distinctions that these principles of classification establish are grammaticalized or lexicalized varies considerably, however, across languages.

However, not all linguists agree on the idea that there is a universal set of features operating. This disagreement manifests itself partly in the kinds of labels used to describe semantic dimensions. Articles describing configurational categories in classifier systems reveal two different strategies. One strategy is that found in Becker (1975). Here, he labels the basic dimension found in the Burmese system as a 'head/body' distinction. He argues that round (non-extended) and long (extended in one dimension) are metaphoric extensions of this 'head/body' distinction. The other strategy is to label the dimensions as abstract shape features. For instance, Paul Kay (p.c. 1976) claims that the systems all deal with abstract one-, two-, and three-dimensions and that the use of 'head/body' in Burmese, for example, is a metaphor for the expression of a more abstract notion.

Is it possible to resolve these opposing interpretations, or to answer the question why they occur? It is possible that the goals of the authors affect their solutions. Those like Becker who are interested in understanding a particular culture in depth attempt to describe the language and culture in the terms that the speakers understand it.¹³ Authors who are more interested in finding universal or pan-cultural features of behaviour may be more likely to choose the more neutral terms.

It is important if possible to discern the 'metaphors' and the basis of these metaphors in different languages. It may well be that universality is assumed at degrees of specificity which are not appropriate. For example, Watkins (1977) claims that people have misinterpreted the verbal system of noun classification in North American Indian languages by claiming it had to do with dimensions of round, long and flat. She argues that it is essential to look at the origin of the classifier morphemes, which is an important part of Becker's approach to the Burmese system. This approach leads to the interpretation that the configurational categories for Athabaskan may come from verbs which indicate position, i.e. sitting, standing and lying. She says objects are not classified by one inherent shape as others have argued, since they can change where they fit by moving. Her analysis receives support in Witherspoon (1977), who also argues that the ability to move (which the idea of position is related to) and the power that movement implies, is an important dimension in categories in the Navaho language, one of the Athabaskan languages. If her analysis is correct, the application of the labels 'round, long and flat' and the claim that classification is based on inherent shape features of the items involved are incorrect, thereby

demonstrating how important it is to carefully analyse the semantic bases of classes based on information from the language itself.

1.4.2 Methodology

The methods that linguists suggest using to correctly analyse the semantic bases of classes, not surprisingly, are different. All of these approaches are valid and useful and probably best employed together. One approach suggested by Allan (1977) and Friedrich (1970) is merely to ask the native speaker if there is a meaning for the class. This is a useful tactic, but one with limitations like any of the others. First of all, the meaning one gets may be associated with only a particular group of nouns that the classifier can classify. This method can provide some core meanings or typical associations, but perhaps not all uses. For example, the more poetic ones that Becker (1975) describes would not be captured by this method. Secondly, consultants can come up with folk etymologies which are not necessarily based on historical connections. For example, this happened to Adams and Conklin (1973) when we were collecting data on Japanese. In Japanese, there is a classifier which is employed with birds and rabbits. When we inquired of our consultant why these two creatures were grouped together separately from other animals, he said it was because they both hopped. Historically, the class came about by royal decree and had nothing to do with hopping. It is useful to be aware of folk etymology because it may explain the grounds on which new items might be included. However, the problem of historical accuracy still remains to be solved in these cases.

A second approach is to employ one's own intuitions as an outside observer. In this method, one looks at the set of items classified by a particular classifier for something they have in common. Many of the articles that deal with classification, and especially those that compare large numbers of systems from different languages have used this tactic. The validity of this approach depends on the degree to which one believes, or the degree to which it is true that numeral classifier systems are based on natural kinds or on material and perceptual features of the items in question. While this approach definitely does provide results and is one of the few possible when native speakers are not available, it is best not used as the sole tactic. As Friedrich says (1970:385), classifiers are 'at a relatively deep level of semantic structure' and are to be 'weighed and evaluated in connection with the premises of the cultural system'. These kinds of 'deep structures' can be missed by this method. The examples of classification of birds in Dyirbal described by Dixon (1968) would be overlooked in this approach.

Becker (1975) and Watkins (1977) suggest a third method for discerning the meaning of classifiers. They argue that it is very important to examine the lexical meaning of classifiers if they are still transparent. It was on the basis of the meanings 'close', 'head', and 'body', which are the meanings of some of the Burmese classifiers for animates, that Becker was able to reach an understanding of the system underlying Burmese. ¹⁴ The information that one gets from this kind of approach is lost when doing the kind of broad based comparisons that Allan (1977), Adams and Conklin (1973), and Denny (1976a) have done.

Becker (1975) and Dixon (1968) are the source of another technique for analysing dimensions. As Becker argues, and as Dixon (1968) also demonstrates, it is important to compare items

classified by different classifiers. It is in this way that one can discern any relational dimensions that might occur in a classifier system. As we have seen, Becker argues that in Burmese in characterising classifiers for inanimates, items may be classified by the same classifier for different reasons. Some items are included because they are 'round' as opposed to 'long' and other items are included in the same class because they are relationally 'upper' as opposed to 'lower'. Both of these dimensions, he argues, are based on the 'head/body' distinction that also operates to divide animates into different classes as well.

Another example of the semantic basis for inclusion of objects being based on more than one dimension is presented in Dixon (1968:118). Dixon argues:

It is quite common for two systems [dimensions in the terminology used here] jointly to provide the semantic basis for noun classes.

Dixon reports the following illustration found in noun classes in Berber. In Berber, there are two prefixes which when used with animate nouns distinguish between women and men and when used with inanimate nouns distinguish between small and large.

a-myar old man ta-mayr-t old woman

i-slli boulder, large stone *ti-slli-t* small stone, pebble

This is a very clear example of an instance where attempting to distinguish the occurrence of different items in a particular class only on the basis of a single semantic dimension is inappropriate.

A final methodological consideration is how one verifies the dimensions one proposes. It has been argued by several authors: Allan (1977), Becker (1975), Burling (1965b), and Sanches (1977) that one way of testing the appropriateness of proposed dimensions is to give native speakers a new item and let them classify it. While all these linguists propose the same method, they do not get the same results. When Becker (1975) used this strategy, his Burmese speakers put the items in the most neutral category. This, Becker argued, showed that the grounds for inclusion of items in a class were at a very deep level of semantic analysis and not based on superficial objective features. Burling also used this process with Burmese speakers, but with less unusual items. He found that different speakers applied different classifiers to the same objects. Allan argues the exact opposite of Becker:

The strongest evidence of semantic classification is the ability of native speakers to consistently and without difficulty classify new objects on the basis of their observed characteristics. This ability is vouched for in such diverse languages as Burmese...Dyirbal..., Fula..., and Navaho (1977:290).

Conflicting statements such as this make one wonder if we are all talking about the same thing.

Why do different linguists get such different results? It cannot be attributed to the language since all three – Becker, Burling, and Allan – talk about Burmese. Part of the difference may be attributable to the kinds of items they asked speakers to classify. For instance, Becker asked about

some unusual things such as stereo-headphones and aerosol throat sprays. However, some of the discrepancy must be due to the same considerations described above: the attitude or the beliefs of the analyst about universal as opposed to culturally relative linguistic behaviour. In turn, these attitudes could also have influenced the native speakers they worked with. The resolution of such opposing views is almost impossible. Both are probably right, though the recent tendency in linguistic description has been to stress the universal at the expense of comprehensive understanding of cultural variation.

1.5 Conclusion

The function of the chapters that follow is to provide, given the available data, as complete a description as is possible of the numeral classifier systems found in three subfamilies of Austroasiatic: Mon-Khmer, Nicobarse, and Aslian. Insights on the nature of categories in such systems in numerous languages and on the best methodology to learn about these categories have been discussed in this chapter. The following chapter describes some of the special methodological problems associated with gathering data for the Austroasiatic language family. The remaining chapters are devoted to detailing the numeral classification systems in Austroasiatic. As the description about these subfamilies unfolds in the chapters to come, an attempt is made to evaluate and modify existing theories about the nature of these categories. Included in these discussions are examples where there were difficulties in deciding whether a form was actually a numeral classifier or one of the other forms that can occur in this same slot. The data chapters are basically divided according to the groupings developed in Adams and Conklin (1973): animacy and one-, two- and three-dimensionality. There is also a separate chapter on general classifiers. Difficulties with this organisation are discussed in each chapter. Every data chapter is organised so that for each language group the nature of the categories is described first. Following that are the sections that identify whether particular classifiers or categories are native or borrowed. These last sections will help to identify the relationships among the subfamilies in Austroasiatic and among Austroasiatic and other language families in the South-East Asian area. They will also help to identify the nature of borrowing of lexical-syntactic categories like numeral classifiers.

NOTES

- 1. Employing the term 'quantifier' for the measure terms that occur in this slot is not without problems. In logical theory and linguistic research, the term 'quantifier' is applied to a wide range of phenomena, including for example 'quantifier scope'. (See Lyons (1977) for a good discussion of the uses of this term.) However, there is precedence in the literature for its use with the forms under consideration here. For example, see Hla Pe (1965). On occasion, the term 'non-classifier' is also used here as a more neutral term for those items other than classifiers which appear in the slot in question.
- 2. These are some of the more common expressions one might use. There are almost limitless possibilities. Gérard Diffloth suggests some of the following possibilities: an offering of books, a column of books.

- 3. This is not surprising, however, since his article deals with other types of nominal classification in addition to that in the numeral phrase. He is attempting to find a term that will characterise all these types, not just numeral classification.
- 4. The implication Greenberg makes here is that a unit is also the number 'one' and that counting is 'unit counting'. Greenberg says that he has seen only one example of 'non-unit counting' in Uvea (?language family), where counting is normally by two's. In this language, however, the classifier is also required, so there is a problem here which Greenberg pursues no further.
- 5. John Grima suggested this interpretation to me.
- 6. This term was suggested by Gérard Diffloth.
- 7. For example, Nguyễn Dình Hòa (1975), argues the latter. The 200 number is inflated because Nguyễn Dình Hòa includes in his examples what I refer to as 'quantifiers'. However, even taking this into consideration, the differences in estimated size are large.
- 8. As it turns out, this claim of 'never' is incorrect. In at least some Tai languages, the word order for expressions with the number one is of the above type with the number and classifier separated. However, it is also possible to argue that 'one' is not a number and that these forms are not counterexamples.
- 9. The classifier-plus-noun-alone constructions found in some languages also demonstrate a stronger nexus than is usually noted.
- 10. The claims of Allan (1977), Denny (1976a), Denny and Creider (1975), and Dixon (1968) will be treated the same here, without regard to the type of classifier system they are speaking about. However, it would not be surprising to find an interplay of dimensions and grammatical function, a topic which Allan does not discuss. For example, Allan posits 'location' as a dimension. However, both Allan and Denny point out that the locative noun class system in Eskimo does not have a locative dimension. In this case, the grammatical function of these Eskimo noun classes precludes them from having this particular dimension.
- 11. I recognise that many of the items included in the following section, for instance trees, may not be viewed as inanimate by all cultures.
- 12. The discussions by various authors over the appropriateness of one or the other set of these terms have been numerous. See for example, Allan (1977:300), Denny (1976:3-6), and Friedrich (1970:381).
- 13. The application of the approach is described in Witherspoon (1977) for the language and culture of the Navaho. He ascribes the original source for this style of description to Geertz's (1973) theory of 'thick description'.
- 14. My only concern with Becker's own use of this method was that he did not consistently apply it to the classifiers for inanimates.

Chaper 2

AUSTROASIATIC LANGUAGES AND HOW (OR HOW NOT) TO STUDY THEM

2.1 Austroasiatic language family

For the reader unacquainted with the Austroasiatic language family, Map 1 (Appendix) shows the general location of the four subfamilies of the Austroasiatic family with respect to rivers and national boundaries. These maps provide the reader with a visual sense of the location of the Austroasiatic languages. As can be seen from them, the family is widespread and its speakers frequently widely separated from each other and located in small pockets. The accepted interpretation of this situation is that the speakers of Austroasiatic languages were at one time more widespread and that the movement into the South-East Asian area of speakers of other languages separated the different groups of Austroasiatic speakers from each other (Burling 1965a:165). The belief is that these Austroasiatic speakers have been in these areas a very long time making their languages important for substratum effects in other South-East Asian languages (Diffloth 1975:480).

The dates of the separation of the Austroasiatic family are largely unknown. However, the work of Thomas and Headley (1970) and Benjamin (1976) have made some guesses possible with respect to Mon-Khmer and Aslian. Diffloth says of this problem:

The date of separation of the three main Austroasiatic subfamilies – Munda, Nicobarese, and Mon-Khmer [including Aslian] has never been estimated and must be placed well into prehistory. Within the Mon-Khmer subfamily itself, twelve main branches are distinguished; glottochronological estimates of the time during which specific languages have evolved separately from a common source...indicate that these twelve branches all separated at approximately 1000-2000B.C. [This is the figure from Thomas and Headley 1970.] (1975:480).

In the reconstruction of Aslian linguistic prehistory found in Benjamin (1976), the separation of the Aslian languages from other Austroasiatic languages is estimated even earlier than in Diffloth. Benjamin offers a date of approximately 4000 B.C. (5970 B.P.).

Most of the schemes for the Austroasiatic language family presented from 1960 on are in almost complete agreement as to which languages belong to the family. These schemes include those presented in Diffloth (1975), Matras and Ferlus (1971), Pinnow (1959) and Thomas and Headley (1970). The disagreements among these linguists revolve around the alignment of these languages into subfamilies and into branches of subfamilies. The question of whether certain languages belong to the Austroasiatic group now concerns only a few poorly known languages. However, even into the mid to late 1950s, this question of which languages belonged to the Austroasiatic family concerned large numbers of languages including what are now considered whole subfamilies and branches of Austroasiatic: Munda, Viet-Mường, and some of the Aslian languages. In Sebeok (1942), Thomas (1964) and Benjamin (1976), one finds some of these earlier arguments over the membership of Austroasiatic reviewed and evaluated. However, those of Sebeok (1942) are discounted in Thomas (1964).

Sebeok (1942) argued, for example, as many had earlier, that a close connection between Mon and Khmer and the Munda languages had not been demonstrated. He claimed that differences in the type of affixes, in the word order of adjectives and nouns, and in the number of syllables that constituted a root, all made the relationship unlikely.

It follows from the foregoing that, while genetic connection between Mon-Khmer and Munda cannot be categorically denied, in the absence of proof or even good evidence the latter must be excluded from the Austroasiatic subgroup of the Austric [term from Schmidt (1906), to be discussed below] family of languages (1942:211).

However, Pinnow's (1959) reconstruction of Proto-Munda and his demonstration of similarities between Proto-Munda and other Austroasiatic languages have convinced most of the relationship between the two.

Prior to the late 1950s, the inclusion of Viet-Mường and some of the Aslian group of languages now considered to be Austroasiatic, also was in question. For example, Maspéro (1952) argued against a Viet-Mường/Mon-Khmer connection because of the lack of affixes in Viet-Mường and because of the fact that Viet-Mường languages had tones while other Mon-Khmer languages did not. However, Haudricourt (1953, 1954) demonstrated the correspondence of Mon-Khmer final consonants and Vietnamese tones, as well as demonstrating the areal process of tonal development. The question of the membership of Aslian languages has been further worked out in Benjamin (1976) and in Diffloth (1968).

In addition to the earlier exclusion of some languages now considered Austroasiatic, there were also several languages which were included in the family, but which now are excluded from it. These languages are the Austronesian ones spoken in South Vietnam: Chru, Haroi, Roglai, Jarai, Cham and Rade. For examples which demonstrate that they are Austronesian languages which have been strongly influenced by Austroasiatic, see Pittman (1959).

While recent articles generally agree on the language members of Austroasiatic, a question which still remains in dispute is whether Austroasiatic is a separate language family or a subfamily of a larger family. In 1906, 1907, Schmidt proposed that Austroasiatic and Austronesian together formed an Austric language family. And Diffloth reports:

More recently Paul K. Benedict, a U.S. scholar, accepting the Austric theory, extended it to include the Tai-Kadai family of Indochina and Burma and the Miao-Yao family of China, together forming an "Austro-Tai" [sic] superfamily (1975:480).

For an example of Benedict's theory, see Benedict (1975). The arguments over the validity of both Schmidt's and Benedict's proposals are numerous although Benedict's are receiving more acceptance. See, for example, the No.6 issue, October 1976, of *Computational analyses of Asian and African languages* and Diffloth (1976a). While some of the examples in question in this work are ones used for proof of one position or the other, the proposals of Schmidt and some of those of Benedict have yet to be clearly demonstrated. For this reason, none of the examples that appear in this work will be used to resolve this argument, and Austronesian, Sino-Tibetan, and Miao-Yao forms in the data will be treated as borrowings.

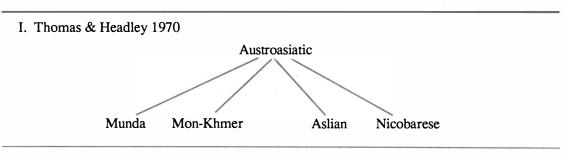
The Austroasiatic scheme that is used in this text is actually a combination of schemes from different sources. In general, those schemes which are the most recent and which are based on the most complete data are the ones used here. This has meant using research that applies to only some subfamilies, hence the combinations. The general scheme for the whole family follows the practice of Thomas and Headley (1970), in proposing four main divisions in the family: Munda, Mon-Khmer, Aslian¹ and Nicobarese and the four maps mentioned earlier follow this scheme. However, not all Austroasiaticists agree with this number of subfamilies. Pinnow (1959) suggests only two divisions: a west group which corresponds to Thomas and Headley's Munda; and an east group uniting Mon-Khmer, Aslian and Nicobarese. Diffloth (1975) proposes three subfamilies; Munda, Nicobarese, and Mon-Khmer which includes the Aslian languages. However, in a later article, in 1976, he also proposes a dual division of Austroasiatic like Pinnow's with Nicobarese as part of the Mon-Khmer subfamily. These different schemes are presented in Table 2.1 which follows. The scheme of Thomas and Headley (1970) which is employed in this text is given first. Pinnow (1959) and Diffloth (1975, 1976b) follow to allow comparison.

The **Munda** subfamily scheme employed here is a combination of that presented in Pinnow (1959) and the one found in Pinnow (1963). The Munda languages will only marginally figure in the discussion that follows, since many of their classifier systems, or what there are of them, are borrowed from neighbouring Indian ones.

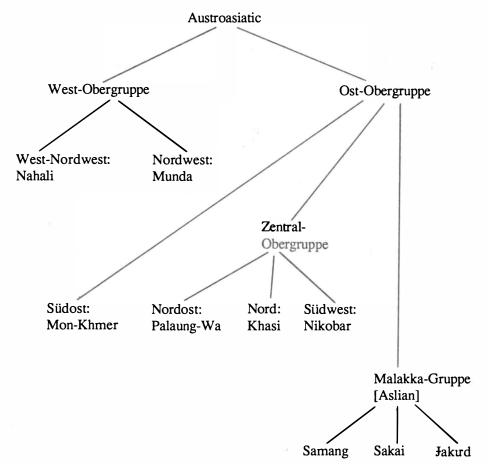
The divisions for the Mon-Khmer subfamily are based on the work of several authors. The overall scheme is that found in Thomas and Headley (1970) and is based on extensive lexico-statistical analysis. The grouping for Bahnaric, one of the nine branches of the Mon-Khmer subfamily, which is presented here, is a later revision by Gregerson, Smith and Thomas (1976) of the earlier Thomas and Headley scheme. The scheme for Palaungic, another branch of the Mon-Khmer subgroup, is taken from Diffloth (1977) and Schafer (1952). Diffloth's grouping of the Waic languages of the Palaungic branch is 'based for the most part on shared phonological innovations, and to a lesser extent on lexical replacements only rarely on geographical facts' (1977:13). The Viet-Mường data presented in Thomas and Headley (1970) has also been modified by including data found in Ferlus (1974) and Diffloth (1975). Ferlus has demonstrated

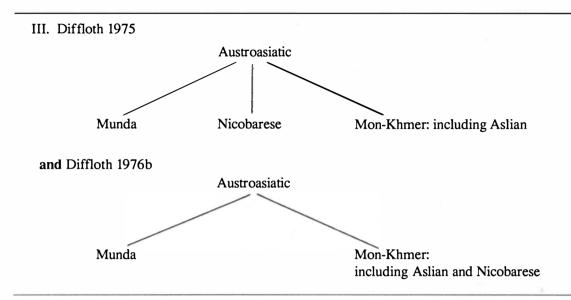
that two additional languages, Thavung and Pakatan, are also Viet-Mường and he has also realigned the languages listed in Thomas and Headley.

Table 2.1: A variety of schemes representing the subfamilies of Austroasiatic



II. Pinnow 1959:1-2





It should be noted here that Ferlus has also proposed a scheme for the Mon-Khmer subfamily (see Matras and Ferlus 1971:60); however, it does not differ significantly from that of Thomas and Headley (1970). The differences consist in the fact that rather than the nine branches listed in Thomas and Headley, Matras and Ferlus list 12 branches. They elevate the three divisions of Bahnaric – North, South and West – to separate branches on the same order as Khmer, Mon, Pear, etc. They also treat Mang, which is placed in the Palaungic group in Thomas and Headley, as a separate branch, an isolate on the level of Khmer. These two different schemes are presented in Table 2.2.

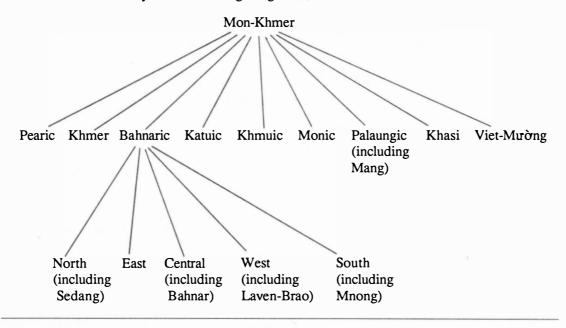
The scheme used here for the **Nicobarese** subfamily is based on Pinnow (1959), with one modification. Car Nicobar, Chowra, and Teressa and Bompaka have been grouped together as North Nicobar following the practice of Diffloth (1975).

For the Aslian subfamily, two schemes are used, that of Diffloth (1975) and Benjamin (1976). Only Benjamin's analysis for North Aslian is employed here since it is the only branch differing in any noticeable way from Diffloth's.

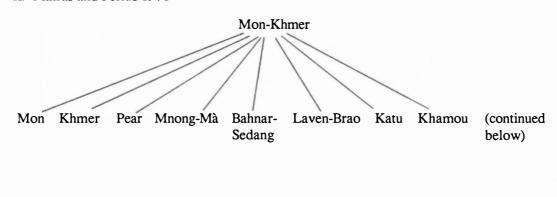
Table 2.3 gives the languages in the Austroasiatic language family in accordance with the combined schemes that were discussed above. There are numerous alternative names for some of these Austroasiatic languages. Diffloth (1975), Shorto, Jacob, and Simmonds (1963), and LeBar, Hickey and Musgrave (1964) are some sources for examples of these alternative names. The forms given in parentheses in the Austroasiatic scheme presented here indicate one of two things: either an alternative name and/or the names of dialects of the language.

Table 2.2: A comparison of two schemes representing the Mon-Khmer branches

I. Thomas and Headley 1970: including Gregerson, Smith and Thomas 1976



II. Matras and Ferlus 1971



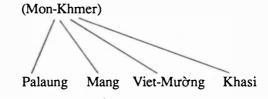


Table 2.3: Austroasiatic language family

```
Main divisions: Munda, Mon-Khmer, Nicobarese, Aslian
  MUNDA
  Munda
     North
       Kherwari
           Santali: Santali proper, Karmali (Kohle), Mahle
          Mundari: Mundari proper, Hasada(?), Naguri, Kera(?)
          Korwa: Korwa proper, Ernga (Singli)
          Ho (Larka Kol)
          Bhumij
          Birhor
          Koda (Kora): Koda proper, Birbhum, Bankura, Dhangor
          Asuri: Asuri, Brijia (Koranti), Manjhi
       Kurku: Kurku proper, Muwasi (Kuri)
     South
       Central
          Kharia: Kharia proper, Hill Kharia, Plain Kharia
          Juang (Patua, Patra-Saara)
       South-East
          Sora (Savara, Saora)
          Pareng (Parenji, Poroja)
          Gutob
          Remo (Bonda, Bonda Porbja, Nanga Poroja, Bonda Gadaba)
  Nahali
```

MON-KHMER

```
Pearic
Pear (Por)
Chong (Chawng)
Samre
(?)Angrak
(?)Saoch
Khasi
Khasi proper, Cherrapunji
Lyngngam
Synteng (Pnar)
Wār
```

```
Palaungic
  Lamet
  Riang
  Danau
  Angku
     Angku
     Amok
     Monglwe
     Davies' P'uman
     IJ
  Rumai
     Palaung (Gold Palaung)
     Pale (Silver Palaung)
     Darang
  Waic
     Samtau
        Kienka
        P'uman
       Samtau
       Tai loi
       KemDègne
     K'ala
     Khalo
     Wa-Lawa-La
       La
       En
       Son
       Wa-Kengtung
       Wa-Lawa
           Drage's Wa
           Wa proper (Davies' Wa, Milne's Wa, South Wa, Praok, Bible Wa,
                Antisdel's Wa, Tung Va Wa, Kawa)
           Lawa (Bo Luang, Umphai, Papae, L'up, Saam, Phae, Mapa, North Lawa)
(?)Mang
Monic
  Mon
  Niakuol
Khmuic
  Khmu (Teng, Câu, Clâu, Tayhay, Yuan)
  Mal (T'in)
  Mrabri
  Yumbri
  Khao (Kháng Aí)
```

```
Tayhat
  Puôc (Puhooc)
Khmer
Bahnaric
  North Bahnaric
     Rongao
     Sedang
     Halang
     Jeh (Dié)
     Monom (Bonâm)
     Kayong (Cagiuong)
     Hrê (Davak)
     Todrah (Didrah)
  East Bahnaric
     Cua (Kor, Traw)
     Takua
  Central Bahnaric
     Bahnar
     Alak
  West Bahnaric
     Loven (Jru)
     Nyaheun, Prou
     Öi, The
     Laveh
   (?)Brao, Krurng, Kravet
     Sok
     Sapuan
     Cheng (Jeng)
   (?)Suq (Sou)
  South Bahnaric
     Stieng
     Central Mnong (Preh, Biat, etc.)
     Southern Mnong (Nong, Prâng)
     Eastern Mnong (Gar, Chil, Kuanh, Rolom)
     Koho (Sre)
     Chrau (Jro)
Katuic
  Katu
  Kantu (High Katu)
  Phưang (Hưu River Vân Kiêu)
  Brou (Leu, Quángtri, Vân Kiêu, Galler, Makong, Tri)
  Pacoh (Bô River Vân Kiêu)
  Ta'oih
```

Ngeq, Nkriang Kataang Kuy Lor, Klor Leun Ir Tong Souei So	
(?)Kasseng, Talieng	
Viet-Mıròng Viet Vietnamese North upland Lowland (several major dialects) Mıròng (Pi, Thàng, Tông, Wang) Mày Arem Tày Pong (?)Sach (?)Nguôn (?)Hung Khnong Khêng Thavung Thavung Pakatan Phou Soung	
ASLIAN	
Jehaic (North Aslian) Tonga Kensiu, Kintak Jahai Menriq Mintil, Batek Che Wong Senoic (Central Aslian) Temiar, Lenoh, Semnam Semai Jeh Hut Semelaic (South Aslian) Mah Meri Semelai, Temoq, Semaq Bri	North Aslian-(Benjamin) 1. Che Wong 2 Bateq Nong Bateq Deq, Mentil Jehai Mendrip Kensiu Kintaq Bong

NICOBARESE

North Nicobar

Car Nicobar

Chowra

Teressa, Bompaka

Central Nicobar

Camorta

Nancowry

Trinkut, Katchall

South Nicobar

Coastal Great Nicobar

Little Nicobar

Condul

Milo

Inland Great Nicobar: Shom Peng (Shompe)

2.2. Methodology

2.2.1 Synchronic description

2.2.1.1 Data sources

For Vietnamese, native speakers were fortunately available. Nhuquynh Shafer was the speaker who helped the most and whose examples are reported here. She was from Hue and spoke the dialect of that area. Vietnamese dialects mostly differ from each other in phonological features; however, 'There are other differences among dialects – a few morphological and syntactic variations and numerous words and expressions with strongly local flavor' (Thompson 1965:88). The few times that the classifier system is affected by dialect differences are noted in the text. Huỳnh Sanh Thông also made numerous refinements which were extremely useful in the interpretation of the use of certain Vietnamese forms.

All the rest of the data presented here, including some of the Vietnamese data, have been collected from published material or from information contained in the field notes of other linguists which they were kind enough to supply. Most of this latter material is noted as 'personal communication' in the bibliography since the majority of this material was sent in the form of letters.

In general, the amount of data available for different Mon-Khmer, Nicobarese and Aslian languages varies greatly. For example, Vietnamese and Khmer, the two Mon-Khmer languages which are national languages, have been described in several good grammars, dictionaries, and numerous articles. On the other hand, for many other languages, there is little published material or only material from field notes. Diffloth (1975:484), for example, says of this situation:

Many languages (e.g. Wa, Kuy, Stieng, Pacòh, Katu, Mường) have only been described briefly in a few articles, and many more (Semelai, P'uman, Sa'och, Riang, Lawa, Mrabri) are little more than names on the map.

In addition to the differences in the amount of data available for languages, the kind of data available also varies. Not surprisingly, very little of the available material has as its goal the description of classifiers. Much of the earlier material contains nothing but word lists without, or with only a few, example sentences. While this kind of information is useful for historical/comparative work, it generally contains no information useful for a study such as this one.

The limited amount of data for many languages has the unfortunate consequence of making the set of classifiers appear small and perhaps marginal in a language when they very well might not be. The Bahnaric languages are a good example of this. For Bahnar proper, Guilleminet and Alberty (1959, 1963) have published a very comprehensive dictionary, which contains a large set of interesting classifiers. It is not unlikely that if more information were available for other Bahnaric languages, the set of classifiers in these languages would be of equal size to that found in Bahnar proper. Many of the classifier systems in Mon-Khmer languages are undoubtedly larger and more interesting than this work suggests.

2.2.1.2 Language sample

The number of Mon-Khmer, Nicobarese and Aslian languages for which data on classifiers are available are considerably smaller than the actual number of languages in the family. For this reason, it seems easiest and more efficient for the readers to present here a shortened list which includes only those languages for which examples of classifiers were found. These are the languages that will be referred to throughout the text, and they appear in Table 2.4.

Languages were left off Table 2.4 for two reasons: there were no data on the language or there were examples of numeral phrases, but the phrases did not contain classifiers. This latter type of language can be considered important for the interpretation of whether or not classifiers are native to Mon-Khmer languages, so it seems appropriate to comment here briefly about this group. Below is a list of such languages:

Pearic
Pear
Palaungic
Riang
Angku
Davies' P'uman

Pearic is the only branch for which no examples of classifiers were found. In the other case, Palaungic, there are only a couple of languages in the branch without examples of classifiers. All of the other Palaungic languages with data on number phrases have numeral classifiers.

Table 2.4: Austroasiatic languages described in the text

```
MON-KHMER
  Khasi
     Khasi proper
    Wār (Amwi)
  Palaungic
    Lamet
    Angku
       Angku
       Amok
       Monglwe
       U
    Rumai
       Gold Palaung
     Waic
       Samtau
          Tai loi
       Wa-Lawa-La
          La
          En
          Son
          Wa-Kengtung
          Wa-Lawa
            Drage's Wa
            Wa proper: Davies' Wa, Antisdel's Wa, Bible Wa, Kawa
            Lawa: Bo Luang, Umphai, Mae Sariang
Monic
  Mon
Khmuic
  Khmu (T'eng, Yuan)
  Mal (T'in)
Khmer
Bahnaric
  North Bahnaric
    Rongao
    Sedang
    Halang
    Jeh
```

Hrê

```
East Bahnaric
     Cua
  Central Bahnaric
     Bahnar proper
        East dialects: Alakong, Bonom, Golar, Tolo
        West dialects: Kontum, Rongao*, Jolong
  West Bahnaric
     Loven
  (?)Brao
     Ôi
   South Bahnaric
     Stieng
     Central Mnong: Preh
     Eastern Mnong: Rolom, Gar
     Koho (Sre)
     Chrau
Katuic
  Katu
  Kantu (High Kantu)
  Brou
  Pacoh
  Kuy
Viet-Mường
  Viet
     Vietnamese
     Mường
NICOBARESE
North Nicobar
  Car Nicobar
Central Nicobar**
ASLIAN
Jahaic
(?)Semang of Ulu Siong
Senoic
  Temiar (Sakai of the Plus River Valley), Lanoh
         ((?) Semang of the Plus River Valley)
  Semai
(?)Sakai of Ulu Bertang
(?)Sakai of Korbu River Valley
```

Mah Meri (Besisi of Sepang, Besisi of Kuala Langat, Besisi of Ayar Itam)

- * Guilleminet and Alberty (1959, 1963) list this as a dialect of Bahnar proper. Diffloth, however, thinks it is a dialect of Rongao, North Bahnaric, whose speakers have moved south. The classifier data supports Diffloth's view.
- ** The data presented by Man (1889) includes examples from Nancowry as well as other Central Nicobar dialects. Since in his list of classifiers he does not cite the source as one particular dialect, I have just cited them as Central Nicobar throughout the text.

There are three possible interpretations of this situation: these languages never did have classifiers; they had them, but lost them; or they have them but they weren't recorded by the field worker gathering the data. Of course, different explanations may be appropriate for different languages. For example, the data for Davies' P'uman are fairly limited, so it is quite possible that examples were not recorded. It is also possible that since classifier use is optional in some languages, the speakers omitted them in this context. On the other hand, the data for Riang are more extensive. In this case, one might argue that there are no classifiers in this language. The same might be said of Pearic.

2.2.1.3 Problems of analysis

The amount and kind of data available for different languages have serious consequences for the kinds of analysis it is possible to do on the classifier systems. Frequently, it is not possible to find more than one or two examples of the items that are classified by a particular classifier. In such cases, the kind of semantic analysis one can do is very limited. For example, in the previous chapter, two different views of the nature of numeral classification were discussed. One holds that classifiers are merely redundant information and more or less predictable given the noun in question. The other view claims that how a noun is classified depends on the intent of the speaker. In this latter interpretation, classifiers are not redundant but add meaning to a phrase. Thus nouns can be classified differently depending on what characteristic of the object in question one wants to focus on. Sadly, for most of the languages described here, this latter notion cannot be confirmed because of the paucity of examples and texts.

The small amount of data available in many languages also affects the degree to which it is possible to understand the way in which classifiers in a language interact to form a system. Becker (1975) has demonstrated the importance of viewing classifier sets as systems. This means that for a good analysis, in addition to comparing all the items classified by a particular classifier to each other, one should also compare these items with those classified by another classifier, since the meaning of the two classifiers might best be explained in relation to each other rather than as independent forms. For example, Becker shows that the idea of an upper versus lower continuum is important for characterising two classifiers in Burmese. Previous analysis had reported one as a classifier for round objects and one as a classifier for long objects, ignoring relationships between the items classified by the two classifiers. Obviously, this kind of in-depth analysis is impossible for much of the Mon-Khmer data because there are so few examples of the kinds of items a

classifier classifies. On occasion, inferences can be made from closely related languages, but this kind of data always must be viewed as without definite proof.

In general, then, for the different languages, the type of semantic analysis made here will vary greatly. Often, the systems will appear static and the classifiers will seem to be no more than redundant information; and often, the metaphors which underlie the systems will escape analysis. This is disappointing, but it must be until a time when better data are available. Even for those languages where fuller descriptions have been possible, the inability to check interpretations with native speakers leaves much of the analysis speculative.

A last problem that was encountered was in determining when forms were actual numeral classifiers rather than any of the temporary measures or group counters or nominal compounds described in Chapter 1. For the most part, the various sources have been taken at their face value if they claim that a form is a classifier. However, on occasion, the meaning of the form, or some of the items it occurs with, or information from other sources, puts the identification in doubt. These examples are discussed in the text. No doubt errors in interpretation were made.

2.2.2 Diachronic description

2.2.2.1 **Sources**

For the identification of Mon-Khmer, Nicobarese and Aslian cognates, the work of various Austroasiaticists was relied upon. These sources have been used in two ways: one was to locate previously identified cognates; the other way was to use their proposed sound correspondences as the basis for suggesting new possible cognates. Some of this information has come from the previously published work of such people as Pinnow (1959), Schmidt (1905), Shafer (1952), Shorto (1971) and Smith (1972). However, the identification of so many of the items and the accuracy of the proposed cognates have been made possible by the help of Gérard Diffloth's vast knowledge of the field and his unpublished material which he kindly made available.

2.2.2.2 Problems of analysis

Identifying cognates has not been an easy task. One of the reasons for the difficulty has been described above: there are numerous aspects of the reconstruction of Mon-Khmer and Austroasiatic remaining to be done. In addition, the number of examples of classifiers are small. This makes it hard to establish good comparisons. However, besides these two points, part of the problem has to do with the nature of the form class under consideration. The meaning of classifiers can be elusive. Sometimes classifiers also function as nouns or other parts of speech. When they do, they can be located in other example sentences or in dictionaries when they exist for the language in question. However, the meaning of classifiers can be lost or obscured over time. Then, unless one finds related transparent forms in other languages, very little that is enlightening can be said about them. Also, often classifiers are not glossed in the data whether or not their meaning is transparent. This means that to find cognates one must compare both forms and meanings of forms across languages.

The difficulty in figuring out the meaning of forms and cognates in Mon-Khmer is compounded by the fact that there are systems of infixation and prefixation in these languages. These affixes may at first obscure both the basic meanings of words and their relationship to a form in a different language. However, according to Diffloth (1975:483), 'It is rare to find more than one or two affixes attached to one root', and 'roots are mostly monosyllabic'. For the analysis of classifiers, the most important affix is a nasal infix which is found throughout the family.

Adding to the difficulty in locating the meaning of a classifier is the fact that some dictionaries for Mon-Khmer languages are arranged according to semantic fields (see Costello 1971). This means that even once a root is established, one has to check a variety of word classes looking for nouns and verbs that might be appropriate.

In addition to the above problems, there exists in Austroasiatic a process that affects the replacement of vocabulary and also possibly the number of cognates one might find in the sets of classifiers of different Austroasiatic languages. Word taboo is an important force in Austroasiatic for restructuring vocabulary. For example, animal names are affected by taboos. More importantly for the history of classifiers is the taboo on the use of a person's name after they die. Diffloth describes the process as follows:

After a person's death his [sic] name and all words resembling it are avoided and replaced by metaphors and circumlocutions. This may explain why, for instance, the Nicobarese languages, which seem closely related, have few vocabulary items in common. In general, new words and fine shades of meanings can always be introduced by word play and from the open-ended set of expressive forms. Borrowings from the nearest majority languages are also common (1975:483).

Skeat and Blagdon (1906:417-431) add even more situations in which word taboos occur. In Nicobar, they claim that not only the name of a deceased, but also names or parts of names of high chiefs and names of relations by marriage are subject to taboo. In addition, there are taboos associated with certain kinds of economic behaviour; for example, the camphor trade among the Jakun in the Malay peninsula.

The ultimate consequence of this process of restructuring through word taboo is that native systems can grow different from each other in a shorter period of time than in a language where this process does not occur. This means that one cannot freely infer that borrowed forms and lack of continuity in forms throughout several languages are indicators that the grammatical system in question is not native.

2.2.3 Borrowings

2.2.3.1 Data sources and problems of analysis

In the discussion above on the effect of word taboo on the vocabulary of Mon-Khmer, Nicobarese and Aslian languages, Diffloth mentions that borrowing is one way that words which can no longer be used are replaced. In general, the process of borrowing and the notion of areal influence is important throughout all of South-East Asia. One of the goals of this study is to determine as far as is possible whether individual classifiers and whole or parts of classifier

systems are borrowed from other languages. To some extent, this has been the most difficult part of the study and has resulted in the most tentative and incomplete results.

For the Mon-Khmer and Aslian languages, conquest by other cultures and other types of socioeconomic and religious influence from other cultures have meant linguistic influence also. Nowadays as in the past, many Mon-Khmer and Aslian speakers are minorities in the area in which they live. While this means that these minority cultures have borrowed from other non-Mon-Khmer and non-Aslian languages, sometimes they have retained more original vocabulary than the national languages like Vietnamese, which was strongly influenced by Chinese when under Chinese domination. Diffloth says of this situation:

Speakers of most other Austro-asiatic languages [other than Khmer and Vietnamese] are under strong social and political pressure to become bilingual in the official languages of the national unit in which they live. Most groups are too small or too scattered to win recognition, and, for many, the only chance of cultural survival lies in retreating to a mountain or jungle fastness, an old Austro-asiatic tradition....Vietnamese, Mon, and Khmer, the best known languages of the family, came within the orbit of larger civilizations and borrowed without restraint – Vietnamese from Chinese, Mon and Khmer from Sanskrit and Pāli. At the same time, they have lost a large amount of their original Austro-asiatic vocabulary. It is among isolated mountain and jungle groups that this vocabulary is best preserved (1975:482-483).

For this study information about borrowed forms was obtained in two ways. First, when available, already published material on this topic was employed. For languages such as Vietnamese, and Khmer, the two Mon-Khmer languages which are national languages, there has been a fair amount of research on borrowings into these languages. Occasionally for some of the other Mon-Khmer and Aslian languages, one also runs across research on this topic. This is true, for example, of Khasi and Bahnar proper. However, in general, a second approach had to be developed for this project to locate possible borrowed forms.

The other approach taken here to the identification of borrowed classifiers has been as follows. For each Mon-Khmer, Nicobarese and Aslian branch, a list was developed of non-Mon-Khmer languages that were presently geographically in a position to influence these Mon-Khmer languages. In addition, when there were older historical connections that have since been severed, these languages were included on the list. An example of this latter situation involves the Austronesian Chamic languages that are located on the coast of South Vietnam. At one time, the Chamic kingdom extended much further and was in contact with more Mon-Khmer languages than it is today.

After drawing up this list, grammars and dictionaries were consulted for sets of classifiers in these languages. In this data, classifiers with similar forms and functions to those found in the neighbouring Mon-Khmer, Nicobarese and Aslian languages were reviewed. Specialists in other language families, i.e. A.L. Becker in Burmese and Austronesian, W.J. Gedney and D. Strecker in Tai, and P. Benedict also checked these results. Table 2.5 cites the languages that were examined. In the Appendix, on Maps 2-6 are shown the branches of Mon-Khmer and the neighbouring non-Austroasiatic languages.

Table 2.5: Non-Austroasiatic languages in contact with Mon-Khmer, Aslian and Nicobarese languages¹

KHMER Siamese Lao Chinese-Taechiu (Swatou) dialect Chamic languages² Sanskrit/Pāli² BAHNARIC Chamic languages Lao² Chinese-Cantonese or Hokkienese KATUIC Lao Chamic languages Lawa Karen Hmong (Meo) Lao Shan Siamese Tai Yuan Lue Tai Dam Tai Yuan Lolo Lahu Akha Lahu Akha Cianta Karen Lamet Meo-Yao Tai Yuan Lue Karen Lahu Akha Caren Lahu Akha Caren Lahu Akha	anese
Chinese-Taechiu (Swatou) dialect Chamic languages² Sanskrit/Pāli² BAHNARIC Chamic languages Lao² Chinese-Cantonese or Hokkienese KATUIC Lao Chamic languages KHMUIC Lao Tai Dam Tai Yuan Lolo Lahu Akha Laoe Tai Yuan Lolo Lahu Akha Lamet Maic* Lue Danau Chinese-Yünn Angku Burmese Kachin Lisu Lahu Akha Karen Sanskrit/Pāli² Lawa Karen Hmong (Meo) Lao Shan Siamese Tai Yuan Lue Tai Dam Tai Yuan Lolo Lahu Akha Akha Lahu Akha	anese
(Swatou) dialect Chamic languages² Sanskrit/Pāli² BAHNARIC Chamic languages Lao² Chinese-Cantonese or Hokkienese KATUIC Lao Chamic languages Chamic languages Lao Chamic languages Lao Chamic languages Lao Chamic languages KATUIC Lao Chamic languages Lawa Karen Hmong (Meo) Lao Shan Siamese Tai Yuan Lue Tai Dam Tai Yuan Lolo Lahu Akha Lahu Akha Akha Lahu Akha	anese
Chamic languages² Sanskrit/Pāli² Chamic languages Lahu Akha Lao² Chinese-Cantonese or Hokkienese KATUIC Lao Chamic languages Lao Shan Siamese Tai Yuan Lue Tai Dam Tai Yuan Lolo Lahu Akha Akha Akha Akha Akha Akha	anese
Sanskrit/Pāli² Sanskrit/Pāli² Kachin Lisu Lahu Akha Lao² Chinese-Cantonese or Hokkienese KATUIC Lao Chamic languages KATUIC Lao Chamic languages KHMUIC Lao Meo-Yao Lue Tai Dam Tai Yuan Lolo Lahu Akha Akha Karen Hmong (Meo) Lao Shan Siamese Tai Yuan Lue Tai Dam Lue Karen Lamet Karen Lahu Akha	
Lisu Lahu Akha Lao² Chinese-Cantonese or Hokkienese KATUIC Lao Chamic languages KHMUIC Lao Meo-Yao Lue Tai Dam Tai Yuan Lolo Lahu Akha Lisu Lahu Akha Lahu Akha Lahu Akha Lahu Akha Lisu Lahu Akha Lahu Akha Lahu Akha Lawa Karen Hmong (Meo) Lao Shan Siamese Tai Yuan Lue Tai Dam Lue Karen Lahu Akha	
Lahu Lahu Akha Lao² Chinese-Cantonese or Hokkienese KATUIC Lao Chamic languages KHMUIC Lao Meo-Yao Lue Tai Dam Tai Yuan Lolo Lahu Akha	
Akha Lao² Chinese-Cantonese or Hokkienese KATUIC Lao Chamic languages KATUIC Lao Chamic languages KHMUIC Lao Meo-Yao Lue Tai Dam Lue Tai Yuan Lolo Lahu Akha Akha Karen Karen Hmong (Meo) Lao Shan Siamese Tai Yuan Lamet Meo-Yao Tai Yuan Lue Karen Lahu Akha Akha	
Lao² Chinese-Cantonese or Hokkienese KATUIC Lao Chamic languages KHMUIC Lao Meo-Yao Lue Tai Dam Tai Yuan Lolo Lahu Akha Karen Sanskrit/Pāli² Karen Sanskrit/Pāli² Lawa Karen Hmong (Meo) Lao Shan Siamese Tai Yuan Lamet Meo-Yao Tai Yuan Lue Karen Akha	
Lao² Chinese-Cantonese or Hokkienese KATUIC Lao Chamic languages KHMUIC Lao Meo-Yao Lue Tai Dam Tai Yuan Lolo Lahu Akha Karen Sanskrit/Pāli² Karen Sanskrit/Pāli² Lawa Karen Hmong (Meo) Lao Shan Siamese Tai Yuan Lue Tai Dam Lue Karen Lahu Akha	
Or Hokkienese Lawa Karen Hmong (Meo) Chamic languages KHMUIC Lao Meo-Yao Lue Tai Dam Tai Yuan Lolo Lahu Akha Lawa Karen Hmong (Meo) Lao Shan Siamese Tai Yuan Lamet Lamet Meo-Yao Tai Yuan Lue Karen Lahu Akha	
or Hokkienese Lawa Karen Hmong (Meo) Chamic languages KHMUIC Lao Meo-Yao Lue Tai Dam Tai Yuan Lolo Lahu Akha Lawa Karen Hmong (Meo) Lao Shan Siamese Tai Yuan Lamet Lamet Karen Lahu Akha	
KATUIC Lao Chamic languages KHMUIC Lao Meo-Yao Lue Tai Dam Tai Yuan Lolo Lahu Akha Lawa Karen Hmong (Meo) Lao Shan Siamese Tai Yuan Lamet Meo-Yao Tai Yuan Lue Karen Akha	
Chamic languages KHMUIC Lao Meo-Yao Tai Yuan Lue Tai Dam Tai Yuan Lolo Lahu Akha Chamic languages Lao Shan Siamese Tai Yuan Lamet Lamet Meo-Yao Tai Yuan Lue Lahu Akha	
Chamic languages KHMUIC Lao Meo-Yao Tai Yuan Lue Tai Dam Tai Yuan Lolo Lahu Akha Chamic languages Lao Shan Siamese Tai Yuan Lamet Lamet Meo-Yao Tai Yuan Lue Karen Lahu Akha	•
Shan Siamese Meo-Yao Lue Tai Dam Lolo Lolo Lahu Akha Siamese Tai Yuan Lamet Meo-Yao Tai Yuan Lue Karen Akha	
KHMUIC Lao Siamese Meo-Yao Tai Yuan Lue Tai Dam Lamet Meo-Yao Tai Yuan Lolo Lahu Akha Karen Akha	
Meo-Yao Lue Tai Dam Lamet Meo-Yao Tai Yuan Lamet Meo-Yao Tai Yuan Lalo Lue Lahu Akha Akha Akha	
Lue Tai Dam Lamet Meo-Yao Tai Yuan Lolo Lahu Akha Akha Lahu Akha	
Tai Dam Tai Yuan Lolo Lahu Akha Lamet Meo-Yao Tai Yuan Lue Karen Lahu Akha	
Tai Yuan Lolo Lahu Akha Akha	
Lolo Lahu Karen Akha Lahu Akha	
Lahu Karen Akha Lahu Akha	
Akha Lahu Akha	
Akha	
Tri Vienni	
MONIC Siamese KHASI Tai: Khamti, A	Ahom²
Tai Yuan Garo	
Karen Assamese	
Lisu Bengali	
Lahu Hindi	
Hmong (Meo)	
A West Indonesian	
Austronesian	
language ²	
Sanskrit/Pāli ²	
(Table continued or	

		VIET-MườNG	Chinese-Cantonese and Hokkienese dialects White Tai Thô Tai Dam Siamese Nung Meo-Yao Chamic languages
Aslian			
JAHAIC	Siamese Malay		
SENOIC	Siamese Malay		
SEMELIAC	Siamese Malay		4
Nicobarese NORTH CFNTRAL	Andamanese		

¹ Excludes European languages.

A further source for the borrowing of classifiers that was omitted from the preceding list is other Austroasiatic languages. For example, Lamet has been influenced by Khmu, Pear by Khmer and Bahnaric languages by Vietnamese, Khmer and Katuic. When enough phonological material is available to identify such forms, they will be discussed.

There are some major drawbacks to the approach described above. One problem is that modern day language contacts may not represent historical ones. Many groups in South-East Asia have been very mobile. In addition, words could have been introduced by individuals who were on their own; a whole group is not necessary to introduce new forms. A further drawback to the approach is that in many cases, the words borrowed to fill classifier slots are not classifier forms in the donor languages. For example, in Khmer, several of the classifiers are either from Sanskrit/Pāli or from an Austronesian language. Sanskrit/Pāli do not have classifiers and the forms Khmer borrowed are from nominal and adjectival classes. Other examples of this type of borrowing were surely missed by this approach.

² Historical contact now severed or in the case of Sanskrit/Pali, maintained in restricted contexts.

^{*} Except Lawa.

The method of searching for borrowed forms that is employed here will only result in the finding of fairly recent loans whose forms have not been significantly altered by any sound changes. In some cases, even the direction of borrowing is uncertain since the phonological history of the neighbouring non-Austroasiatic languages with respect to borrowings into Mon-Khmer, Nicobarese, and Aslian, is not a well researched topic. Many of the findings presented here must remain only suggestive until further reconstruction on Austroasiatic and further work on the phonology of loans into Austroasiatic is completed.

NOTES

1. These languages until recently were referred to as the Malaccan languages in many sources, cf. Pinnow (1959). However, 'this term actually refers only to one of the smallest constituent states of the Malaysian Federation; a state furthermore in which only one of the languages (Mah Meri) covered by the term is spoken' (Benjamin 1976:43). The term Aslian is one suggested by Diffloth to apply to all the Austroasiatic languages located in the Malay Peninsula and the related languages in South Thailand.

Chapter 3

THE CLASSIFICATION OF ANIMATES

3.0 INTRODUCTION

Animates are treated in several different ways in numeral classification systems.¹ The following list represents possible styles of classifying animates:

Style 1: To classify all animates: humans, warm and cold blooded creatures, in one category.

Style 2: To classify humans in one category and to classify other living creatures in another.

Style 3: To classify animates with non-living objects.

Style 4: Not to classify animates at all.

There are some possible variations on these styles. It is not uncommon for Style 2 to be elaborated, especially in the case of humans, so that in a system one may get a couple of special classes only for humans. These separate classes usually group people according to social and spiritual considerations. (See Becker (1975) and Burling (1965b) for discussions of other Asian languages whose classifier systems are elaborated for humans.) The third style, classifying animates and inanimates together, usually happens with non-human animates. Therefore, one often can find a language with a system that is a combination of Style 2 and Style 3: 2 for humans and 3 for warm and cold blooded creatures. The fourth style, not classifying animates at all, only occurs in a few Mon-Khmer languages for non-human animates, and typically in these languages, there are always one or two species that are classified. Together, the Mon-Khmer, Aslian, and Nicobarese languages have a diversity of styles, mostly drawn from categories 1, 2 and 3.

3.1 Mon-Khmer subfamily

3.1.1 Khasi

Khasi, which has only two classifiers, has a combination of Styles 2 and 3. Humans are treated as a separate class while all other living things are counted with the same classifier as inanimate objects. This system essentially divides countables into humans and non-humans. See Table 3.1. An interesting problem for speakers is deciding the proper place for ghosts, spirits and angels. Rabel (1961:54) says that native speakers disagreed about which of the two categories they belonged in. Some speakers considered them 'human', some considered them 'non-human'.

Wār is a dialect of Khasi located to the south of the Standard Khasi dialect that Rabel describes. While the Wār Khasi form $b\varepsilon$ for classifying humans is different from the Standard Khasi form ngut, the systems in the two dialects are the same. This can be seen in Table 3.1.

 Human classifier
 spirit, angel ghost, devil
 General Classifier non-human animate + inanimte

 Standard Khasi¹ (Rabel 1961 and Blah 1970, 1971)
 ngut ----> <----- tllii</td>

 Wār (Amwi)² (Weidert 1975 and Grierson 1904)
 bε-rbε -----> <----- khlon</td>

Table 3.1: Classifiers in Khasi

3.1.2 Palaungic

3.1.2.1 Styles of animate classification

The Palaungic languages are interesting for their diversity in styles of classification. All languages except one have either the second system described above or a combination of Style 2 and Style 3 which was also found in Khasi. The second style, where humans are treated as one category and non-human animates as another, is found in some of the languages in Waic: La and all the Lawa dialects – Bo Luang, Umphai, and Mae Sariang. In addition, three of the four Angku languages, Amok, U,² and Monglwe, and the one example of Rumai, Gold Palaung,³ also use this style. The other languages in Palaungic use a combination of Style 2 and Style 3: humans separate and non-human animates with non-living objects. The languages with this system all belong to the Waic group and include Son and Wa Kengtung of the Wa-Lawa-La group and also of this group, Drage's Wa and all the forms of Wa proper: Bible Wa, Davies' Wa, Antisdel's Wa, and Kawa. The only language which does not fit into these two styles is Angku. It handles animates according to Style 1, that is as a single group for humans and non-humans. Tai loi of the Samtau division in Waic should also be mentioned here as a possible exception to the manners of classification shared by the other Palaungic languages. In the single example in Scott (1900) for

¹ Forms as cited in Rabel 1961.

² Forms as cited in Weidert 1975.

'three men', only the noun and the number slot are filled. However, this does not mean that humans are unclassified. It is always possible that the classifier for 'men' is a repeater and it was omitted in this context. If this were true, then Tai loi would not be an exception but would be like La and the other Palaungic languages which use the second style.

3.1.2.2 Source of classifiers for humans

The classifiers in Palaungic for ordinary people, exept for the one in Angku, are morphemes found throughout Waic and Mon-Khmer and are all probably native.⁴ However, while the Palaungic languages all use native Mon-Khmer forms, they do not all employ the identical classifier. (See Table 3.2.) The 15 languages and dialects employ five different forms. Of the three Angku languages which are located to the east of the Palaungic area: Amok and U use a different classifier from Monglwe. The northern Palaungic languages except La, all use the form *ki?. La uses a unique form, p'i. The southern Lawa group also share a single classifier different from those found in the other languages.

Table 3.2: Palaungic classifiers for deities and humans

	Images of Buddha	Monk	King	Man (person)
I. Angku Angku (Scot 1900) Amok (Scott 1900) U (Svantesson 1983) Monglwe (Scott 1900)	-			to i Y kwīn
II. Rumai Gold Palaung (Milne 1921)	sū,* chū*		p'ā	ku**
III. Waic Samtau Tai loi (Scott 1900)				ø
Wa-Lawa-La La (Davies 1909) En (Scott 1900) Son (Scott 1900) Wa -Kengtung				ø(pi) kaü gao
(Scott 1900)				gao

Wa-Lawa Drage's Wa (Drage 1907) Wa proper	hsu (pagoda)	pa (priest)	kaü
Davies' Wa			ka
(Davies 1909) Antisdel's Wa			Ka
(Antisdel 1911)			kau
Kawa (Diffloth (1977)			Kuu
Lawa			
Bo Luang		ton	pui
(Mitani 1966, 1972)	1		
Umphai (Mitani 1972)		ton	phui
Mae Sariang		ton	pui
(Mitani 1972)			

^{*} halo, bank of river, pagoda

All the forms used for classifying ordinary people are drawn from words referring to people or kin. The Amok and U form, i, means 'man, human being' and throughout the northern group of Mon-Khmer languages, is used meaning 'human' or 'woman'. In the eastern group, Khmer and Katuic, it is a grammatical marker. It is not in Monic or Bahnaric. In the Aslian subfamily it is also used as a definite article. The Monglwe form $kw\bar{\imath}n$ means 'father' throughout Waic and it means 'husband/male animal' in Nicobarese. The third form, which is found throughout Waic and in Gold Palaung is *ki? meaning 'man, body' in Proto-Waic and 'person, body, self' in Mon. The La form p'i means 'person' in Proto-Waic and is reconstructed as *bi? (Diffloth 1977). The final Mon-Khmer form in Palaungic is the form shared by the Lawa dialects. It is pui and also means 'person' in Proto-Waic: *bvy (Diffloth 1977). Several of the forms are used as repeaters and can classify themselves.⁵

In contrast to the classifiers for ordinary people, all those for deities, members of religious orders and royalty are borrowed from other languages. One example of this phenomenon can be found in Gold Palaung (Rumai) and Drage's Wa (Waic). They both share the same classifiers for these categories. Whether these forms are wider spread throughout the Palaungic branch is not clear from the data consulted here. The small size of the classifier samples in many other languages does not mean that the forms do not occur only that the data collectosr probably did not take the time to get more instances of human classifiers. The forms found in Gold Palaung and Drage's Wa are given in the table below. (Table 3.3)

^{**} also doll

Table 3.3: Animate classifiers and their sources in Gold Palaung and Drage's Wa

Drage's Wa	Gold Palaung		Gold Palaung Shan		Burmese		
hsu – pagoda	SŪ	image of Buddha pagoda	shu²	deities pagoda	hsu	Buddha, relics, images, law, nets, gardens, stairs	
	chū	halo riverbank	ton1	deities priest	pa:	deities, saints, monks, royalty	
pa – priest	p'ā	king image of king	paa ⁴	ecclesiatics rulers religious precepts	u:	people of status, teachers, scholars	
kaü – people	ku	human doll	phu ³	human male	yauk	ordinary people	
	tδ	cattle lower animals rainbow kite	ko ⁵	person animals	kaung	animals, ghosts, dead bodies children	
mo – round things, animals	ką-mā	female beast tool, instrument (sword, chisel, comb)					

The $s\bar{u}/ch\bar{u}$ and $p'\bar{a}$ forms in Gold Palaung and Drage's Wa come from the same source: Shan and/or Burmese or some other Tibeto-Burmese language. It may be that the forms in Gold Palaung and Drage's Wa are borrowed from Shan which originally borrowed them from Burmese or that they are borrowed directly from Burmese or some Tibeto-Burman language. LeBar, Hickey and Musgrave (1964:125-126) indicate that if they were borrowed from Burmese, it would have happened sometime after 1780 and any time up to the present. LeBar, Hickey, and Musgrave report that in the 1960s monks of the central area, where Gold Palaung is spoken, went to Mandalay and Rangoon for training. There they would have certainly been influenced by Burmese language and culture. On the other hand, if the forms were borrowed from Shan which borrowed them from Burmese, it could have happened two or three centuries earlier. It is possible that the different forms have different sources. This might explain the existence of $s\bar{u}/ch\bar{u}$ in Gold Palaung. Perhaps the two forms were borrowed at different times from different sources, thus explaining two similar forms with almost identical functions. However, it should be noted here that Shorto (1957) claims that the $s\bar{u}/ch\bar{u}$ forms are borrowed from Shan which borrowed them from Burmese.

While Gold Palaung and Drage's Wa share forms, this does not mean that these forms in the two languages classify exactly the same set of items. It is possible for the two languages to have modified the systems of classification they borrowed in slightly different fashions. In Drage's Wa, there are only a couple of examples of items cited with the morphemes in question. With hsu Drage lists only pagodas, but not any of the examples of deities or images of deities found with this form in Gold Palaung, Shan and Burmese. For pa, Drage lists only 'priest', the same usage found in Shan for the form paa.⁴ On the other hand, Milne (1921) does not give this usage for the equivalent Gold Palaung form. She records only 'king' for $p\bar{a}$ which is also a usage found in Shan. Further examples for Drage's Wa and Gold Palaung might make these differences non-existent or might reveal even more.

The overarching organising semantic principle in these two Palaungic systems appears to be the same semantic dimension that Becker (1975) proposed for Burmese: 'distance from Buddha'. The existence of this set of classifiers in Gold Palaung and Drage's Wa is a linguistic manifestation of a changing cultural situation. As described in LeBar, Hickey and Musgrave (1964:125-126), the Gold Palaung have adopted Buddhism, as well as other customs from the Shan and Burmese. Buddhism, widespread in South-East Asia, has replaced a native animistic religion which some other Mon-Khmer and Aslian cultures have retained.

The tripart division of the world that Milne's Gold Palaung speaker presented is very orderly and transparent. The native Mon-Khmer form *ki? for ordinary people forms a coherent system with the borrowed $s\bar{u}$ and $p'\bar{a}$. Each classifier serves to distinguish one type of being and the images and artifacts associated with this being. The system also extends to include non-human animates just as in Shan and Burmese. In Milne's data, images of Buddha and pagoda are both classified by $s\bar{u}$ and $ch\bar{u}$. Pagodas are used for religious purposes and logically fit in a class with images of Buddha. In addition, $ch\bar{u}$ classifies halos and river banks. Just as in Western religions, halos are associated with deities in Asian cutlures. However, the reason for including river banks in this cateogry is not obvious to this author. Moreover, it does not parallel either of the systems in Shan and Burmese. In addition, Gold Palaung has a second classifier for river banks: $kl\bar{q}ng$ which also is borrowed from Burmese according to Shafer (1952).

In keeping with the 'image' concept, $p'\bar{a}$ classifies kings and their images and ku classifies people and their images, dolls. In Gold Palaung, the $t\bar{o}$ category can be characterised as the furthest point from Buddha according to Becker's scheme (1975), since an animate meaning appears central to this category even though inanimate items are also contained in it. The inclusion of inanimate items, i.e. rainbows and kites, is related to the 'image' dimension just as they are in the deity and human categories. There are three ways in which kites are like animates in their appearance. One is in their colour and shape, and the second is in the fact that they fly like birds which are also members of the $t\bar{o}$ category. In addition, it is possible for kites to have pictures of animals on them. In Danau, another Palaungic language (Luce 1965:108:#99), the word for kite and the word for bird of prey are homophonous or identical $(k\hat{a}yang^4kyang^2)$. The classification of rainbows by $t\bar{o}$ in Gold Palaung may be due to some Buddhist or animist image of the world. For instance rainbows are associated with dragons in Cambodian. Perhaps speakers of Gold Palaung have similar associations.

The inclusion of 'image' in the $t\bar{o}$ category seems to be partly an innovation made by the Gold Palaungic system since the animal-like 'images' associated with tua/to in the Tai languages are different from those in Gold Palaung. In many Tai languages, $tua/t\bar{o}$ is used to classify items that have arms and legs, e.g. shirts, pants, chairs and tables. The term tua in Tai means 'body'. Arms and legs are of course body parts. In addition, clothing and furniture are all functional human artifacts. The classification of such artifacts by $tua/t\bar{o}$ does not seem to have been borrowed by the Palaungic languages. Moreover these same concepts of body parts cannot be easily applied to the inclusion of kites and rainbows in the to class in Palaungic. The relative clarity of the principle involved in the Palaungic animate classifier system, i.e. 'image', may be due to the recentness of the system's borrowing or to the desire of a particular informant for orderliness.

As can be seen in Table 3.4, in Gold Palaung there is also the classifier $ka-m\bar{a}$ for animals. This is a native form and does not fit in with the 'image' system described above for the other five classifiers. For this reason, it is discussed in the section below on non-human animates in Palaungic.

Besides the modification in the items classified by $t\bar{o}$, Drage's Wa and Gold Palaung have also made other modifications in both the Shan and Burmese systems. Notably, both Drage's Wa and Gold Palaung have only three classifiers for human animates, whereas in Shan there are five and in Burmese four. Neither ton^1 for deities and priests nor phu^3 for human males which are found in Shan occurs in these two Palaungic languages. From Burmese, the concept represented by u: for teachers, scholars, etc. is omitted. However, one of these forms, ton^1 in Shan, is found elsewhere in Palaungic languages.

Lawa is the only other language in Palaungic where there are data on classifiers for anything other than ordinary humans. In Lawa, one finds the *ton* classifier, a Tai form as we have seen. Lawa may have borrowed this form from Shan or it may have gotten it from any other neighbouring Tai language, since this classifier is common throughout the languages of the Tai family, including Siamese.

The description of the classifier for animates in the Angku language has been left for last because it is the one language in the Palaungic branch that does not have a separate class for humans. It is the only language in the branch to follow Style 1 mentioned above. In Angku both humans and animals are counted by the form to.

While the to form resembles forms for animals found in Gold Palaung and in other Palaungic languages, this classifier could have another source besides Tai. According to David Strecker it could possibly be from Chinese or Miao-Yao since he reports the following problems in identifying the origin of this form.

Manomaivibool (1976:180) suggests that tua 'classifier for animals' [in Thai] is a word that 'might have been borrowed from Chinese in Han times'. The putative Chinese etymon is * $d entrm{a} u$ (with the p'ing tone).

This is similar to forms given as 'animal (classifier)' [in Miao-Yao] in Purnell (1970:Appendix:7). Purnell lists two cognate sets which he glosses 'animal (clf.)' The first set is: Cheng Feng $- tett^4$ and Hua Yuan $- te^3$. These are both 'Miao'

dialects in Kueichou and Hunan...Purnell reconstructs the form in Proto-Miao as *d, with tone B, vowel uncertain.

Purnell's other cognate set consists of forms from three Iu Mien dialects and one Kim Mun dialect, that is from the two languages which constitute 'Yao'...Purnell's Proto-Yao is tau^2 . Apparently the tone of the Proto-Yao form does not correspond to the tone of the Proto-Miao form so Purnell has to set up two separate cognate sets. Moreover, it would appear that the Hmong [a Miao language] classifier tus (pronounced [tu:] with low level tone) 'classifier for cylindrical objects including people and other animals' is not cognate with either Cheng Feng teu^4 etc., or with Proto-Yao * tau^2 . For one thing the tones do not match up.

I have no idea whether or not there's any relationship among all these Chinese, Tai and Miao-Yao forms. I suppose it means that if you get a Mon-Khmer classifier for animals that looks something like to or tu or tau that it could have come from any one of a number of sources (p.c. 1980).

To make the picture even more complex, Austronesian also has forms like this meaning 'person'. Benedict (1975:335-336) cites **(t)awu in Indonesian, **tau in Proto-Oceanic and a similar form in Futuna and Tonga, and *taw in Formosan. He claims that this form is related to the Proto-Yao classifier mentioned above. However, there are two reasons why these Austronesian forms probably are not the direct source for the to/tua classifiers in Mon-Khmer. First, Benedict does not cite the form as occurring in Chamic which would be the most likely Austronesian source for such a form in the Mon-Khmer languages and in particular in the Bahnaric subbranch where there is also a to classifier. Secondly, Benedict does not cite the form in Austronesian as a classifier. This second argument is a weak one, however, since we will see in several cases that Mon-Khmer languages frequently use as classifiers, non-classifier morphemes from other languages.

In the case of Angku (Palaungic), the solution to the problem of the source of the classifier differs depending on what linguistic aspect of the item one considers. The classifier looks like the other to forms in Palaungic, which are probably from Tai. As Diffloth (p.c. 1982) points out, the question of timing makes Shan/Tai seem a more likely source from Palaungic forms. However, the items which the Angku classifier classifies are similar to those in Hmong or Chinese.

3.1.2.3 Styles and sources for non-humans animate classification

As described above, the Palaungic languages, except for Angku, classify non-human animates in separate classes according to Style 2 or with inanimate objects according to Style 3 (see Table 3.4). In all but one case, Lamet, we shall see that those languages which separate non-human animates into a specific category (i.e. Style 2) have a borrowed classifier to. Languages with this form include Gold and Silver Palaung, Lamet, Tai loi, La, Lawa, and the Angku languages Amok and Monglwe.

Table 3.4: Palaungic classifiers for non-human animates

	non	-human animate	S			
	bullock, buffalo	horse	other creatures	things	classifier for round things	
I. Lamet (Izikowitz 1951)	kwn		tō (chicken)			
II. Angku Angku (Scott 1900) Amok (Scott 1900) Monglwe (Scott 1900)		to to to				
III. Rumai Gold Palaung (Milne 1921)	<	tō	ka-mā (female — beast)	> (rainbow paper kite) > (tool, instrument)		
IV. Waic Samtau Tai loi (Scott 1900) Wa-Lawa-Wa La (Davies 1909) En (Scott 1900) Son (Scott 1900) Wa-Kengtung (Scott 1900) Wa-Lawa Drage's Wa (Drage 1907)	mo <	to t'ong ø mu bo			-> <i>mo</i> (hill, round thing)	
Wa proper Wa dialect (so-called Vii (Scott 1900) Davies' Wa (Davies 1909) Antisdel's Wa (Antisdel 1911)	mo <	типд			moo(general cl., round	
Bible Wa (Young, 1934, 1935) Kawa (Diffloth 1977)			mu (fish)		thing, fruit, vegetable, door) mu (cl. for round things)	
Lawa Bo Luang (Mitani 1966, 1972) Umphai (Mitani 1972)	<		— tua (chicken) — tua (chicken)		?bəu (round thing, melon orange, egg) ?meu round thing, melon, orange, egg)	

The claim that there are two separate styles in Palaungic for classifying warm- and cold-blooded creatures needs clarification because technically in all cases the classes in question contain both animates and inanimates. However, there is a difference in what is the central organising principle, and it is on these grounds that it can be claimed that there are two different styles. As mentioned above, in Tai *tua* can be used to classify inanimate objects such as chairs and clothes. If the forms are borrowed from Tai, or Miao-Yao or Chinese, which also classify inanimates with animates, one might argue that one would expect to find inanimate objects in the classes in Palaungic also. However, no examples like this were found in most Palaungic languages. For many languages there is no extensive list of objects classified by *to* so more examples might have revealed the Tai or Miao pattern. However, those languages with more examples all listed only non-human animates. Even if examples are found to invalidate this distinction, one would still have to demonstrate that animacy was not the major semantic organising principle. With Gold Palaung, the *tō* category does include some inanimate objects. However, as described above, the organising dimension in Gold Palaung is non-human animates and their image. The inanimate objects are included because of their relationship to or identification with non-human animates.

This identification principle appears very different from the third style of classification of nonhuman animates in other Palaungic languages. In most of the Waic languages, including Son, Wa Kengtung, Drage's Wa and all the Wa proper forms, it appears that non-human animates are classified with the classifier for round objects: *?()myl/r: Proto-Waic (Diffloth 1977). The term 'appear' is used here because not all the languages with this form have examples of its usage with animals. In Son, Wa Kengtung, Davies' Wa and Bible Wa, the morpheme *?()myl/r classifies only animals. However, in Drage's Wa and the Wa proper dialect, Antisdel's Wa, examples are found with both round objects and non-human animates. In the Wa proper dialect Kawa, it is found with round things alone. This is true of Lawa also where it appears that to has taken over the classification of animals and *?() $m_1 l/r$ has been left exclusively for round objects. The examples of *?()mrl/r in Kawa and Lawa used only with round objects would seem to indicate that non-human animacy is not the central organising principle of this classifier, unlike with to. Of course, only further data could conclusively decide this question. The way the data were elicited may have resulted in only one usage. If only a round object was given to be classified then the use with animates would have been missed and vice versa. If, however, the classifier was given and the speakers were asked about its usage, it is to be assumed that the central usage would be given first. Since the meaning of this classifier is 'round' this also gives support to the argument that this style of classification of non-human animates in Palaungic is one where the animates are included in a category of inanimacy based on shape.

The *?()mrl/r form is found throughout Waic, so it may be a native Mon-Khmer form. In addition, none of the neighbouring non-Mon-Khmer languages have a form identical to the Waic form. However, the principle of classifying animals with round objects is not unique to Palaungic. For example, in Chinese, a word meaning 'stalk', 'trunk' (mer²) classifies small round objects and animals. As in so many cases discussed here, there are not enough data to argue convincingly that this semantic dimension was borrowed from Chinese. It could be that this similarity is based on spontaneous parallel developments. As we shall see in the discussion of Bahnaric, a similar style is found in that subbranch but using a different morpheme.

It was mentioned at the beginning of this chapter that it is not unusual for a language to develop an elaborated set of classifiers for humans. But occasionally languages also do this for animals. Lamet is interesting in this way. The Lamet system singles buffaloes out for special treatment. This handling of buffaloes is not surprising considering the religious role of buffaloes in many Mon-Khmer societies. (See Izikowitz 1951 and Condominas 1977). The respect given to buffaloes is obvious from the meaning of the classifier, kun 'elder or honourable person'. Buffaloes are associated in Lamet culture with sacrifices to ancestors. This meaning contrasts with the second classifier in Lamet for animals, the commonly found $t\bar{o}$ which is listed in Lamet with chickens (and probably is used with other animals) but means only 'person' or 'body' as a separate noun.

The only other language in this subbranch for which there are data showing an elaboration of non-human animates is Gold Palaung. However, the Gold Palaung system is not identical to the Lamet one. It does have the same $t\bar{o}$ classifier for animals in general, but the animals treated differently here are female cows. In addition, female cows are not classified separately as the buffaloes appear to be in Lamet, but are included along with inanimate objects. As a matter of fact, there is disagreement as to whether the classifier in question, $ka-m\bar{a}$ classifies female cows at all. Milne (1921) cites this usage; however, Shorto (1957) also gives it as a classifier, but as one for tools only, not for animals.

Both Milne (1921) and Shorto (1957) also give the form in question, $ka-m\bar{a}$, as part of a system of gender marking in Gold Palaung that occurs in a post nominal position. Shorto cites it as meaning 'female [animal] and found in a compound like rənggor kəma meaning 'thumb' from 'mother or female finger'. Diffloth (p.c. 1982) claims the -mā part means 'seed'; the ka-part could have various meanings, but is associated with female, so that together the form means 'mother seed'. Obviously a female animal is a seed carrier. Milne (1921:14) says of the form: 'In words denoting ogresses and all the lower animals and tools, $ka-m\bar{a}$ is added to the noun to express the female gender'. The table below gives some additional examples of other forms that mark gender in Palaung.

Table 3.5: Gender markers in Gold Palaung

Male		Female
ī-mē	human being	ī-pā̞n
-a	proper names	-i
a-t [?] ūk	animals	kạ-mā
	ogres	
a-kǭng	birds	
	tools	
tā- 'grandfather'	spirits	yā- 'grandmother'

The forms in Table 3.5 are only part of the system since other words occur in Milne's text which also appear to have the function of marking gender. The forms included in this list do not appear to be obligatory, particularly once the gender has been identified at its first mention in the text (Milne 1921:15).

Since tools as well as female beasts are marked with $ka-m\bar{a}$ this seems to indicate the existence of grammatical gender in Gold Palaung. Milne states (1921:13), 'Inanimate objects have, as a rule, no gender, but tools and instruments of all kinds, such as $b\bar{o}t$ (a knife), $ra-j\bar{a}r$ (a comb), and $r\bar{a}-t^2a\bar{\imath}$ (a plough) are feminine'. Gender marking systems occur in other languages in the Mon-Khmer branch. In Khasi, it occurs obligatorily (see Rabel-Heyman 1977). In Khasi ka-, which is related to the $ka-m\bar{a}$ in Palaung is a female gender marker also. Khmu also has some of these forms in use. $T\hat{a}$ - 'grandfather' is given by Delcros (1966) as a kind of article before names of boys and i- as an article for names of girls and daughters in Khmu. These forms in Khmu are similar to those in Palaung, but the $t\hat{a}$ form occurs with a different domain. Other languages in the Katuic group also have such markers.

Unfortunately in Milne's (1921) texts and example sentences, there were no instances of $ka-m\bar{a}$ in number phrases. Therefore, it was not possible to discover how the two functions of the form, i.e. as gender marker and as numeral classifier (if Milne is correct in her assertion that $ka-m\bar{a}$ is also a classifier), operate when it is possible for both of them to occur. It may be that one gets both of them in a phrase, for example:

Noun +
$$ka$$
- $m\bar{a}$ + number + ka - $m\bar{a}$ gender classifier

It is also possible that $ka-m\bar{a}$ only occurs in the classifier or only in the gender slot in these cases, thus avoiding repetition of the form.

Discerning the semantic basis for the $ka-m\bar{a}$ classifier except for its gender distinction is difficult. One can ask whether the notion of 'distance from Buddha' or 'relative sanctity' (Burling 1965b) is appropriate for characterising the $ka-m\bar{a}$ classifier as it appears to be with $t\bar{o}$. Its function as a gender marker probably existed before the Palaung's conversion to Buddhism; however, that does not mean that speakers do not somehow justify the $ka-m\bar{a}$ form with the same explanation that they use for other animate classifiers, but there is no available data to decide this. In the case of the inanimate objects also counted by $ka-m\bar{a}$ the reasons for their inclusion in this class could only be discerned by increased knowledge about the gender marking systems in Mon-Khmer. However, perhaps there is an association between some tools and planting, which would relate to the seed meaning of $m\bar{a}$. If tools do have this association, it might also be of importance that in the closely related Lamet culture, in some villages, women must do the initial planting of rice according to religious custom (see Izikowitz 1951).

3.1.3 Mon

3.1.3.1 Styles and sources for human classification

As with the Palaungic and Khasi languages, Mon classifies humans in a class separate from other animates. And as with Gold Palaung, Drage's Wa and Lawa, some of the sources for Mon give an elaborated system of classifiers for humans. However, the elaboration in Mon shows itself to be different from that in Palaungic (see Table 3.6).

There is one classifier for humans listed in all Mon sources which can be employed for all categories of people. This form is $h \ni kao$? and it can be used with people, monks, and deities which are the whole range of items that were classified separately in Gold Palaung and Drage's Wa. However, the classifiers for humans found in other Palaungic languages can probably be used in the same way as this Mon form. In Mon, this classifier, $h \ni kao$?, is also used as a polite term of address (Shorto 1962:17).

	deity	monk	king/ kingdom	man/ person	governor	master/ owner
Shorto 1962 <-				həkao?¹		
Halliday 1922			kadäng petain	cékau tala²		>
Haswell 1901	<			jaku tala²	***************************************	>
Low 1837				ø		

Table 3.6: Mon classifiers for deities and humans

Classifier for things loaded and ridden including animals

The classifier hədak²	
Shorto 1962 Halliday 1922 Haswell 1901	for vehicles; riding animals: e.g. elephants; and other things loaded and ridden

² Form as cited in Shorto 1962.

¹ Forms cited as found in texts.

² toela [tīla] in Shorto 1962.

The hakao? classifier is cognate with the *ki? classifier in the Palaungic branch meaning 'body, man'. The appearance of the same form in the two branches may not be a case of shared inheritance of classifiers as one might first surmise. It may simply be a case where the same form for a human classifier was independently chosen in two languages.

Both Halliday (1922) and Haswell (1901) list another classifier for humans: *toela?* [tīla] to count men, masters, owners and governors. Shorto (1971) gives this word as a learned form, which may explain its absence in his Modern Spoken Mon dictionary as a classifier. This form is also a noun meaning 'lord, master, owner'. This division in Mon is different from any of those found in the Palaungic languages. This classifier is based on the notion of economic as well as political power. However, below we will see that Lao has a classifier like this. Whether the Mon concept is borrowed or merely a coincidence is unprovable, although the latter is most likely since the two forms are phonologically unrelated.

Halliday (1922) lists a third classifier which neither of the other sources for Mon gives. It is kadäng petain for kings and kingdoms. Again, this classifier is also a literary form. This distinction among mortal beings and kings is similar to the one in Gold Palaung. However, this really does not mean much as far as claiming that these are inherited styles of classification. First, the two forms are phonologically unrelated. Secondly, special forms for distinguishing monarchs are common fare in languages spoken in cultures with royalty. It is found in Burmese and Tai, for example, which are unrelated.

Forms similar to the above two classifiers *toela*?[tīla] and *kadāng petain* were not located either in other Mon-Khmer languages or in any neighbouring languages.

3.1.3.2 Styles and sources for non-human animate classification

In Mon, as in Khasi and as in some of the Palaungic languages, there is no separate classifier for animals. In fact, it appears that animals are generally unclassified except as pairs or herds. This means that in Mon, one has a variation on Style 4, with non-human animates being the unclassified group. However, a few animals, notably elephants, are classified along with several other objects as things which are loaded or ridden. This form, hədak, is a noun meaning 'freight' or 'load'. This treatment of animals is very different from any of the systems described above. The bases for counting non-human animates with inanimates in the other two Mon-Khmer branches already discussed, Khasi and Palaungic, are very different. In Khasi, the category is based on non-humanness, in Palaungic it has to do with the concept of roundness or three-dimensionality. Here in Mon, the uniting feature is function. However, this principle of classification is not unique to Mon in the subfamily. In Bahnar, one of the classifiers for elephants comes from a word referring to the baskets that elephants carry. However, the form in Bahnar is not the same as that used in Mon.

Interestingly enough, the semantic basis of this category in Mon, 'to be ridden or loaded', is the same as the basis of a classifier found in Burmese. The two forms classify the same objects. The Burmese form is $s\hat{\imath}$, which Burling (1965b:252) cites as classifying 'things ridden: elephants, horses, carts, automobiles, airplanes'. The Mon and Burmese lexical items themselves are not

related to each other, but it is certainly possible that one of the languages borrowed the semantic dimension from the other, but not the morpheme. A similar type of category occurs in Karen, where there is the classifier $d\hat{y}$ for four-legged creatures and large baskets carried on the back. While the data from Mon, Burmese and even Karen suggest borrowing – probably from Burmese to Mon – the similarities in Bahnar and Karen, two languages which are not in contact with each other, suggest separate spontaneous development based on parallel experiences in life style.

3.1.4 Khmuic

3.1.4.1 Styles of animate classification

Both Mal and Khmu, including the T'eng and Yuan dialects, employ the second style of classifying animates (see Table 3.7). Both languages have specific classifiers for humans and separate classifiers for non-human animates. However, while the distinctions made among animates are the same in these languages, the sources for the classifiers are not.

Table 3.7: Khmuic classifiers for deities and humans

	deity	person	body parts/heart, lungs
Khmu ¹ (Smalley 1961)	х	gon	x
(Delcros 1966 and H. Maspéro 1965) ¹	. 1	gôn	
Khmu Yuan (Lindell, Svantesson, Tayanin (n.d.))		kon'	
Mal (Tin) (Wajanarat 1978 and Filbeck 1976b)		long	-

¹Form as cited in Delcros 1966.

Classifiers for non-human animates

	non-human animates	spirit	rainbow
Khmu (Smalley 1962, and H. Maspéro 1955) ² (Delcros 1966)	too (no classifier listed)	x	_

Khmu Yuan (Lindell, Svantesson, Tayanin		=	
(n.d.))	toσ	x	
Mal (Tin) ³ (Wajanarat 1978 and Filbeck 1976a)	'nang	х	x

²Form as cited in Smalley 1961.

3.1.4.2 Sources of classifiers for animates

The Khmu system of classification for animates is nothing more than a borrowed, but simplified Laotian system (see Table 3.8). Thus, rather than the elaborated three-way system for humans found in Lao, the various Khmu dialects use only one classifier for all people. In addition, in Khmu, this form has been extended to include what are 'essential' body parts. This appears to be a Khmuic innovation.

Table 3.8: Sources of animate classifiers in Khmu

Khmu		Lao			Lao		
gon	people in general kinship terms, pronouns	khon	people in general				
	titles names of divinity	οù	grand people, governors				
	lungs, heart centre	tŏn hŭb	talapoins (original meaning: Buddist monk of Pegu)				
too	animals, birds, fish,						
	insects, spirits	tô	animals				
		sưěk	elephants				

The Mal classifier for humans is *long* and the one for non-human animates in 'nang, which according to Filbeck (1976a), means 'animal', 'body' and is cited as panang in Ratanakul (1975). The origins of these forms are not certain. One suggestion for 'nang is nang 'skin' in Tai. However, this suggestion is tentative. The Mal forms may be native or it may be that the Mal system has borrowed lexical items from different languages. The interesting aspect of Mal is the inclusion of rainbows in the animal class as was found in Gold Palaung.

There are several possible explanations for the differences in the Khmu and Mal systems. At one time they may have shared some forms, with one or the other replacing them with those from

³Form as cited in Wajanarat.

neighbouring non-Mon-Khmer languages. The shared system could either have been based on native or non-native forms. On the other hand, they may have never shared forms. Both just may have borrowed their systems separately. Lindell (p.c. 1979) claims that their Khmu Yuan informants used classifiers exclusively with numbers from the Lao language. This would argue against the first proposal made above, if it meant the original shared forms had to be native forms, since one would not expect Khmu speakers to restrict the usage of classifiers to Lao numbers if they were originally a Mon-Khmer system. However, in Maspéro's and Smalley's T'èng and Khmu data, these same classifiers are found with Mon-Khmer numbers as well as Lao numbers. However, the tendency does seem to maintain the Lao forms with Lao numbers. Maspéro (1955:473) says of the form mak, Tai for fruit or 'areca nuts', '...il sert quelquefois de numérale après les noms de nombre tài après lesquels on semble hésiter à mettre des mots t'èng:

plé blau sam mak' fruit 2 fruit noun # classifier

Interestingly enough, however, the *plé* form is Mon-Khmer, so the restrictions that do exist are on the combination of number and classifier, not classifier and noun. Only further data indicating for certain the origin of Mal forms would help resolve this problem of whether Mal and Khmu originally had different sources for their classifiers.

3.1.5 Khmer

3.1.5.1 Human classification in pre-revolutionary Khmer

The system for the classification of humans in Khmer which is described below is really a relic of a previous social order. According to Shawcross (1979:376), the revolution has affected the terms of address in Khmer. Therefore, it is more than likely that the classifier system has also changed. Shawcross says, 'All forms of address that betoken social or family relationships were abolished and names were simplified. Father, mother, doctor were all replaced by comrade'. However, if this new social order cannot maintain control, some of the old forms may return.

As with all Mon-Khmer languages described above, except Angku, Khmer classifies humans as a separate group. And as in Gold Palaung, Drage's Wa and Mon, pre-revolutionary Khmer had elaborated categories for different types of people. See Table 3.9. The first three dimensions of the pre-revolutionary Khmer system are similar to those found in Gold Palaung and Drage's Wa. However, the forms are quite different, and there are some differences among the items classified by the Khmer system and those classified by the Palaungic systems; i.e. the concept of 'image' and the consequential inclusion of inanimate items is not found in pre-revolutionary Khmer. Basically, the Khmer system distinguishes people with royal and religious status from all others.

Table 3.9: Pre-revolutionary Khmer classifiers for deities and humans and some inanimates*

I	image of Buddha	clergy/monk	royalty		person
Jacob 1965, 1968 Huffman 1970 Headley et al. 1977 Ehrman 1972 G. Maspéro 1915 Gorgoniyev 1966	<	?ong(R) — qang — ?ang — ong — an	preəh-?ong(R) preəh-qang		neðk neðq neak né? nak neðk
II	high persons	dignitaries	superior honours		inferior honours
G. Maspéro 1915 Jacob 1965, 1968	louk ———		— hupan~ pan		hupåk
III **The classifier:	person	picture/ painting	statue image	shape/ form	monk
Jacob 1965, 1968 Gorgoniyev 1966 G. Maspéro 1915 Ehrman 1972	x x (writer)	x	x x	x	
Headley et al. 1977	^	x	x		x

IV **The classifier: tu:ə	person	letter of alphabet	character in play	upright object
Jacob 1965, 1968 Headley et al. 1977	х	x x	x x	х

- * Form cited here as found in texts.
- ** Form here as cited in Jacob 1965, 1968.

As with the Palaungic languages, Becker's (1975) and Burling's (1965b) dimensions of relative sanctity are the most appropriate for characterising the relationship among these classifiers. It is possible for certain non-holy people to be off this scale in some Khmer speakers' classification systems. For example, Maspéro (1915) reports that thieves are not classified by $n\varepsilon \partial k$ and hence not by the other forms either. However, Headley et al. (1977) do report examples of this particular usage.

Except for the images of Buddha, the pre-revolutionary Khmer system does not include any of the kinds of inanimate items in the above classes that are found in Gold Palaung. $R\hat{u}:p$ and $tu:\hat{p}$ (see Table 3.9, III and IV) are the classifiers by which Khmer categorise people according to the notion of image as opposed to reality. They are different from the other human classifiers in Khmer because persons as images are only one of the number of items that they classify. As with the ?ong(R) classifier, in different sources $r\hat{u}:p$ is reported as classifying different items. Jacob's (1965) list is the most restricted. She claims it is used only to count 'people from a philosophical view and characters in books'. Ehrman (1972) and Headley et al. (1977), however, cite it as classifying: 'pictures, images, shapes and statues' as well. $R\hat{u}:p$ comes from Sanskrit/Pāli and means 'image', and in Khmer it also occurs as a noun with this meaning. This form is not meant for classifying real people, but objects which are somehow an abstraction or perhaps even a caricature. Headley et al. (1977) is the only source that gives $r\hat{u}:p$ as referring to monks. The semantic basis for the use of this form with monks is unclear unless monks are thought of as images of god. Headley et al. (1977) do not give data clarifying when one might employ ?ong(R) rather than $r\hat{u}:p$ for monks.

The second classifier for people and images of people, $tu:\partial$, is only reported in Jacob (1965) and Headley et al. (1977). As a noun, this word means 'body, figure, character or part in a play'. Headley et al. (1977) report it as only counting characters in plays and letters of the alphabet. Jacob (1965) claims it is also used for upright objects and persons. There are obvious relationships between body, upright, figure, written symbol, and plays. Even in English 'character' refers to written symbols such as are used in Chinese, as well as parts in plays. Ehrman (1972) cites this form as counting vehicles, but this particular usage does not seem to fit well with the other functions of $tu:\partial$.

Maspéro's (1915) list of classifiers contains additional forms for classifying humans not found elsewhere (see Table 3.9 II). They are used for dignitaries and other 'high' persons. One of them, *louk*, is identified only as classifying 'high persons'. Another form, *hupan*, is from a

Siamese phrase huâ phăn 'who commands 1000 men'. This form has an alternative, pan. It is also used for honours and degrees of rank. In this latter function, Jacob (1968:88) also lists it as a classifier. Hupàk is a classifier used for inferior honours. Gedney (p.c. 1986) says that there is an old Tai word, paak meaning 'hundred', but it is not used in Siamese. The meaning of this form, one hundred, as opposed to one thousand for hupan shows that its referent is inferior in size and therefore in honours.

None of the forms in the group of classifiers used for humans in pre-revolutionary Khmer is conclusively a native Mon-Khmer form. The most controversial form is $n \approx k$, the classifier for humans. It is possible that the next form was borrowed at an early period from some Austronesian language where it meant 'offspring, child'. For example, Chamic speakers have been on the mainland from around the third century. In Rhade, anak occurs meaning 'infant', 'one's own children' or 'inhabitants of a country'. The form is also found in Indonesian branches of Austronesian according to Benedict (1975). The use of this form as a classifier in Khmer is particularly interesting since if it was borrowed from Austronesian, its use as a classifier is an innovation because in Chamic, the language from which it was most likely borrowed, it does not serve this function. It is, however, employed frequently in Austronesian to make compounds or for purposes of nominalisation. This particular usage in Austronesian might have made it a more likely candidate in Austroasiatic for a classifier. This is a widespread form in South-East Asia. It also exists in Tai, but not as a classifier. However, it was probably borrowed into Tai from Khmer, according to Gedney (p.c. 1981). Moreover, Gedney (p.c. 1986) does not believe that the origin of the Khmer classifier is Austonesian. Gedney has always doubted this Austronesian connection and hopes 'that someday epigraphic evidence within early Khmer, or else comparative evidence that the word is native, would disprove it'.

Another possible source for this form is suggested by the similar classifier found in some languages in the Bahnaric and Katuic subbranches. Chrau (S. Bahnaric) has na?, and Kui, Brou, Pacoh, Katu (Katuic) all also have nak (see Table 3.14). However, Kantu (Katuic) has chanak, (see Table 3.14 also). This form is an infixed form of the Proto East Katuic *cak 'body' (D.M. Thomas 1967:73). According to Diffloth (p.c. 1982) this form chak is found only in Bahnaric and Katuic subbranches, and he believes it may then be the source of nak in these languages, but not necessarily in Khmer. Benedict (p.c. 1986) also feels that the nak form in the Katuic and Bahnaric subbranches is 'surely the reduced form...of infixed/chanak/' and 'not related to Malay, etc.'. The chance that the Khmer classifier may be related to the form from Bahnaric and Katuic is possible.

The ?ong(R), preh-?ong(R), and rù:p forms are originally Sanskrit/Pāli. ?ong(R) is from $\acute{a}nga$ meaning 'body, limb, member or part'; $r\grave{u}:p$ is from $r\bar{u}pa$ meaning 'image, appearance, form'. As with the neak form, (if from Austronesian), these words are not classifiers in Sanskrit or Pāli. However, preh-?ong(R), ?ong(R), and $r\grave{u}:p$ also occur in Siamese. They can classify

approximately the same set of objects and concepts in Siamese. For example, $rice{n}$ is used for priests, drawings, and photographs. According to Gedney (p.c. 1980), the direction of borrowing of the forms between Khmer and Siamese cannot be determined. Therefore, it is also impossible to know who innovated their use as classifiers.

The tu:a classifier is borrowed from the Tai noun and classifier tua. Both mean 'body'. However, if one compares the kinds of items they count in the two languages, several differences appear. In Tai, the form is mainly for animals and additionally for things with limbs, like tables and shirts. However, letters of the alphabet may also be classified by this form as in Khmer. The use with characters in plays seems possible for Khmer only. The Khmer classifier is much more limited in its scope and ignores the major usage in Tai for animals. This seems quite unusual. However, in Khmer, the use of classifiers occurs most frequently in literary language. It may be that in this context, the chance for classification of animals is not as frequent or important.

3.1.5.2 Styles and sources for non-human animate classification

As with Mon, in Khmer there is no classification of animals in general as a distinct class, so that again one can say that a modified version of Style 4 exists in Khmer for non-human animates. There are only two forms whose purpose seems to be to classify some non-human animates (see Table 3.10). The first one is kontúy 'tail' found in Jacob (1965) for classifying fish. It may very well be that it is only employed with this particular set of animates. Jacob lists it as a phrase for the use of fish as sold in a store. This same type of classification can occur in Chinese, but not the same form. Also in Aslian, forms meaning tail and body are used to classify both humans and animals. Several of the Aslian languages have borrowed the form and this usage from Malay (Austronesian). Chamic languages, which are the languages one would expect Khmer to borrow from, do not use this form to classify animals. Again, it is hard to tell whether the similarity with Chinese or Aslian is based on borrowing, likely in the market place in the case of Chinese, or whether it is only the result of similarities in experiences and perceptions.

There is one other form in Khmer that may be a classifier for some kinds of animals; however, not all sources agree on its usage (see Table 3.10). The form in question is *kba:l* which has the nominal meaning 'head'. Jacob (1965), Headley et al. (1977), and Maspéro (1915) all agree on its usage as a classifier for volumes of books. Maspéro and Jacob also record its usage as a classifier for pairs of antlers and horns. Ehrman (1972) and Huffman (1970) cite it as classifying livestock. This usage could easily be seen as related to the 'pair of antler' usage. Headley et al. (1977) give a most interesting usage for this form. They claim that it can be used with humans for derogatory purposes. Since it is not unusual in classifier languages to find speakers counting humans by the animal classifier for the purpose of insulting humans, this may strengthen the argument that the form is commonly used for horned animals in Khmer even though only one of the sources list this usage.⁶

I. The classifier: kontúy				# ¹ - 1	
Jacob 1968	kontúy for fish				
II. The classifier: kba:l*	humans (insult)	livestock	ox, water- buffalo	pairs of antlers, horns	volumes of books, tablets
Ehrman 1972 Jacob 1965, 1968 G. Maspéro 1915 Headley et al. 1977 Huffman 1970	x	x x	x	x x x	x x x x x

Table 3.10: Khmer classifiers for non-human animates and books

This kba:I form is interesting in that it has the same nominal meaning as the classifier for cattle in the Munda languages, the eastern most branch of Austroasiatic. However, Headley et al. claim that the form itself is not a native word, but a Sanskrit/Pāli loan: kapala. This is not the form found in the Munda languages. The South Bahnaric languages also use a classifier meaning 'head' for animals, but it can be used for many more animals (see Table 3.12) than the Khmer form. However, as with Munda, the morpheme itself is not the same as the Khmer form.

3.1.6 Bahnaric

3.1.6.1 Styles of animate classification

Of all the branches of Mon-Khmer, the classification of animates in Bahnaric is the most interesting. This is partly due to the size of the data sample available in Bahnaric both in terms of the number of languages with data on classifiers and in terms of the number of classifiers recorded for individual languages.

All the languages in Bahnaric follow Style 2 for humans; that is, they all have separate classes for humans alone. In addition, in the case of Bahnar (Central Bahnaric) and Mnong Gar (South Bahnaric), there is elaboration of the system for classifying humans. However, this elaboration varies in two related ways from the systems found in Palaungic, Mon or Khmer. First in Bahnaric, the classifiers are of Mon-Khmer origin unlike the other three systems where most of the forms were borrowed from Shan or a Tibeto-Burman language and from Sanskrit/Pāli. Secondly, as we will see below, the basis for the elaboration in Bahnaric is quite different from the Palaungic, Mon and Khmer systems. For example, in several cases, the borrowed classifiers are just a reflection of borrowed cultural values associated with the non-native Buddhist religion. The

^{*} Form as cited in Jacob 1965, 1968.

Bahnaric system also divides people according to social value, but the values are different. Frequently, people are associated in a class with the value of some non-human animate and some inanimate object like rifles or jars. And, in Bahnaric, one of the classes is meant to show a negative value. Thus, in the elaborated system for humans in Bahnaric, one has both Style 2 and Style 3 depending on associated values of people, animals and items in the world. Style 3, in which humans are included with inanimates, is not common.

For non-human animates, both Style 2 and Style 3 are found. Many of the languages have separate classes for non-human animates, and a couple of languages even have an elaborated style. On the other hand, several languages treat animate creatures like certain inanimates. Just as with the classification of humans in Bahnaric, one will see new grounds for the inclusion of items in some of the classes.

There are a couple of other variations in the Bahnaric system that are unusual in terms of the style of animate classification described above for other subbranches. One is that in some Bahnaric languages, one finds the use of a general classifier for animates of all kinds. As is discussed in Chapter 7, this is not typical, especially with humans. A second interesting variation in some Bahnaric languages is the association and perhaps even marking of the classifier morpheme with certain numbers. This latter phenomenon is one that is highly unusual according to Greenberg (1972).

3.1.6.2 Sources of classifiers for humans

All the Bahnaric languages possess a separate category for humans. However, as in Palaungic, there is a variety of forms employed by the languages of this subgroup. See Table 3.11.

Ī			
-	one	two or more	ghost/spirit**
North Bahnaric Rongao (Neo and Gregerson 1974) Sedang (Smith 1965, 1975) Halang (Cooper 1971) Jeh (Cohen 1976) Hrê (Trebilco, Trebilco and Nghĩa 1974)	ngai ngê ngai nau ngai		> >
East Bahnaric Cua (Đô, Môc, and Maier 1974)	dro	>	
Central Bahnaric Bahnar proper* (Guilleminet and Alberty 1959, 1963) East dialects West dialects except Rongao Rongao	nu nu ngai		> > >

Table 3.11: Bahnaric classifiers for humans and other things

West Bahnaric Loven (Bondet de la Bernardie 1949) Brao (Keller 1976) Oi	ra raa ra		
South Bahnaric			
Stieng (V. Miller 1976)	mbu	du	
Central Mnong			
Mnong Preh (Phillips and Kpor 1974)	nuyh	>	
Eastern Mnong			
Mnong Rolom (Voegelin and			
Voegelin 1966)	naw	>	
Mnong Gar (Condominas 1977)	neh	>	
Sre (Manley 1972 and Drouin)***	na?	>	
Chrau (Thomas and Luc 1966 and)		
Thomas 1971)	mvu	ndu	

- * Form as cited in Guilleminet and Alberty.
- ** Expanded in following table.
- *** Form as cited in Manley.

II	honourific for person	non-honour person	children	bonded souls	non-human animates	things
Central Bahnaric Bahnar proper (Guilleminet and Alberty 1959, 1963) All dialects	măt	(deprecating)<-	(poetic)	ko!*	(valuable animals) <	(valuables) tòng (valuables) găr** (small spherical objects) konāng (flat things)

- * gol in Rongao (West).
- ** gĕr in Alakong.

The North Bahnaric languages, except for Jeh, share the same form, *ngaay (Diffloth p.c. 1982). Diffloth glosses this form as 'pupil of the eye', although in Sedang it is given as meaning 'person'. In addition to its classifier function, it also functions as a pronoun in Sedang. It is also very likely that the *ngaay form for classifying humans throughout North Bahnaric is related to the Viemamese classifier người also used for humans in general. As in Sedang, the Viet-Mường form

is glossed as 'person' and can function as a pronoun in addition to its use as a classifier. According to Diffloth (p.c. 1982), this Vietnamese form is related to the Proto-Palaungic form, *?ngaay, meaning 'eye'. And it is very likely that both the Palaungic and Vietnamese forms are related to the one in North Bahnaric.

Jeh is the only language in North Bahnaric that does not use the *ngaay form. The classifier for humans in Jeh is ?nau. Thomas and Smith (1967) cite a different cognate in Jeh for the form found in the other North Bahnaric languages. This form is mangay which, according to Diffloth (p.c. 1982), means 'the one having eyes'. However, this mangay form does not occur as a classifier in Jeh in any of the data available for this study.

In Cua (East Bahnaric), we find dro functioning as the human classifier. The form is also used in some of the dialects of Bahnar (Central Bahnaric) not to classify, but to function as a noun drô meaning 'person', 'individual'.

Bahnar (Central Bahnaric) also has a unique classifier, *nu*, meaning 'person' which cannot be associated with any certainty to other Bahnaric languages.

The classifier morpheme in the West Bahnaric languages, Brao, Ôi and Loven, is from a fourth source. The West Bahnaric classifier, *raa? (Diffloth p.c. 1980), means 'big, adult human' and is found in other Austroasiatic languages.

Basically for North, East, Central and West Bahnaric one finds one classifier per branch. However, in the South Bahnaric branch, a variety of classifiers for humans exists. Unique forms are found in Stieng and Chrau where the classifiers themselves are inflected for number. See Table 3.11. The two morphemes for classifying a single person appear to have an *m*-prefix which very likely has the meaning 'one'. Most words for 'one' in Mon-Khmer begin with *m*- and in some of the Mon-Khmer languages, e.g. Katu and Khmer, an *m*-prefix form of 'one' is attested.

The other South Bahnaric languages have different forms for human classification. The Koho Sre form in na?, the same form found in Khmer and in the Katuic languages which are much further north. This wide geographic spread of nak as a classifier might indicate that originally more Mon-Khmer languages used the form. However, it is also possible that the Bahnaric and Katuic languages may have borrowed this usage from Khmer, or that they may have independently coined its usage as a classifier. The Mnong Preh (Central Mnong) (South Bahnaric) form nuyh appears to be a borrowed form. It can be reconstructed as *mnus originally from Sanskrit manusa meaning 'man, person'. In the Eastern Mnong languages, Mnong Rolom and Mnong Gar, forms are not related to each other and probably are not related to any of the forms found elsewhere. See Table 3.11 (I).

As in Palaungic, although the actual classifier morphemes differ, when glosses can be found, they are related to two concepts. One is 'pupil of the eye' found in several North Bahnaric languages. In Sedang, we saw that this form was also glossed as 'person'. This meaning is the second common one found for classifiers. Several forms in other Bahnaric languages were also glossed as 'person', 'individual' or 'human adult'.

In Bahnar proper and in the more southern Rongao described by Guilleminet and Alberty (1959, 1963), one finds an elaborated system of classifiers for humans. The systems in these two languages are the same, and it is most likely that Rongao borrowed these forms from its southern neighbour. See Table 3.11 (II). This argument seems plausible since in the Rongao described by Guilleminet and Alberty (1959, 1963) the classifier for people in general *ngai*, is the same as the forms found in the Northern Bahnaric languages, which is where the Rongao were originally from. See Table 3.11 (I).

In Bahnar (Central Bahnaric) a form meaning 'head', kol, is used in what can be a denigrating manner for humans, like kba:l in Khmer. The main function of this form as cited by Guilleminet and Alberty (1959, 1963) is to count 'living beings and people and bonded souls'. (Slavery and indenturing is not unusual in this area.) One can also count inanimate things such as boats and valuables, as well as animals, with this form. The use of kol with inanimates seems to be derived from the fact that bonded souls have a value and a rate of exchange that can be applied to other objects.

This class is much like a class found in Mnong Gar (South Bahnaric). In the Mnong Gar class, slaves, animals and a kind of measure for rice beer are grouped together. This is much like the Bahnar grouping except for inanimates which are not cited in Mnong Gar. The fact that data are limited in Mnong Gar might explain this difference, but it may be a legitimate one. In addition to the similarity of items grouped together, the Mnong Gar classifier also means 'head'; however, the morpheme in Mnong Gar is book, not the kol form found in Bahnar.

The two honorifics in the elaborated Bahnar (Central Bahnaric) system bear no resemblance to any of the other forms with this function in Mon-Khmer languages. See Table 3.11 (II). Mắt, one of the honorifics, also functions as a noun meaning 'eye, eyesight, hole in the ground for seeds, tear, lamina' and (in compounds) 'pupil of the eye'. This morpheme appears throughout the Mon-Khmer subfamily, including spoken Mon where it means 'precious stone' (Shorto 1962, 1971). The meaning in Mon, 'precious' may help to explain its usage as an honorific, i.e. it refers to something of value. This form, mắt, is related in meaning to the classifiers found in North Bahnar for people in general, where the classifier meant 'pupil of the eye'. While the mắt class fits in Style 2, the other honorific tòng fits in Style 3. This honorific considers a person's social value to be a type of economic value. When counted by tòng, people are classified as equivalent to valuable items including jars, rifles and axes. It is found throughout Bahnaric classifying things with handles, but only in Bahnar (Central Bahnaric) is it given as counting humans.

The last two forms to be considered here are classifiers whose uses are primarily for objects, but are extended to include humans so they fit in Style 3. One form găr/gĕr, means 'seed, grain'. The use of this classifier with adult humans is limited since its function is to deprecate adults by counting them as small in size and probably as of little value as one grain of rice. This form is found in a speech genre referred to as poma pojoruh.

One uses the deprecating genre when it is important that the spirits do not understand the topic under discussion. For example, one would use it for the discussion of the preparation of a sacrifice. The deprecating items protect the speakers in case they must cancel the sacrifice. If the normal language, which spirits understand, were used and the promised ritual were cancelled, the

spirits would be angry and punish the person who had made the promises (Guilleminet and Alberty 1959:xxiv).

This g & r/g & r form and another form, kon & ng, are both also used for children. The former functions as a poetic form for children and is not deprecating as with adults. The latter classifier kon & ng is used for flat inanimate objects, immature dogs and cats and young children. Here again one finds animates being treated according to inanimate considerations of size and shape. This classifier is cognate with k & ng found in Mnong Gar meaning 'board'. The view that immature beings lack a dimension, i.e. are flat rather than round is also poetically pleasing. The Bahnar and Rongao system is clearly associated with the Bahnar culture and not borrowed as other elaborated systems have been.

3.1.6.3 General classifier

The general classifier (i.e. the classifier which is used for a large number of unrelated items) is discussed is some sections of this chapter because some languages use this classifier with animates, both human and non-human. In addition, in some cases, the general classifier found in one language is used in another language as the classifier for non-human animates. As Table 3.12 shows, the general classifiers take different forms in different Bahnaric languages. However, the tendency is for the North, East, Central and West Bahnaric languages to use similar forms and for the South Bahnaric languages to use similar forms, but ones unrelated to the forms found in the four other subbranches.

Table 3.12: Bahnaric classifiers for non-human animates, inanimates and general classifiers

	non-human		general classifier					
	animat	es	inanimatas	animate	es	non-	with	two or more*
	alive	dead	inanimates	adult	kids	human	one	
I.								
North Bahnaric Rongao (Neo and Gregerson 1974) Sedang (Smith 1967, 1975) Halang (Cooper 1971) Jeh (Cohen 1976) Hrê (Trebilco, Trebilco and Nghlĩa 1974)	pom (vehicles also)		(?) (pom,tō) (?) púm (round) to (?) (puom,to) sĭ pôm toq	(?) older brother		→	>	->
East Bahnaric Cua (Đo, Môc, and								

Maier 1974)	- 1		роор	1		>	1	ľ
Central Bahnaric Bahnar proper** (Guilleminet & Alberty 1959, 1963; J. Banker 1967 E. Banker 1973)	<i>bŏn</i> *** (upright trees, plural)		apôm		-	>		
all dialects			to (except flat objects)					>
West Bahnaric Loven (Bondet de la Bemardie 1949) Brao (Keller 1976) Ôi	yur tô pom		<i>mpââm</i> (round)					
South Bahanic Stieng (V. Miller 1976)			mlom oc				>	>
Central Mnong Mnong Preh (Phillips and Kpor 1974) (Blood 1969) Eastern Mnong Mmong Rolom (Voegelin and Voegelin 1966) (Blood 1968)	<i>buuk</i> (elephant)		mlom mblŏm					
Mnong Gar (Condominas 1979 Blood 1968)	book		measure of rice beer <i>lŏm</i>	slaves				
Sre (Manley 1972 and Drouin)****			nəm (except round objects)			>		
Chrau (Thomas and Luc 1966 and Thomas 1971)	vôq	vanông	lâm			>		

^{*} This chart includes only classifiers for non-human animates in general. More specific ones or ones where the usage with animates is derived are in the following tables.

As with the human classifiers in Bahnaric, the general classifier in a few of these languages alternates for number. That is, there is one classifier used with number 'one' and another classifier used with numbers two and above. Surprisingly, however, the languages with alternating general classifiers, except for Stieng, are not the ones with alternating human

^{**} Form cited here as in Guilleminet and Alberty.

^{***} bēn in Rongao dialect.

^{****} Form cited here as in Manley.

classifiers. In this case, alternating classifiers are found in the North and Central branches as well as in the Southern branch.

In the North, East, Central and West Bahnaric groups, the two forms that regularly appear as general classifiers are *pom* and *toq*. However, in the following discussion we shall see that the available data indicate that the languages in these branches do not use these forms in the same way. Some use *pom* for a general classifier, others use *toq*, and some use both and change them depending on the number. In addition, not all of these languages use the two forms for general classifiers. In a couple of cases, the forms seem restricted to classifiers for non-human animates and in others to certain inanimates. It may even be that in some cases, these are homophonous forms with different functions.

The pom classifier wherever a gloss is found is cited as 'round'. The meaning and the function is very much like the *?()mrl/r 'round' classifier form in Palaungic that has been described above. Again in Bahnaric, we have a form that is found both with three-dimensional objects and with non-human animates. In Bahnaric, this association is especially interesting because we saw above in Bahnar (Central Bahnaric) the use of a form meaning 'board' for flat things including the immature of certain species. It is very common in Bahnaric languages to have non-human animates treated according to a dimensional basis. The pom form in Bahnaric, however, functions differently from the Palaungic form in its use as a general classifier and, in this capacity, in its limitation to singular numeral phrases in some languages. However, the different Bahnaric languages don't always use the pom form in all its possible applications.

In Oi (West Bahnaric), the *pom* form is cited only with non-human animates. There is little available data on Oi, so it may be that *pom* can actually be used for round items. Or it may also be that there is a different classifier for round items.

In Jeh (North Bahnaric), it also looks like the *pom* classifier's main purpose is to classify animals and additionally vehicles. In addition, there is a possibility that this same form in Jeh is for round items. In the Jeh data of Cohen (1976), in addition to *pom*, there is also cited a *pŏm* classifier. The semantic range of the *pŏm* classifier is like that of the same form in Sedang, Halang and Rongao (North Bahnaric) where it is used for round things like ears of corn. One might expect these two different forms just to be two separate classifiers. However, the data in Thomas and Smith (1967) on Proto-Jeh-Halang make this interpretation less likely. The round classifier in Halang is given as *puom* in Cooper (1971); in Thomas and Smith's transcription system it would be *poam*. While they do not list a *poam* form in Halang, they do cite *hopoam* with the meaning 'round, oval'. This Halang form *hopoam* is cited as cognate to Jeh *pom*. The surprise is that this Jeh form is the classifier for animals. It is not the Jeh form one would have expected, i.e. *pŏm*, which is the classifier for 'ear of corn'. Perhaps additional data would show that the *pom* and *pŏm* forms in Jeh are really variants of the same form and that *pom* functions as a classifier both for round objects and non-human animates.

In several other of the North Bahnaric languages, the *pom* classifier seems to be for round objects and not for animates as in Jeh. In Sedang, one finds *púm* for round objects and in Halang, *poum* is cited with melons and ears of corn. Two of the descriptions of Rongao also cite the *pŏm* form as meaning 'round' and used for round objects. Both Neo and Gregerson (1974) and

Anonymous (n.d.) list items such as oranges, jars, melons and ears of corn with the pŏm classifier in Rongao.

In two other languages, pom looks like a general classifier for all kinds of items, not just round and non-human animates. Cua (East Bahnaric) is one language where poop is cited as the general classifier. In Brao (West Bahnaric), mpââm looks like a general classifier, but the evidence is not quite as clear. Mpââm in Brao is glossed as 'round' and is cited with items like melons and ears of corn. In addition, it is used with offspring and fish hooks. The offspring example means that it is used with animates, and perhaps even human children. Moreover, the fish hook example makes it look like it might be a general classifier since fish hooks are not normally examples of round or three-dimensional items.

The final use of the pom classifier is to be found in Hrê (North Bahnaric) and Bahnar (Central Bahnaric). In these languages, it is the general classifier, but it is restricted to use with the number 'one'. The apôm form in Bahnar is cited with round items like melons, eggs and balls; also with animals; and also with all sorts of inanimates. This same usage is cited for thee Rongao dialect described by Guilleminet and Alberty. This Rongao dialect's usage is different from the other Rongao dialects described above in which pom was only used for round objects. However, Guilleminet and Alberty say that speakers of their Rongao dialect do not use the form much as a general classifier and prefer specific classifiers instead. It seems that these Rongao speakers in the Central Bahnaric area have continued to use pom in a more Northern style, where they were originally from.

Even though Hrê (North Bahnaric) and Bahnar (Central Bahnaric) both employ pom for a general classifier in singular number phrases, there is one point of variation in the use of the classifier in these two languages. In Hrê, the classifier can be used with humans. It is cited with the noun 'older brother'. However, in Bahnar (Central Bahnaric) Guilleminet and Alberty say specifically that apôm cannot be used with items classified by nu, the human classifier.

The variety of applications of *pom* described above are interesting, as is the fact that these uses are not necessarily consistent in any one subbranch of Bahnaric. The same subbranch, North Bahnaric for example, can have three different uses. However, as with all the data described in this text, more information might show that there really are fewer variations in the use of the *pom* classifier.

In the North, Central and West Bahnaric subbranches, the other major form used for a general classifier is toq.⁸ As with pom, this form appears to have different functions in the different languages: that of a general classifier used for both inanimates and animates; also that of a form alternating for number; and finally, as a classifier for animals only. Unlike pom, the toq form is not attested in East Bahnaric (Cua) and is not as widespread in North or West Bahnaric either.

In the North and Central Bahnaric languages, toq is used as a general classifier sometimes limited to certain numbers and sometimes not. In Sedang (North Bahnaric), to is found as a general classifier and used for non-human animates, body parts, buildings, etc. In Halang and Hrê, two other North Bahnaric languages, it is used only with inanimates in the examples available to me. However, in Hrê, it is employed only with numbers two and above. The function of to in Rongao, another North Bahnaric language, is listed differently in different sources. In Neo and

Gregerson, and Anonymous, it appears to be used with things, animals, and spirits and is used with all numbers. However, in the Rongao dialect that Guilleminet and Alberty describe, while the form is used for similar items (i.e. everything except humans and flat things classified by *nu* and *hlak* respectively), it is used only for numbers two and above. This is the same usage, of course, found in Bahnar (Central Bahnaric) described by Guilleminet and Alberty. This limitation of to to certain numbers fits in with the usage of *pom* with which *toq* alternates in Hrê, in Guilleminet and Alberty's Rongao and Bahnar (Central Bahnaric).

In Loven (West Bahnaric), the to form is listed for use with animals only. The Loven form, according to Bondet de la Bernardie (1949), is a borrowing from Tai of tua. Of course this may be the source of the toq form in some of the other languages like Sedang (North Bahnaric). They all classify animals and some related body parts and a few inanimates like Tai tua does. However, it appears that the form is used for more inanimate items in Bahnaric than the Tai form. In addition, the alternation for number is totally unique to Mon-Khmer. It is quite possible that the toq form described here could be from different sources: tua in Tai in some languages and perhaps some form having to do with numbers in Mon-Khmer in other languages.

The general classifier forms found in South Bahnaric are reconstructed to the form *mlŏm by Blood (1968:57). Blood glosses the form as a classifier for 'things and a non-personal classifier'. This latter phrase means that it is used for animates other than humans. However, in Chrau, it can also be extended to use with children. This type of extension is also found with the general classifiers in Hrê and in some of the Katuic languages described below which have the same general classifier as the South Bahnaric languages.

Stieng is the only language in the South Bahnaric group where there is some variation in the use of the general classifier. As with the classifier for humans in Stieng, the general classifier form varies for number. The *mlom form is employed with the number one. σc is the general classifier in Stieng for numbers two and above. A special form of the number one is used with both the general classifier for one object and the mbu classifier for humans in Stieng. The form di is used rather than $mu\hat{o}i$. As with the human classifier the m- may be a prefix form of the number one.

This *mlŏm form, which also occurs in the Katuic languages, looks very much like classifiers found in Lao. In Lao, there is lam for elongated things such as stones, bamboo and sugar cane and lĕm also for long things such as needles, knives and torches, but things that are shorter than lam. While these forms look similar to the South Bahnaric ones, neither is likely to be their source. First of all, they do not classify the same range of items as the South Bahnaric and Katuic ones, and Gedney (p.c. 1986) claims that the Lao classifiers are always very specific and specialised. Secondly, there is also in Lao and many other Tai languages, including Siamese, a general classifier ?an which classifies essentially the same range of items as the South Bahnaric forms. As a matter of fact, Coyaud (1967) cites the ?an form as also being used for animals and kids. This is the word that one would have expected to be borrowed as the general classifier, not lam or lĕm.

3.1.6.4 Styles and sources for non-human animate classification

There is in many of the Bahnaric languages a fairly extensive system for classifying animals. This makes this subgroup to some extent a novelty among the other languages in the family such as Mon, Khmer, or Khasi either where animals are included with inanimates in Style 3, or where only a few specific species are classified. In addition to the general classifiers in some Bahnaric languages which can include animals, there are classifiers for animals in general (that is as a class) as well as classifiers for specific animals, in addition to forms that classify animals with inanimate objects. These different classifiers and their classes can be seen in Tables 3.12 and 3.13.

There are examples of the classification of animals as a class in four of the five divisions of Bahnaric. The possible lexical meaning of the pom form which occurs in Jeh (North Bahnaric) and Ôi (West Bahnaric) which classes animals as a group has been discussed above. The only interesting variation in this class in Jeh is the inclusion of vehicles. What appears to have happened in this case is that some one or more aspects of animals have served as the basis for inclusion of vehicles. In the case of vehicles, several dimensions could relate these two types of objects: for example, forms of transportation for loads as well as for people; four legs and four wheeled; things with movement; and things that are driven, as well as being three dimensional. One cannot help but note the similarity to the class found in Mon. However, in the Mon case, function was the main dimension, not animacy or shape, as was demonstrated by the meaning of the classifier in Mon.

In Loven (West Bahnaric), different forms for classifying animals in general are found. Loven has two forms: $t\hat{o}$, described above, and yur. The $t\hat{o}$ form as mentioned above is most likely a borrowing from Lao or some Tai language. The yur form is unique among the examples in Bahnaric or elsewhere for classifiers. It means 'that' or 'what'.

In Chrau, Mnong Gar and Rolom (South Bahnaric), the form $v\hat{o}q$ meaning 'head' is found classifying animals in general. This form has as its basis the notion of animacy. However, there are a few examples of inanimates in this class in all three languages. In Chrau, one finds it used with pam 'trap'. David Thomas says of this form:

vôq (camvôq) 'head' is a widely used word, used for people's head, animals, tools, etc. It can mean the front part of anything. I would guess that it is used with pam, the long tapered fishtraps, with the thought that the tip which is pointed downstream, is the head and the important part (p.c. 1976).

In Mnong-Gar, the form is also used with slaves and measures of beer. The use with slaves seems parallel to the *kol* form found in Bahnar (Central Bahnaric) meaning 'head' or 'summit' and also used for bonded souls. The use with beer is because the horns of animals' heads are used as measures.

In Chrau, there is a second form, vanông, for classifying animals in general. Vanông is also found in two Katuic languages (see Table 3.14). The form itself is made up of an -an infix for making nouns from verbs and a verb stem vông which means 'fall down'. According to Thomas (p.c. 1976), this is rather a rare form whose usage in Chrau is most appropriate for dead animals.

Table 3.13: Bahnaric (additional classifiers for non-human animates and some kinds of inanimates)*

	animals of value	crab	elephant	æl	fish	snake/ worm	lizard	turtle	young dog/cat	things
North Bahnaric Sedang (Smith 1967, 1975) Central Bahnric Bahnar proper all dialects (Guilleminet and Alberty 1959, 1963)		kơtôu	wong** hâlâu- hơ lâu	<	<					rono (long narrow things) komon*** (spherical, cylindrical things)
e e	~			5	<				<	kơnang (flat things) gặr**** (small spherical things) kơi***** (for valuables and bonded souls)
South Bahnaric Chrau (Thomas 1971)							<	<		tong (tools, vehicles) păng (flat things)

^{*} The Bahnar proper forms konang, gar and kol are all used with humans also. For their usage please see preceding table.

^{**} ruong-Jolong dialect.

^{***} komong-Jolong dialect.

^{****} gĕr-Alakong dialect.

^{*****} gol 'head, summit, origin' Rongao dialect.

The reason he gives for the treatment of dead animals as a separate category by a native speaker is that a 'dead animal seems bulkier than a live animal, especially when you have to drag it home'. It may be that there are other more deep-seated feelings about dead animals which require their treatment as a separate group. The infixing makes this appear to be native form. There is in Karen a similar class; however, the distance of Karen from Bahnar makes borrowing unlikely. Rather, it would seem a metaphor that has developed separately because of similar experiences.

The dialects of Bahnar (Central Bahnaric) and Rongao have a classifier bon for animals that is unlike any of the other classifiers described earlier in terms of its form and the items classified. This form can be used for upright trees as well as for animals. Here, there is a new animate grouping: trees and non-human animates. This form is also of interest because it can be used for plural enumeration. In South Bahnaric, the cognates for this form mean 'we-inclusive', i.e. von in Chrau and *bon in Proto-Mnong. In Semai, as a prefix bon-, it means 'person and friends'. However, though Guilleminet and Alberty cite the form as 'couramment' (readily) for plurals, this does not exclude the possibility that it previously was used and is still used to count individual items, and not groups of items as the Guilleminet and Alberty data suggests. What is most fascinating about this form is that the same metaphor is found in Chamic (Austronesian) for classifying animals. Cham and Rhade use trei for the animal class and the meaning for this form is 'we all'. This usage is exclusive in Chamic (Austronesian) for animals. Other languages like Malay use 'tail' for this purpose. Given this information, perhaps Chamic borrowed the usage from Bahnaric.

Of the five classifiers for specific animals rather than animals in general that occur in the Bahnaric groups, two of them, both in Bahnar and Rongao, are for elephants. One form, wong, refers to the baskets that elephants carry. This categorising of an animal by its burden is not unusual as we have seen in Mon.

The two forms for specific animals found in Sedang (North Bahnaric) have not been found among the other animal classifiers in Mon-Khmer. The one for birds pa refers to specific parts of the bird (the breasts and wings) and this may mean that it is only used for dead birds and perhaps only for parts of birds. The second form is for crabs and means 'shell, skin or bark'.

The last category of classification of non-human animates in Bahnaric is the one which includes non-human animates with inanimates. This kind of classification is usually based on the shape of the beings in question and is usually for cold-blooded creatures. These types of forms are found in Sedang and Rongao (North Bahnaric), Bahnar (Central Bahnaric) and Chrau (South Bahnaric). Since all of these languages have other classifiers for non-human animates, what one has in most of the languages is a mixed system of separate classification for warm-blooded animates and birds and mixed classification for cold-blooded forms.

Of the North and South Bahnaric languages where cold-blooded creatures are classified by shape, one finds in Sedang a form *rono* for long narrow objects. This classifier is found throughout Bahnaric, but in Sedang, it is given also as a classifier for snakes, earthworms, and fish and eels. In Chrau, the form *păng* for flat objects also classifies turtles. Also in Chrau, the form *tong* is found. It is used with all sorts of long objects. *Tong* occurs as a classifier in many

Bahnaric languages, where is generally seems to mean 'handle' or 'instrument'. In Chrau, lizards fit into this group of long-handled items.

In all the dialects of Bahnar (Central Bahnaric), including the Rongao dialect in this area, there are also several examples of non-human animates classified by shape. In the Bahnar dialects, komon for spherical objects is used with fish; and konāng for flat things is also for fish. This form does not fit in with the cold-blooded argument mentioned above since it is also used with the young of the human, dog and cat species. A third form mentioned earlier, găr/gĕr 'seed', for smaller round things, is also used with fish.

3.1.6.5 **Summary**

The Bahnaric languages mainly pattern after the second and third styles of classification proposed at the beginning of this chapter. In all the Bahnaric languages there are classifiers whose main function is to classify humans according to the second style proposed above. Also in Bahnar and Rongao (Central Bahnaric) and Mnong Gar (South Bahnaric), there is an elaboration of classifiers for humans. In these languages, rather than maintaining the integrity of separate classes for humans, as most other languages have done, the elaborated systems have humans classified with inanimate objects. In these cases with most of the forms, perhaps with the exception of kol for bonded souls and măt for honoured people in Bahnar, it seems that animacy must not be seen as primary or the only dimension under consideration. In these categories, shape and value also appear to be important organising principles.

For non-human animates, most of the Bahnaric languages have them classified with inanimates also. In the case of kol mentioned above, it has to do with the value of the creature. Also, the extensive use of general classifier fits in with this third style. One of these general classifiers, pom, again seems to have shape as its basic organising principle, and we saw above several languages using shape for cold-blooded creatures. The only exceptions to this are the few languages like Chrau and Mnong Gar (South Bahnaric) and perhaps Jeh (North Bahnaric) and Oi and Loven (West Bahnaric), which have special classifiers for animals in general. The other exceptions to classing animates with inanimates are the special classifiers for elephants and crabs in Bahnar (Central Bahnaric) and Sedang (North Bahnaric), which treat these animals apart from other creatures and things. Bahnar (Central Bahnaric), another exception, has a particularly interesting general animate class, in the form of bŏn, which includes animals and upright trees. This is a new combination not seen before.

3.1.7 Katuic

3.1.7.1 Style of classification for humans

The classification of humans in Katuic is like most of the other Mon-Khmer systems in that there is a classifier specifically for humans (see Table 3.14). The classification of humans in Katuic does seem though to deviate from the standard second style in one interesting way. In Pacoh and Brou, it is possible and perhaps obligatory to categorise children apart from adults. One can use the general classifier *lam* for counting children rather than classifying them by *naq*,

the human classifier. S. Watson (1976) claims that Pacoh speakers typically use *lam* with their own children. One can infer from this that for another person's child, one would use *naq*, although this may not be true. She also claims that Pacoh speakers use *lam* with adult humans to insult them. Miller (p.c. 1976) also reports that in Brou speech '*lam* is characteristically used with the word *con* 'child', with *naq* being used for adult humans'.

person non-human animates general things classifier adult child alive reptile dead Kui* (Sriwises 1978 and Levy 1943) nà? Brou (C. Miller 1964 and J. Miller 1964) naq-noaq lam acan Pacoh (S. Watson 1976) паа (insult <-(one's <lam with own ntrayh adult) children) (long things) Kantu (Costello 1969, chanak anam panong abea 1971)things) hơơq (?) Katu (Costello 1969. nak (a)beg 1971 and Wallace panong (plants) 1969) buh -

Table 3.14: Katuic classifiers for humans, non-human animates, and general classifier

Perhaps one should not make too much of the difference between the Katuic and other systems, since in some of the Bahnaric languages discussed in the previous section, there was a similar phenomenon: that is, children treated separately. For example, in the dialects of Bahnar proper, there was a poetic classifier for children, găr/gĕr 'seed', and another, kơnāng 'flat things', that could also be used for kids. In the other languages in Bahnaric, some of the general classifiers could also be used with children and even sometimes with other humans. However, not all of the Bahnaric languages cited have this usage. In all these cases, however, the inclusion of children in a different class from adult humans in Bahnaric did not seem to be required or to be common as one is led to believe it is in Pacoh and Brou.

^{*} Form as cited in Sriwises 1978.

3.1.7.2 Sources of classifiers for humans

D.M. Thomas (1967) reconstructs the Katuic classifier for humans as *nak. This is the same form as is found in Khmer and in Sre (South Bahnaric). Differing slightly from the other forms in Katuic is the High Katu (Kantu) form chanak, an infixed form of the Proto-East Katuic *cak 'body' (Thomas 1967:73) which in Katu proper occurs as chak or achak (Costello 1971:28). As mentioned above on the section in Khmer classifiers, the *nak form might be a borrowing from Chamic (Austronesian). However, it could also be a native classifier derived from chak which according to Diffloth (p.c. 1982) is found only in Bahnaric and Katuic subbranches.

An interesting feature of classifier systems in Mon-Khmer comes to light when one looks at the list of classifiers in Kui. In Kui, the 'body', *cak, cognate also occurs uninfixed in the classifier system. However, in Kui, it is not used for humans, it is used for tubers. Thus, one has the same cognate found in different languages, classifying quite different sets of items. This is not unusual in the Mon-Khmer systems. Another example is the m
otin t cognate. In Bahnar (Central Bahnaric) it is an honorific for humans. However, in Mon, m
otin t [mat] is used with portions of medicine. Another classifier like this, though borrowed from Sanskrit is otin t meaning 'body, limb, member'. In Mon, otin t for armies and books; in Khmer otin t is for high status people.

3.1.7.3 General classifier and the classification of non-human animates

The Katuic languages and the South Bahnaric groups share two classifiers which are used for non-human animates. First, there is the general classifier lam in Pacoh and Brou (Katuic) and *mlŏm in South Bahnaric. In both of the subbranches, the form covers approximately the same set of items except for the classification of children in Pacoh and Brou which was described above. A second shared form is panong found in Kantu and Katu which seems related to the vanông form in Chrau. In Kantu and Chrau the form classifies the same thing: large dead animals. However, in Katu, Costello (1971) reports it as a kind of general animate classifier that occurs with humans as well as other animates and even plants. If one had only the Katu data, the relationship of the Katu and Chrau forms would seem unlikely. It is on the basis of the Kantu usage and on their similarity in form that it is possible to argue that all three forms are related. Classifying dead animals in a separate group is, after all, a fairly unusual category found elsewhere in Karen and Japanese.

The animate systems in Kantu and Katu are most like each other than like Pacoh and Brou; however, this is not surprising since it is possible to consider Katu and Kantu as dialect variants. In Pacoh and Brou, the basic system seems to be adult humans versus everything else. However, Brou does appear to have a general animal classifier acan which competes with lam for classifying non-human animates. In Pacoh, lam also is not the only class that non-human animates can occur in. In Pacoh, snakes and worms are classified together with long inanimates (see Table 3.14), but this fits the general pattern in Brou and Pacoh of counting inanimates and non-human animates together. Moreover, as we have seen, this treatment also appears extensively in Bahnaric (see

Table 3.13) and as mentioned in Chapter 1, counting cold-blooded creatures by their shape is a common strategy in all kinds of classifier systems.

In Kantu and Katu, the overall system seems more like humans versus animals versus inanimates. For example, in Kantu, one finds not only the panong for large dead animals, but there is also the form anam which is used as a general classifier for animals. However, Katu, as we have seen, does not quite fit into this pattern. First, it does not seem to have a separate classifier for animals. There is only the panong form which Costello claims is for humans also. On the other hand, in both Katu and Kantu, the general classifier (a)beq appears to be only for inanimates.

Costello cites two other classifiers for animates in Kantu and Katu. However, no examples of their usage were available, so what distinguishes them from the nak, panong, or anam forms described above is unclear. One of the forms is $h\sigma\sigma q$, which occurs in Kantu. Costello glosses it as being used with humans and animals as 'still, more'. Therefore, it may not really be a classifier for individuals. The other form buh appears in Katu. No lexical meaning was given for it, but it occurs with both humans and animals.

3.1.8 Viet-Mường

3.1.8.1 Introduction

The Viet-Mường subbranch is represented here by two languages only. Vietnamese and Mường are both members of the Viet branch. The available data on Mường dialects indicate that the classifier system in these dialects is composed of the same forms as those of the Vietnamese system. However, the total set of classifiers in Mường may be smaller. So far, data have been available on classifiers for the Mân Đức dialect only. In contrast to Mường which has only limited data available, Vietnamese is the Mon-Khmer language with the most thorough descriptions available except for perhaps Khmer.

3.1.8.2 Styles of human classification

The system of human classification in Vietnamese is the most extensive of any of the Mon-Khmer languages, and it follows the second style of treating humans as a separate class. In addition to a general human classifier, there are numerous other classifiers that form a system for distinguishing people by age, sex and other socially important factors. One should keep in mind that, just as in Khmer, since many of the classifiers for humans in Vietnamese do distinguish social rank and occupations, some of the descriptions that follow may no longer be appropriate in the new Vietnam. Most of the available data are from the 50s, 60s and early 70s, and the new social order may certainly have resulted in some changes in the classifier system. One example of this happening in the address system was well known in the 1960s. Ho Chi Minh wanted to be referred to as Uncle Ho even though he could have been accorded the title of grandfather or even great-grandparent. In the case of forms like this which occur in both the pronominal system and

the classifier system, alterations in pronominal usage will also affect classifier usage since the semantic basis for their use in the two situations is the same.

3.1.8.3 Sources of classifiers for humans

The classifier for general reference to humans is $ngu\dot{\sigma}i$. This form is also a noun meaning 'person' and originally 'eye' and one of the forms regularly used as a nominaliser. ¹¹ $Ngu\dot{\sigma}i$ can be used for a variety of words referring to humans, though it is not the most appropriate for all nouns. One of its functions according to Nguyễn Dình Hòa (1957:133) is to classify kinship terms. In addition, according to Nguyễn Dình Hòa, there are some occupations classified by $ngu\dot{\sigma}i$. He lists rickshaw man, worker, artisan and cook as professions classified by $ngu\dot{\sigma}i$. Other occupations are classified by different classifiers in Nguyễn Dình Hòa's scheme, but except for what seems to be a white collar versus blue collar division the reasons for separating different occupations is unclear. Lastly, it seems that $ngu\dot{\sigma}i$ is the form that is used when there is no reference in the context or text of the age and sex of the person. Accordingly, there is a whole set of nouns such as 'inhabitant', 'citizen', 'foreigner', 'friend', 'guest', etc., which make no reference to certain kinds of social characteristics, and these nouns are classified by $ngu\dot{\sigma}i$.

The người form may be related to the forms found in some of the North Bahnaric languages and in the Rongao dialect of Bahnar (Central Bahnaric). As noted in the discussion on Bahnaric, the Palaungic form for 'eye' *?ngaay (Diffloth p.c. 1982) is related to Vietnamese and it is likely that Palaungic and Vietnamese are related to Bahnaric.¹²

Vietnamese has a very elaborated system for classifying humans, including separate categories for children. In Vietnamese, the form *dứa* is used to denote 'young persons of unspecified sex' (Nguyễn Dình Hòa 1957:140). Included in this category are forms such as 'younger sibling, child, grandchild, niece/nephew' as well as the word for servant. Nguyễn Dình Hòa (1957:146) says the form is for low status adults, but there are not any other examples besides 'servant'.

In Vietnamese, numerous kin terms function as classifiers. Moreover, their usage in the classifier system is related to their usage in the pronominal system in which kin terms refer to non-kin. The family in Vietnamese society is the major social unit whose structure is also used to order other kinds of social relationships. As a style of elaboration in classifier systems, the use of kin terms is unique among the Mon-Khmer systems. This set of kin based classifiers is smaller than the set of pronouns, which is smaller than the set of kin terms. Table 3.15 shows Vietnamese kin terms. The forms which have an extended pronoun usage, i.e. also refer to non-kin, are marked with an X (Cooke 1968). Those forms which according to Nguyễn Dình Hòa (1957), Thompson (1965), and Shafer (p.c. n.d.) can also be used as a classifier are marked with an O.

Table 3.15: Vietnamese kin terms

Lineal consanguine terms

generation	male	neutral classification	female
5		tô	
4		sớ	
3		(XO) $c\delta(c\mu)^*$ 'great-grandparent'	
2	(XO) ông 'grandfather'		(XO) bà 'grandmother'
1	(X) cha/bê 'father'	1	(X) me 'mother'
older	(XO) anh 'older brother'		(XO) chi 'older sister'
EGO			
younger		(XO) em 'younger sibling'	
1	_	(XO) con 'child'	
2		(X) cháu 'child's child'	
3		chất	
4		chít	
5		chut	

^{*} These are dialect variants.

Collateral consanguine terms

1	(XO) bác 'father's older brother' (XO) chú 'father's younger brother'		(XO) cô 'father's sister'
EGO 1	(XO) cậu 'mother's brother'	sibling terms + họ (X) cháu (họ) 'sibling's child' cháu 'sibling's childs' child'	dì 'mother's sister'

Affinal terms

1	giương (rể) 'parent's sisters' husbands'		(XO) bác (dâu) 'father's older brother's wife' (O) thím (dâu) 'father's younger
			brother's wife' (X) mợ(dâu) 'mother's brother's wife'
EGO 1	(con)rể	sibling terms + <i>rễ</i> , <i>dâu</i>	(con) dâu
	'daughter's husband'		'son's wife'

Of the lineal consanguine kin terms, seven of the forms are used as classifiers. Có/cu is used for very old people and hence for people rating great respect. It is possible for this form to be preceded with ông or bà when one wants to specify the sex of the person involved. These two forms mean 'grandfather' and 'grandmother' respectively and are among the most frequently employed kin terms in the classifier system. Nguyễn Dình Hòa (1957:135) says that these two forms can be used instead of người to classify some relatives, i.e. aunts, sisters and uncles and brothers. By using this form, one increases the amount of respect one is paying. Nguyễn Dình Hòa cites ông as used for men over 30, Cooke for men over 40. Bà seems to be used with women of the same age. They occur with royalty and are used for gods, goddesses and deities. These two forms also occur with a wide range of occupations and professions: doctors, priests, scholars, mayors, midwives, and sorcerers. Women in Vietnamese society take on their husbands' status, so it is possible to find a woman classified by bà and then referred to by her husband's title. For example, take:

một bà đồc one grandmother doctor 'a doctor's wife'

However, it is not just one's occupation or wealth that determines the use of these two forms. It depends on age, marital status and other kinds of behaviour that deserve respect. Therefore, these forms are also used with shopkeepers, peasants, and beggars. These forms are also more formal in pronominal usage and can be applied to younger people if one wants to be formal (Cooke 1968:135).

Chị and anh, 'older sister' and 'older brother' respectively, are counterparts in the classification system. Thompson (1965) cites them as referring to inferiors. However, Nguyễn Dình Hòa (1957:137) cites them as referring to 'poor people', generally of 'rural origin', of 'lowly trade', but 'honest'. This means for example that blacksmiths and vegetable sellers are classified by these forms. Some of these occupations could also occur with người if one were not marking sex. In

pronominal usage, they are for unmarrieds (Cooke 1968:135). This may also be true of their use in classification, but not necessarily.

Em means 'younger sibling' and classifies children, for example, school age kids. Sex marking for siblings younger than one's self (and for one's children) is neutralised in the Vietnamese system. Therefore, em classifies children of either sex. Along with chi and anh, it forms the set of words used to refer to one's siblings in the kinship system.

While the lineal consanguine term *con* refers to one's own children, unlike the other kinship terms its main function in the system is not to classify humans, but to classify animals and other animate 'inanimates'. For this reason it will be discussed further in the section on the classification of animals.

Of the collateral consanguine kin terms, four of them are used as classifiers according to Nguyễn Dình Hòa. Three of them, $b\acute{a}c$, $ch\acute{u}$ and $c\^{o}$, the terms for one's father's siblings, he reports as being employed in the same kinds of situations as $ch\acute{t}$ and anh. That is, it is for 'poor', in 'lowly trades', but 'honest' people. For example, these forms are found with the words for 'barber' and 'ferryboat driver'. $Ch\acute{u}$, father's younger brother, is also specifically used for males at the lowest ends of ranked occupations. For example, it is the classifier for 'Buddhist novices' and 'army privates'. $Ch\acute{u}$ is also used for alien residents, especially Chinese or Indians.

 $C\hat{o}$ (cu), father's sister, is frequently paired with $c\hat{a}u$, mother's brother, to be used for young unmarried people. The forms are associated with students and with some occupations that children of officials tend to go into.

Only one affinal term is used as a classifier in the Vietnamese system. It is thim, father's younger brother's wife. As a classifier it refers to Chinese women and should be seen as paired with the same usage of chi, father's younger brother, for Chinese men.

One noticeable difference between the set of kin terms used as pronouns with extended meaning and those used as classifiers is that the terms 'father' and 'mother' participate in the former system, but not in the latter. However, even in the pronominal set, their usage is restricted. But another noun which is frequently used for fathers also participates in the classifier system and the pronominal system. This form is thay, which means 'master, teacher'. As a classifier, it is used to count people in most of the same occupations that ông can be used for. However, thay is appropriate for younger members of these professions.

In Vietnamese the kin system of classification and pronominal usage is not strictly referential, but exaggerates people's status. For instance, take the case of ông and bà. The people to whom these items refer when counting do not have to be of grandparents' age. Even those of lower status as long as they are adults are treated as older kin. Cooke says of the Vietnamese pronominal system as a whole: 'Vietnamese stands apart from Siamese and Burmese in its exaggeration of status usage and on its restriction against addressing lower social classes as inferior' (1968:149).

The set of morphemes that makes up the kinship system in Vietnamese is drawn from Mon-Khmer, Chinese and Thai sources. Of the elements we have discussed here, according to Benedict (1941), $c\hat{\sigma}$, $\hat{o}ng$, $b\hat{a}$ and $ch\hat{i}$ in the lineal consanguine set are Chinese. However, according to Diffloth (p.c. 1982) $\hat{o}ng$ has cognates in Bahnaric languages: ?ong Bahnar, ?oong

'sir, father-in-law' in Sre and Mnong, ?ong 'son-in-law' in Halang, Rongao and Jeh. So it is more than likely that ông should be considered Mon-Khmer. con is also Mon-Khmer. anh and em according to Benedict are neither Chinese nor Thai. Of the collateral consanguine set, bác, cậu and cô are all Chinese. Only chú is Mon-Khmer. Thím, the one affinal term in the classification systems is also Chinese. 14

Of the borrowed Chinese kinship forms that occur as classifiers in Vietnamese, none of them have this function in Chinese. Neither do any of these Mon-Khmer kin terms show up as classifiers in other Mon-Khmer systems. Although in Palaungic, Monglwe used the form $kw\bar{\imath}n$, 'father', to count people, elaborating the whole system of human classification through kinship extension is unique to Vietnamese in the three Austroasiatic subfamilies described here. The only other language in the area with the same style of counting is Nung, a Tai language spoken in Vietnam (see Saul 1965). However, the Tai classifiers are not borrowings but parallel developments in cultures sharing the same concerns.

According to Nguyễn Dình Hòa (1957), there are numerous other forms used for human classification that are not kin terms. ¹⁵ The large size of the set he cites is possibly due to the fact that he has confounded classifiers with compounding forms and that Sino-Vietnamese forms are mixed in with non-Sino-Vietnamese forms. It may be in fact that the first mixture is quite reasonable depending on whether classification should be treated as a separate word class in Vietnamese. In the latter case, however, it would have been extremely useful had he indicated the sources of these forms. Sino-Vietnamese is a more learned style of language in which there is 'greater complexity of sentence structure' and 'the use of a special vocabulary, nearly wholly of Chinese origin (to a large extent pseudo-compounds)'. It occurs 'mainly in written texts of a formal nature. This includes most newspaper writing, as well as formal letters and both popular and more scholarly books' (Thompson 1965:310).

Here the additional classifiers for humans that Nguyễn Dình Hòa lists will only be briefly characterised. There are several classifiers used to refer to office holders, heroes and kings. These forms mostly seem to be Sino-Vietnamese. Among them are:

trang for heroes

vi for officeholders and outstanding characters

viên for officeholders¹⁶

bực/bậc

đứng/đấng for heroes and monarchs

Some of them, i.e. burc/bac and vi are words meaning 'rank', 'rung', or 'position'. These forms resemble in meaning, but not in phonological structure or in origin, some of the Khmer classifiers.

There are a couple of archaic forms, *chàng* and *nàng*, which are used to classify respectively young men and women of reputable character. The usage of these forms seems to partly overlap with $c\hat{a}u$ and $c\hat{o}$ of the kinships terms, except that in the case of *chàng* and *nàng*, the people do not have to be unmarried.

Thăng, another form for young people, is used to refer to those on the other end of the social scale from chàng. According to Nguyễn Dình Hòa, it is used for young boys of low social status.

It is generally derogatory in usage and is paired with the use of con for low status women that is described in the next section. There are a couple of forms according to Nguyễn Dình Hòa that are particularly for women who are marginal to the society: a for women associated with opium and sex and mu for contemptible women. It may be that both these forms are Sino-Vietnamese.

There are two other forms that Nguyễn Dình Hòa lists which occur in his article with Sino-Vietnamese nouns but may not themselves be of Chinese origin. One is *tay* meaning 'hand, arm, person' that occurs with artists and artisans. Nguyễn Dình Hòa cites another form as the Sino-Vietnamese equivalent of *tay*. The other is *nhà*, which means 'house and family'. It is used with monks, experts, and authorities.

There are four other forms that Nguyễn Dình Hòa includes in his list of human classifiers in Vietnamese. Three of them are for crooks and the like. All of them seem to be somewhat equivalent in their lexical meaning. They are:

dô 'individual, undesirable male' (Chinese) – crooks and thugs

quân 'band, individual' - crooks ruffians, and rebels

tên 'name, personal name' – crooks, rebels, etc.

gã 'individual, young man' – wood cutters and Don Juans

With the numerous other forms that Nguyễn Dình Hòa gives, it still seems that the majority of the Vietnamese forms are not classifiers in Chinese. The form v_i is the only one that looks solidly to be a Chinese classifier. In both ancient Chinese and contemporary Chinese, there is a form $w \ge i$ which means 'rank' in earlier stages and 'place' later on. In both cases, it classifies people. The Vietnamese form v_i , as we saw earlier, also means 'rank'. Another form that is possibly borrowed from the Chinese system into the Vietnamese one is the Chinese form $d \ge i$ which means 'class' and occurs in both ancient and modern Chinese. It classifies people, and in earlier times, also applied to degrees, army and social classes, etc. It resembles the $d \le i$ form. Other forms that are Chinese loans to Vietnamese appear to be innovations in the classification system in Vietnamese.

3.1.8.4 Styles and sources for non-human animate classification

In Vietnamese (see Table 3.16), there is the classifier con for animals and other living beings including fish, insects and reptiles. In addition, included in this class are gamblers, whores, hostages and sick people. This usage would seem to have the function of marking such peoples as less than human¹⁷ or at least less than a healthy adult human, since the form means 'child'. Also in this class can be spirits, monsters, and ghosts. The classifier con also classifies images of animate beings. For example, it classifies kites just as $t\bar{o}$ did in Gold Palaung. However, in Vietnamese, it seems that images of other animates, including effigies and dolls, can also be classified by con. On the other hand, a sculpture of a deity can be classified by $c\acute{a}i$. In the Palaungic system, what form classified an image was determined by the object it represented, not by the fact that it was a representation. This does not appear necessarily to be so in the Vietnamese system.

Table 3.16: Classifiers for some animates in Vietnamese

con 'child' for animals in general; some people; some inanimate items cái 'object, thing' general classifier for inanimates; may include some living creatures thớt specific classifier for elephants; also rafts and gardens for tigers, elephants and whales in proverbs bác; chú, 'uncle' for elephant; for small rat

Also included among the items classifed by con are the following body parts: eye, pupil of eye, heart (if alive) and penis. This appears to be a result of these body parts being considered more animate or more lively than other parts. The classifier for the corresponding female organ, vagina, is cái, the general inanimate classifier. In addition, the eyes are perhaps seen as images of the soul. We have seen that forms for 'pupil of eye' are found as classifiers for humans in Bahnar and Vietnamese. These words are often glossed as 'person', so there is no doubt of an animacy interpretation of 'pupil of eye'.

Numerous other items that are included in this set fall into what appear to be groups of items related to each other. The inclusion of digit, figure, number, postage stamps, seals, chess pieces and cards may all be due to their function as symbols and images or because they might have images on them. This interpretation is like the one for the class of images that occurs in Khmer. On the other hand, chess pieces and cards are part of a larger group of items, including dice, spinning tops and teetotums (tops and a letter T symbol used in a game) which are all props for games. Some of these are also objects used by gamblers, people who are included in this class.

The con class also includes words referring to pathways, both waterways and non-waterways. However, water is the main focus in this case. Besides the waterway itself, dikes, which can be paths, and tides of water are classified by con. Reservoirs and sewers are cái, as are lakes. Oceans and seas are unclassified. The size of the body of water and whether or not it is artificial seems to affect its classification. Huỳhn Sanh Thông (p.c. 1984) says that smaller rivers are seen as children while main rivers as opposed to tributaries are cái, the mother. Cái also means to be female. In addition to waterways, vehicles for traversing them are also classified by con. Boats, oars and punting poles all belong in this set, but not sails.

The last set of items that are related to each other in the *con* class are those having to do with weaving. There is 'spindle', 'shuttle' and 'hank of skein of silk'. A knowledge of the role of these items in stories, etc. might help to explain their occurrence in this class.

'Knife' and 'stick of Chinese ink' are the only two items left to be dealt with. The ink is perhaps due to its use with stamps. The reasons for the inclusion of 'knife' are unknown. Other instruments such as hammers, swords, spears, handles are all classified by *cái* or other classifiers.

The choice to employ the classifier *con* with the set of items discussed above is not without some flexibility. A comparison of the set of items classified by *con* in Nguyễn Dình Hòa (1957)

and in Nguyễn phú Phong (1975), with those given to me by N. Shafer (p.c. n.d.), shows some variation. The classification of animals appears to be the most inflexible. Shafer always uses it. However, Nguyễn Dình Hòa claims that a few living creatures, i.e. insects such as ants, bees, lice, mites can also be classified by cái. Pests then are on the margin of this category. Nguyễn phú Phong (1975:5) describes this change as a way to 'abaisser la fourmi au rang d'une chose insignifiante'. However, according to Nguyễn phú Phong, one also finds cái cò in popular poetry. cò means heron. In this case, cái is used to indicate a feminine bird. Huỳhn Sahn Thông (p.c. 1984) says that cái cò means 'mother heron'.

The classification of the body parts 'eye' and 'pupil of the eye' were only with *con* in both sets of examples. The same is true with the categories of people and with postage stamps.

There is a great deal of variability in the classification of *con* on waterways and associated objects. For boats, classification by *con* is not obligatory. They can be classified by *chièc* which is the classifier for vehicles. In fact, Shafer used only this form and not *con*. Perhaps there is a stylistic difference between the use of the two forms. Nguyễn phú Phong (1975:4) says that the choice is 'sans changement semantique ou avec changement imperceptible'. The same holds true of the choice between classifying street with *con* or *cái*, according to Nguyễn phú Phong. Unlike boats and streets, the classification of 'stream' and 'river' by *con* seems much more solidified. However, for 'river' only, according to Shafer, it was possible to use *dòng* which means 'course, current'. This is for use in more literary genres, however, and was not her first choice.

For several of the other objects, data from both Shafer and Nguyễn phú Phong indicate that choices besides con are often available, but not necessarily without a change in meaning. In most of the cases, the other choice for a classifier is cái. Cái can be used with knife, spindle, top, seal and digit. In the case of the later three nouns, there is a shift of meaning. With top, it may mean that it is not spinning. The form for digit can mean fate, when classified by cái, and the one for seal can mean spot or stain. 18 Other forms that can be classified by other classifiers are the form for 'chess pieces' and the one for 'skein of silk'.

The word con has three meanings in addition to its function as a classifier. It means 'child', 'to be small or young', and 'a girl up to the age of ten'. It is one of the numerous kinship terms that is also employed in the classifier system. Among this group of forms, con is the one which refers to the youngest humans. It is not a form that is used as a classifier for animals in other Mon-Khmer languages. In this sense, it is unique. However, con is a common Mon-Khmer cognate for child.

3.1.8.5 Specific animals

There are a few animals which can be classified separately due to their respected nature. One of these is the elephant. In Bahnar, as was described above, elephants had their own classifier. In Vietnamese, there is also a special classifier for elephants: thớt. However, in Vietnamese, this

form is also used to classify 'gardens' and 'rafts'. According to Huỳnh Sanh Thông, *thớt* means 'saddle', and rafts, like wooden saddles, are wood blocks that are flat.

Nguyễn Dình Hòa (1957:136) claims that $\hat{o}ng$, which means grandfather, can be used to classify certain animals like tiger: e.g. $\hat{o}ng/ba/mu\sigma i = \text{grandfather (lord)/three/ten (three ten = thirty = the tiger rather than using the name). In addition, it is used with whales, elephants and several other words for tiger. The usage here is found 'in proverbs, sayings and folk literature' where the nouns denote 'personified or deified animals'. The same type of usage is possible with the forms <math>b\acute{a}c$ for elephant and $ch\acute{u}$ for small rat which refer in the kinship systems to 'father's brothers'. This usage has some parallels to that in Lamet for buffaloes, but neither the form nor the frequency of usage is the same.

None of the forms for animal classification have any counterparts in the Chinese system, nor in any of the other Mon-Khmer languages have these forms been found as classifiers for animals.

3.1.8.6 Mường

Of all the Vietnamese classifiers discussed above for the classification of animates, dúa 'individual' for children and low status adults is the only one attested in the available Murong data. As in Vietnamese, Murong does not use classifiers with additive noun phrases (see Chapter 1 for definition) or with some compound nouns. In spite of a fair number of examples of numeral noun phrases whose referents were human, in the Murong data there were not many examples of classifiers.

3.2 Nicobarese subfamily

3.2.1 Styles of animate classification

The style of classification for animates in Nicobarese follows patterns found elsewhere in Mon-Khmer. Again, there is a separate class for humans. However, there is an interesting variation in Car Nicobarese, which has a special classifier for children and offspring. This special treatment has been found only in Vietnamese and Murong and in some of the Bahnaric and Katuic languages. However, the nature of this classification style in Car Nicobarese is different from that in some of the other Mon-Khmer languages. While Vietnamese and Murong have a separate class exclusively for children as Car does, the Bahnaric and Katuic languages include children with other items. In addition, of the Bahnaric and Katuic languages in question, this style of classification seems obligatory only in Brou and Pacoh (Katuic). (See Table 3.17).

	humans	spirits	children offspring	animals	things cylindrical
Car Nicobarese	taka	->	manik	<	nong
Central Nicobarese	kōi/ (tat-kōi) yūang/ (tat-yūang) tat		> ? > ?		nōang

Table 3.17: Animate classifiers in Nicobarese

Non-human animates are classified according to Style 3 in the inanimate category. Here again, as we saw in Bahnaric and some Palaungic languages, the cohering principle is shape; however, the dimension involved here is not round, but cylindrical, both long and round, according to Man (1887:xiv).

3.2.2 Sources of the classifiers

The two human classifiers in central Nicobarese whose meanings are known to me both refer to round objects: kōi is a Mon-Khmer cognate meaning 'head' and yūang means 'fruit' according to Man (1887:xiv). The use of 'fruit' to classify humans is a new metaphor. Words meaning 'fruit' have only been found in other Mon-Khmer languages with round objects. As we have seen above, morphemes meaning 'head' are found in several Mon-Khmer languages for animates. However, in these cases, they are used for non-human animates and for slaves. In Man's data, there is not enough information to discern any difference in the application of all the alternative forms cited in Table 3.18. As can be seen in the table, there are three basic forms for humans in Central Nicobarese: tat, koi and yūang. The tat form can then be compounded with the other two. In the list of humans classified by these various forms in Man, one finds yūang and tat-yūang with foreigners: Burmese and Malay. kōi and tat are found with children. However, it is not possible to say whether the two yūang forms with non-Nicobarese is a pattern or just coincidental in this small set of examples. One interesting use of these classifiers is with images of humans. Man (1887:xiv) points out that 'kareau', carved wooden figures of women and men that are meant to scare away demons, can be classified by these various human classifiers. This use is similar to that in Gold Palaung (Palaungic) but not Khmer or Vietnamese.

The manik form, classifier for children in Car Nicobarese, is also found in Semang (Aslian). There the form is mani? However, it is not a classifier in Semang, but a noun meaning 'human' (Skeat and Blagdon 1906:653, #M23).

3.3 Aslian subfamily

3.3.1 Styles of animate classification

The Aslian languages, as can be seen in Table 3.18, follow Style 2 of having humans classed separately. However, it also appears according to data in Skeat and Blagdon (1906), that in some Aslian languages, it is possible to use Style 1, that is, to use the same classifier for both humans and animals. This is for the most part an unusual style in Mon-Khmer unless the form is meant to be disparaging for humans. The only other language in which this seems to be the general pattern without disparagement is Angku (Palaungic). Unfortunately, there are not enough data described in Skeat and Blagdon (1906) to know whether the inclusion of people with non-human animates is neutral in nature or not in Aslian.

animals, fowl, etc. humans Jahaic (?) Semang of Ulu Siong kěbök 'fruit', 'tail' Senoic Temiar (Sakai of Plus River Valley) ê-kur 'tail' -(probably) Lanoh (?) (Semang of Plus River *katek* 'tail' -(probably) Valley) Semai mmom Semelaic Mah Meri (Besisi of Sepang) ikur/kur 'tail' -(probably)

Table 3.18: Classifiers for animates in Aslian*

3.3.2 Sources of the classifiers

Two of the classifiers for animates mean the same thing, 'tail'. The *ekor* form which is cited as both 'tail' and 'body' in Skeat and Blagdon is also found in Malay (Austronesian) as the classifier for animals. The various Aslian languages which have borrowed this form from Austronesian do use it in the typical Austronesian style for animals. However, as mentioned above, the languages cited in Skeat and Blagdon (1906) use the form for humans also. This is not the style in Malay or other Austronesian languages where they have a separate classifier for humans: *orang* 'person'. The other 'tail' form, *katek*, is a Mon-Khmer cognate (Diffloth, p.c. 1982). This Mon-Khmer form is used like the borrowed Austronesian one in that it is also for humans (in the Skeat and Blagdon data).

^{*} All the data for this subfamily are from Skeat and Blagdon (1906) except for the Semai (Senoic) data, which is from Diffloth.

Another form, kĕbök, found in Semang of Ulu Siong, according to Skeat and Blagdon (1906) means 'fruit'. However, they also claim that in enumeration it means 'tail'. This shift is strange. Most likely the gloss 'tail' is just meant to indicate its usage with animals.

3.4 Conclusion

Reviewing just one small part of classification systems in Mon-Khmer languages, i.e. the classification of animates, has revealed a diversity of styles and forms. All except Angku (Palaungic), and perhaps some Aslian languages, have a separate classifier for humans. As reported in Adams and Conklin (1973), this is the style found throughout most of the language families in South-East Asia. The majority of the forms for classifiers for humans in general are drawn from nouns meaning 'body', 'person', 'individual' and 'man'. Many of these forms are native and in fact in Kantu (Katuic), there are even infixed forms, a typical Austroasiatic process. However, only a few of these forms, native or not, are shared across or even within the subfamilies. There is the *ki? form in Palaungic and Mon; the nak form in Khmer, Sre (South Bahnaric) and Katuic; and the *ngaay form in many North Bahnaric languages and in Palaungic and Vietnamese. The nak form may or may not be native.

Besides sharing forms, it is also possible for the languages to share metaphors. As mentioned above, many languages draw their classifiers for humans in general from nouns with similar meanings, for example, 'person'. This is not unusual in Asian classifier systems. Both Tai and Austronesian languages have done this. However, the most interesting metaphor has to do with nouns meaning 'head' and 'body' or related concepts as applied to classifying humans and animals. The same forms show up in other language families, but used differently. For example, in Burmese, as Becker (1975) reports, two of the classifier forms for animates are the nouns 'head' and 'body'. However, in this case, 'head' is the form used for relatively high status people, and 'body' is the form used for animals and derogatorily for humans. In addition, in Tai, tua, which means 'body', is also used for animals and derogatorily for humans. On the other hand, in several classifier systems in Mon-Khmer, one finds the reverse. The preceding discussions of Khmer and Munda make note of some classifiers for animals which mean 'head'. In addition, some Bahnaric languages have forms meaning 'head' to classify animals (see Tables 3.11, 3.12). In Chrau and Mnong Gar (South Bahnaric), one finds the same morpheme, 'head' vôq, for animals. In Bahnar (Central Bahnaric), another form meaning 'head' is used derogatorily for humans and for animals. There, one finds a morpheme meaning 'head' or 'summit' used for bonded people and animals with a similar value. On the other hand, in several Mon-Khmer languages, one finds classifiers meaning 'body' to refer to humans in a non-derogatory way. Khmer is one language that has a completely reversed system. It has the morpheme meaning 'head' for some animals. In addition, Khmer has ?ong(k) and tu:ə, both meaning 'body' to classify humans - in the case of ?ong(k) for high status humans. Besides Khmer, several languages use a classifier meaning 'body' for humans, even though they do not use a 'head' form for animals. The *ki? form found in Gold Palaung, En, Son, Wa Kengtung, Drage's Wa, Davies' Wa, Bible Wa and Kawa of Palaungic and in Mon means 'body' as well as 'man' and is the general human classifier. Also in Kantu (Katuic), the general classifier for humans is an infixed form of another morpheme meaning 'body'. Related to this reversal of head/body metaphor, in

Aslian, several languages have morphemes meaning 'tail' as the classifier for humans as well as animals. Very interestingly, the Austronesian languages from which some of the Aslian languages borrowed the tail classifier, do not use the classifier for humans, but for animals only.

Of course, not all the classification systems in Mon-Khmer, Aslian and Nicobarese work this way. There are some that show the head/body metaphor as in Burmese. For example, in Nicobarese, one of the variations of the classifiers for humans means 'head'. In addition, some Bahnaric languages and Vietnamese have as their general classifier for humans a form meaning 'pupil of the eye'. Here, a different upper body part is used to classify humans. Also several languages have a form meaning 'body' for animals. However, those languages which use 'body' to classify animals in Mon-Khmer all seem to have the borrowed *tua/to* form from Tai. We also saw in Khmer a form meaning 'tail' used for fish and in Aslian 'tail' can be used with animals as well as humans.

As with most of the data to be found in the Mon-Khmer classifier systems, one cannot really use it to argue sweeping generalisations. The contrast of the head/body metaphor between Mon-Khmer languages and Burmese systems is extremely interesting. However, it is not possible to claim that this is a widespread and original metaphor in numeral systems in Mon-Khmer. One problem was mentioned above: several languages do not fit the system. Another problem is that the reversed body/head metaphor is not found complete in any language except for Khmer. But even there, the classification of animals is marginal, only for livestock, and, in contrast, fish can be classified as 'tails'. An argument for a reversal in Mon-Khmer of a typical South-East Asian pattern might be possible if the metaphor were to be found in other units of language use and social behaviour. On the other hand, it is also possible to argue that this use in Khmer and other Mon-Khmer languages is just coincidental. The idea of classifying animals by 'heads' can be found worldwide, e.g. 'a head of cattle' in English. This similarity could be attributed to a common human experience of using body parts as metaphors for many things including for basic shapes. The use of 'head' for animals is also found in Chinese. Here, t'ou² is used for animals, slaves, and kids, much like the form in Bahnar (Central Bahnaric). 19

The few languages in Mon-Khmer for which there are elaborated systems show little resemblance to each other, except for those languages that belong to the same subbranch. In Palaungic, the elaborated systems in Gold Palaung and Drage's Wa and Lawa are all based on religious notions – mostly on distance from Buddha, a concept that was borrowed from non-Mon-Khmer cultures. The pre-revolutionary Khmer system may be related to Palaungic in the concepts that are used to determine the categories, but the forms are not related. The Palaungic forms are most likely borrowed from Burmese via Shan, and the Khmer are borrowed from Sanskrit. Again, the development of the categories most likely is independent.

Also in Khmer, one finds the concept of image to be important, as it is in Palaungic, Vietnamese and Nicobarese. However, in Palaungic and Nicobarese, image and reality are treated as the same; in Khmer and Vietnamese as separate categories. Khmer also considers people by rank as does Vietnamese. However, again, there are not shared forms: the Khmer are from Tai; many of the Vietnamese from Chinese. Their existence in both these languages seems to be mostly from similar experiences in class structure.

Mon, according to some sources, also has an elaborated system. Here, monarchs are treated separately, as are other people of economic and social power, i.e. governors and masters. However, the forms found in Mon are not related to any of those in the other languages.

Further interesting elaborations are in Bahnar and Rongao (Central Bahnaric) dialects and in Vietnamese. The Bahnar and Rongao systems elaborate according to value, but a very different kind of value than the one found in Mon. Here, value is based on the social system of these groups where slavery, jars of goods and other valuable items are a part of day to day life. The classifiers used in this system for the most part are native forms. In Vietnamese, on the other hand, many of the categories are based on qualities associated with the roles of family members. Even though many of the forms in Vietnamese are borrowed, their usage in this system is original, as is this style of elaboration in Mon-Khmer. Only in Lamet and Monglwe (Palaungic) were there a couple of examples of kin forms used. Perhaps more data would have shown this style as more common in Mon-Khmer.

Interestingly enough, it is not unusual for the borrowed forms found in the Mon-Khmer systems originally to be other than classifier forms. In Palaungic and Khmuic, one does find borrowed forms that were originally from classification systems in the donor languages, for example, Tai languages and Tibeto-Burman languages. However, in Khmer, Vietnamese and Bahnaric, there are several forms borrowed from languages unrelated to each other such as Sanskrit, Austronesian and Chinese. In many cases, these borrowed forms were not originally classifiers; in fact, Sanskrit is not even a classifier language. In addition, as we have seen in the above discussion, in Palaungic and Khmuic, even when borrowed forms are classifiers, the systems may be simplified and restructured.

The classification of non-human animates is an extremely varied phenomenon in the Mon-Khmer, Aslian and Nicobarese languages. In some cases like Khasi or in some languages with general classifiers, non-human animates are not important as a group; they are just part of everything else that is not human. In other cases, non-human animates are classified separately. This is true of all those languages that have the borrowed tua/to form except Khmer which has this form but not for the purpose of classifying animals. But in other languages without borrowed forms, one also finds these categories; for example, Mal (Khmuic), Chrau and Mnong (South Bahnaric) and Vietnamese. One also finds non-human animates grouped with other subjects, mostly on the basis of shape. This was common in Palaungic and Bahnaric where they were associated with three-dimensionality or roundness. In Nicobarese, it was with length and roundness. In Bahnaric, and in Pacoh (Katuic), we also saw extensive use of shape for coldblooded creatures. As mentioned in Chapter 1, this is not an uncommon way of treating coldblooded creatures in classifier systems. What is interesting here is that in Bahnaric the forms can also apply to immature warm-blooded creatures like dogs, cats and sometimes humans. In a few cases important animals had their own classifiers - for example, buffaloes in Lamet (Palaungic) and elephants in Bahnaric. In a couple of cases, live animals were distinguished from dead ones. Also, animals were associated with function in Mon and with value in Bahnar (Central Bahnaric). Many of these forms are native, but there are different native forms following different patterns.

NOTES

- 1. Much of the information in this chapter on the classification of humans is also discussed in Adams (to appear). However the material on humans in this text is a revised and reconsidered version of that paper which was originally presented in 1979. In this text, the term animacy refers only to humans, mammals, fish, fowl and insects. A discussion of the classification of trees and plants is not included here even though they are perceived as animate in Mon-Khmer cultures. Since they are frequently included in classes with inanimates, I have chosen to treat them in the later chapters. When there is special treatment, it will be noted.
- 2. The data that Svantesson supplied only include three classifiers. He had examples of counting animals so there is always the chance that they are treated differently in U.
- 3. There is a special variation on the classification of animals in Gold Palaung to be discussed below.
- 4. To claim that all these forms classify ordinary people may be inaccurate. In several of the languages, Davies' Wa, La, En, Wa Kengtung, the only example was with the word 'man' and especially in the case of Monglwe where the classifier means 'father', it may be that the classifiers are restricted to usage with male humans. However, in the other languages besides Monglwe, the classifiers have a general meaning like 'body', 'person', so it has been assumed here that they apply more widely to all sorts of people in the above languages.
- 5. In several sources in the numeral phrases under consideration only the number and the classifier slot were filled. The noun slot was empty. Since the meaning of the classifier and the noun would have been the same, it has been assumed the noun was left out. This kind of deletion is well-known in other languages with classifiers, see Adams and Conklin (1974).
- 6. This discussion is not meant to argue that all instances of using animal terms to apply to humans is derogatory. This is not the case in Semai (Diffloth p.c. 1980). Also in Bahnaric (see next section) classifiers used for animals are also found used poetically for children.
- 7. Jenner and Pou (1981) also cite a classifier for elephant tusks, meka/meek/ 'branch' and bniata/pniiət/ 'paddock' for groups of eight elephants, but the latter is not a classifier in the sense used here.
- 8. Jeh (North Bahnaric) possesses a general classifier that is different in form from the other forms found in the other North Bahnaric languages. This form is sī. Since it is limited to classifying inanimates, it will only be discussed in Chapter 7.
- 9. Jenner and Pou (1981:276) cite a form in Khmer, (not a classifier), *crona/craaong* which describes dead animals and trees lying with their feet or roots up in the air, so this grouping is not unusual in Mon-Khmer.
- 10. Actually the dialect was unspecified, but other articles by the same author, Barker, describe this dialect, so I have assumed they are the same.
- 11. Benedict (p.c. 1986) disagrees with Diffloth's reconstruction of the meaning of this form. He believes it would have gone from the more general meaning 'person' to the more specific 'pupil of the eye'.

- 12. It should be noted here that Deloustal (1914) cites người as Chinese. However, the more recent data are the more reliable.
- 13. This style of referring to non-kin as kin is one of the reasons why Vietnamese refugees in the U.S. form new families of people who are technically unrelated. It is unthinkable in Vietnamese society to be without a family.
- 14. For a further discussion of the origin of the Vietnamese kinship system and for a list of the original Chinese forms, see Benedict (1941).
- 15. I am focussing on Nguyễn Dình Hòa's work because he has the largest set of forms. Other authors such as Emeneau (1951) and Deloustal (1914) also list some of the same items. Emeneau includes in his list, bàc, nhà and viên. Of the kin terms he also had ông, bà and con. Deloustal also lists thàng.
- 16. This form is homophonous with a classifier for nouns referring to items of regular shape, e.g. bricks, tiles, tables (and) Chinese ink. In Nguyễn Dình Hòa's dictionary, they are listed as separate classifiers.
- 17. Nguyễn Dình Hòa (1957:143) claims that the use of *con* with humans is not always derogatory, i.e. one can say *con ngưới* for human beings.
- 18. Nguyễn phú Phong claims that cớ, for a chess piece, and nước, for tide or water, can be also classified by cái with a complete change in meaning: cớ to flag and nước to country. However, Nguyễn Dình Hòa has these second references as separate entries in his dictionary.
- 19. A less meaningful argument against this being a wider spread metaphor is the occurrence of form with similar meanings that do not function in the animate aspect of the system. For example, in Khmu Yuan, one gets *kmpong* 'head, beginning' to classify bee nests and fields.

Chapter 4

CLASSIFICATION OF INANIMATES: THREE-DIMENSIONALITY

4.0 Introduction

One of the most common kinds of classes to be found in numeral classification systems after animate ones is a class based on three-dimensionality. As we have seen in Chapter 3, several languages in Mon-Khmer include animates in such classes. For that reason and because of its frequency in all kinds of classification systems, this class is the next to be considered. The use of the term three-deminsional needs explication since there are few objects that cannot be considered as having three dimensions. However, here this term is meant to apply to round or spherical items as well as to bulky items including even cube shapes – in other words, things that are seen as extended roughly equally in length, width and height. Also, in the discussion below items that are merely circles are included because the term 'round', which sometimes is the meaning of the classifier for these classes, can apply equally well to spheres or discs.

This chapter considers three-dimensionality from two points of view. First of all, it takes account of classes whose basis of classification is three-dimensionality, However, inanimates can be classified by many other dimensions besides shape: for example, function, material, natural kind, artifact and other culturally specific concepts. Therefore, in addition to describing classes that treat objects according to shape, the second purpose of this chapter is to look at how the same items found in three-dimensional classes can be viewed by other criteria. Characterised here will be the classification of items such as food like fruit, vegetables, tubers, eggs, grains and nuts; naturally occuring items such as stones, hills, holes, sun, moon, animates and some body parts; and cultural artifacts such as pills, pots and pails, baskets, toys, hats, jewellery and houses. All of the Mon-Khmer languages for which there are any extensive data have classifiers for many such items.

In spite of the number of items under consideration here and the variety of possible semantic dimensions by which such items can be classified, there are several types of classes which reappear in different Austroasiatic subbranches. One type of class appears to be based on shape and will be referred to as the fruit-plus class. Most of these types of classes cite first under the list of items classified fruit and vegetables. Then listed after that are different kinds of naturally occuring forms, including on occasion animates, and after that various kinds of artifacts. The emphasis on fruits and vegetables by giving them first as examples makes it seem appropriate to consider the qualities of these items as the original organising principles or metaphors in the class. This interpretation is supported by the fact that in some subbranches, the meaning of the classifier is also 'fruit'.

There are also classes that are just for fruits and vegetables. They also often have as their classifier morphemes nouns meaning 'fruit'. These classes are based on what has been called in Chapter 1 the 'natural kind' dimension. It is possible that such classes formed the basis for the fruit-plus classes described above if their principles of organisation shifted to shape.

A possible example of this shift may be seen in the meaning of some of the classifiers for fruit-plus classes. While, as was noted above, some of these classifiers mean fruit, a few of them are glossed as 'round'. Of the few languages that include animates in their general three-dimensional classes these classifiers are always glossed as 'round'. This could, of course, just be coincidental. However, it is also possible that as the types of items subsumed in a class increase in variety, the less appropriate is a morpheme with a very explicit meaning such as 'fruit'. It is possible then that the classifier morphemes may have had their original meaning shifted to a broader meaning with the broadening of the types of items in the class.

An important concept to keep in mind in all these discussions is that not all items in a class may be included for precisely the same principle. As a class grows and develops, the reasons for including new items in a class can change, generally (one would assume) in the direction of more general features.

Another kind of class based on three-dimensionality that occurs in some subbranches is differentiated from the fruit-plus classes by being limited to smaller, firmer objects. This type of class frequently has as its classifier a morpheme meaning 'seed' or 'grain'.

Other classes having to do with roundness can also be based on only the feature of two dimensions. That is, there are also classes for rings or circles rather than spheres. (These items are often classed together with spherical items.) Some of the classifiers for these classes have as their meaning 'to encircle' or 'ring'. Also there are classes for holes (or half spheres?). Many of these kinds of classes have as their classifiers morphemes meaning such things as 'hole'.

There are other classes for three-dimensional items based on what appear to be concepts of material and function. However, when the meaning of the classifier is unknown, one can only surmise the basis of the class by looking for similarities among the items in the class.

4.1 Mon-Khmer subfamily

4.1.1 Palaungic

4.1.1.1 Styles of classification

The one kind of class found throughout Palaungic is a general class for anything roundish. These general classes can all be considered fruit-plus classes since they are for the usual food items like fruit, vegetables and eggs in addition to many other objects, including man-made ones. Often these classes include large items both natural and man-made. For example in Drage's Wa the round classifier is found with gun barrels (round interiors) and hills in addition to the natural food objects. In Antidsel's Wa, it is found with pails and doors as well as being used with the sun and moon which in reality are large, but small to the naked eye. In Lamet, the general form is used with small objects like eggs and drops of spattered blood, but also with houses.

However, the three subgroups, Waic, Rumai, and Lamet do not have identical sets of objects in these classes nor do they use the same classifier morpheme. The major difference in the items subsumed in these classes is in the treatment of animates. In Waic, where all the languages share the same classifier for round items, *?()mrl/r (Diffloth 1977) this general class includes animals, in all but one of the languages. Lawa (Waic) does not count animals with *?()mrl/r because it uses the to/tua classifier borrowed from Tai for this purpose. In Gold Palaung (Rumai subgroup) and in Lamet, animals are also included in a borrowed to/tua class, not in the fruit-plus class as is the predominant Waic style. In addition, Gold Palaung and Lamet do not share the same classifier morpheme either with the Waic languages or with each other. Gold Palaung uses pong for round things and Lamet, plē.

Two of the Wa proper languages, Antisdel's Wa and Drage's Wa, in addition to the *?()mrl/r class, share another classifier for three-dimensional objects. However, this class, represented by the morpheme lon, may be for smaller and harder spheres. It is used to classify stones and spheres in Antisdel's Wa, and loaves of bread and perhaps more in Bible Wa.

Gold Palaung (Rumai subgroup) has a class that is also used for stones. The classifier for this class is kan-ang. What is interesting in this class is that it also includes carts, which makes it look quite different from the *lon* class in the Wa proper languages. Gold Palaung also has two classifiers, $kan-l\bar{u}m$ and $kar-l\bar{u}ng$ for lumps of things, including in the case of the latter form, pieces of amber and boots. So while stone-like items are generally a classified item in Palaungic, they show up classified by different forms and with different kinds of objects.

According to Izikowitz (1951) at least in one Palaungic culture, Lamet, stones are very important. They are used over graves to anchor spirits and are used to smear blood on for sacrifices. So their frequent mention as something to be counted is not surprising.

Gold Palaung, the largest data sample, also has other kinds of round classes. It has *gwong* for rings which can be considered as outlines. However, in Gold Palaung, other kinds of jewellery, like anklets and bracelets, and also body parts are classified by another form, *kon*. Gold Palaung also has a form *kar-vyang* which is for coils or circles of things.¹

Lastly in Gold Palaung, there are some separate classes for large bulky items that are frequently found in fruit-plus classes. There is $i-\bar{u}p$ for boxes, $h\bar{q}ng$ also for boxes, as well as rooms, weighing machines, bellows, carriages and coffins. Lastly, there is $kr\bar{q}ng$ also for rooms, boats, altars, and houses.

4.1.1.2 Sources of the classifiers

As mentioned above, the three different subgroups: Waic, Rumai, and Lamet, do not use the same classifier for the fruit-plus class. The Waic form *?()mvl/r, as was mentioned in Chapter 3, means 'round' (Diffloth 1977). This is the gloss that one finds also in Bahnaric for the general round classes that include animals. As was noted in the introduction, the meaning of this classifier may have to do with the very broad nature of the kinds of items included in the class.

In Lamet, the classifier for the general round class is a noun *ple* meaning 'fruit'. However, except for shape, there is little in common between the meaning of this noun and houses, which

are one of the items in the class. The inclusion of eggs and drops of blood also seem to be on the basis of shape. However, Izikowitz (1951) mentions that these two items are often used together for sacrifices to spirits, so there may be more than a shape connection in the minds of Lamet speakers for egg and blood droplets. This form for fruit is a native Mon-Khmer word and is found as a classifier in other Mon-Khmer languages; however, not in neighbouring languages as one might expect. The South Bahnaric languages, Mnong Gar and Sre, use it for fruit and other items, and Vietnamese and Mường use it as a fruit-plus style classifier. Also in Mon-Khmer languages this cognate commonly forms the names of the fruit from various plants. This usage of plē 'fruit' as a classifier has been borrowed by a non-Mon-Khmer language, Karen, where the form phlé also functions as a classifier for round things such as fruit, pots, and pagodas.

The source of the *lon* classifier for stones and spheres in Antisdel's Wa and loaves of bread in Bible Wa cannot be clearly identified. This Wa form is possibly related to the verb *luan* 'to knead, make a pot' found in the Bo Luang and Umphai dialects of Lawa. This would certainly explain the form in Bible Wa, but not necessarily the Antisdel's Wa form. It is also possible that the form may be borrowed from Burmese or another Tibeto-Burman language. The classifier for spherical objects in Burmese is *lôun*. The class in Burmese includes small round objects like fruit, seeds, grains, and pills, as well as pots and loaves of bread. But in addition it is used for all sorts of larger round objects like houses and mountains. While this class looks much like the fruit-plus type class, certainly this is not the function of *lon* in the Wa dialects. However, as we have seen happen before, it would not be impossible for the speakers to have limited the kinds of items included in the class when they borrowed it.

The Gold Palaung classifier for stones and carts, kan-ang, is also a Mon-Khmer form. This classifier is an infixed form of a noun meaning 'bone', 'seed', 'joint'. It has cognates throughout Mon-Khmer; however, it is not used as a classifier in any of the other languages, though in Bahnar it is found with groups of items. The connection between carts and stones based on the idea of 'joint', 'bone' is unknown to me.

The $gw\bar{\rho}ng$ form for rings in Gold Palaung is also found in Lawa (Palaungic), kuuang; and in Shan (Tai), kwang- 'ring' according to Shorto (1957). However, it is not cited as a classifier in either of these two languages. There are classifiers for rings in two other neighbouring non-Mon-Khmer languages. In Burmese, the form is $kw\hat{n}n$ and in Karen, kwo. Both these classifiers phonologically resemble the Gold Palaung form in their initials and in Karen, the vowel also is similar, but the finals are not. These two forms may or may not be related to the Gold Palaung form.

The other form in Gold Palaung for circles or coils of things is kar-vyang. This form is from a verb vyang meaning 'to go around'. In Khmer, there is a related form vùeng 'circle' that is also cited as a classifier for many things in a circle such as members of an orchestra. Since there were no examples cited with the Gold Palaung classifier, perhaps it too is for sets of items as the Khmer form is. This form resembles the form waing in Burmese, so it may be a borrowed form. The interesting aspect of both the gwong and kar-vyang classifiers is that both forms have a meaning similar to the items they classify. This is a fairly common pattern in classifier systems and is also found for humans as well as inanimates.

The only other Gold Palaung classifier for which a meaning is available in the literature is *krong*, the classifier for boats, altars, houses and rooms. The meaning of this form is 'back'. So here, the classifier refers to some part of the item classified; that is, one has an example of synecdoche. This concept is important for classifiers with all types of objects. For example, this is also the pattern sometimes found with animates when some body part, e.g. eye, is used to classify humans.

4.1.2 Mon

4.1.2.1 Styles of classification

Mon has a variety of classes which are based on three dimensions and roundness. There is one class which looks like a fruit-plus class. It includes fruits and the artifacts, pills and clocks. It is not clear from any of the data on Mon whether the classifier form for this class, $me^{?}$ [ma], can be used for larger items as is typical of fruit-plus classes in Palaungic. In addition, there is the mot [mat] class which is also used for pills. It may be that this class is more limited in its usage, perhaps for smaller, harder objects, since pill is the only item cited with it. Another classifier for some small hard round items is hakong [dakon, takon] for ears of grain and semiprecious stones and lumps of metal or nuggets. Halliday (1922) also cites haloe for lumps of things. However, Shorto (1962) only gives this as a verb form meaning 'to be hard' or 'to form a lump'. Mon also has an outline form just as Gold Palaung does. The form is halliday (1901) a classifier, halliday (1922) and Haswell (1901) a classifier, halliday (1923) and halliday (1924) and halliday (1925) and halliday (1926) and halliday (192

4.1.2.2 Sources of the classifiers

The mè? [ma] classifier for fruit, pills and clocks is a Mon-Khmer form. Diffloth (p.c. 1982) reconstructs it as *maa?, and its meaning is 'seed', 'kernel', 'pill', 'small round object'. Its meaning, along with the items cited with it, raises some doubt as to its similarity to the fruit-plus classes described in Palaungic. In the Palaungic classes, large roundish items like mountains and houses are included. In addition these classes usually draw their classifiers from nouns referring to larger round items like fruit. This seed, kernel concept is a very common source for classifiers, (see Khmer for example), but usually for smaller objects.

This *maa? form is also found with a prefix $(ka-m\bar{a})$ as a classifier in Gold Palaung (Palaungic). In Chapter 3, the form $ka-m\bar{a}$ was listed as a classifier for female cows and tools. As was noted there, it is also a gender marker in Gold Palaung. The prefix in Gold Palaung most likely means something female, so the meaning of the whole form is 'mother-seed' (Diffloth p.c. 1982). This example and the one following are both worthy of note for the same reason since what one has are languages in different branches using the same form for a classifier, but for an entirely different purpose. In the case of *maa?, 'kernel, seed', the association between the different uses in the two languages is not very close. In Mon, certainly the shape is important, and perhaps there is also an association of seed with fruit. However, in the Palaungic use of the prefixed form $ka-m\bar{a}$, shape plays no clear function. Here the female cow is a seed carrier. The

association with tools is unclear, unless as suggested in Chapter 3, some tools are associated with planting.

The mòt classifier for pills in Mon, as was mentioned in Chapter 3, is an honorific classifier for humans in Bahnar (Central Bahnaric). The meaning of this form is 'eye' or 'precious stone'. In the Mon case, the shape and texture, and perhaps preciousness is important for classifying pills. In the Bahnar case, the value of a precious stone and the association of a body part, eye, are the connections to humans.

The sèh [jreh] classifier for rings mean 'circle, ring' or 'quarter of citrus fruit'. As in the Gold Palaung (Palaungic) case, the classifier means the same as the item it classifies; however, the two languages do not use the same form. What is interesting about this Mon form is that it is used for individual items like rings; for parts of wholes, like slices of fruit; and possibly also for groups as one source cites it for things in circles. If this latter use is also possible then what one has is a class that overlaps three of the four possible types of categories of quantifiers and classifiers described in Chapter 1. This would make these distinctions mentioned there less reliable as criteria for distinguishing between types of counters. This information makes those notions worthy of rethinking.

The classifier for pit-like places, *letäng*, according to Haswell (1901) is a synonym for the things it classifies. He claims the form means 'hole'.

4.1.3 Khmuic

4.1.3.1 Styles of classification

All the Khmuic languages have the fruit-plus classifier, but in each case in the various Khmu dialects and in Mal different forms are in use. In the Khmu located in the south, which is described by Smalley (1961), Delcros (1966), the Maspéro (1955), one finds hnuey. In addition to foodstuffs like fruits and grain, this morpheme is also used with body parts that are of a three-dimensional nature: breasts, wombs, hearts, and pimples and swollen sores. Moreover, household items such as pots, baskets, seats, boxes and clothing such as hats are also placed in this class. This particular form is also found in the northern Khmu Yuan dialect. In addition to the examples in the other Khmu dialects, the household items mortars, bottles, pails and needles appear in Khmu Yuan; also the body parts eyes and kidneys, and the foods eggs and rice. Moreover, just as we saw in Palaungic with plē and ?()mrl/r, this form in Khmu Yuan is attested with all sorts of shelters: fieldhouses, houses, households, hunting huts, storehouses, barns and also termites' homes. Hnuey is not the only fruit-plus classifier, however. In Khmu Yuan a second form luuk` is found with the same kinds of items as hnuey.

A third form for classifying fruit is reported by Maspéro (1955) for the T'eng dialect. There, *mak* is used as a classifier for fruit and nuts when Tai numbers are employed. However, it is only for these foods, so it is not a fruit-plus classifier but one for natural kinds.

While Mal has classifiers for many of the same items as Khmu, as we saw in the classification of animates, Mal does not use the same forms with these items. In Mal the fruit-plus classifier is

le? It is found with all the same kinds of items as hnuey in the Khmu dialects and with the sun and moon, as ?()mvl/r was in Waic.

For a narrower range of items that are small and hard and perhaps of more regular shape, one finds koon in Khmu for pill shaped objects like pills and eyeballs. In Khmu Yuan, this form, koon, is given as meaning a small part of something and is applied to ingots, bricks, etc. Khmu Yuan also has a 'lump' classifier: kmlò which may be a part/whole form as it is employed with pieces of meat and bones. Mal has a different 'lump' classifier: ngui. It functions to classify stones and clouds. This form might be related to hnuey in Khmu; however, it is listed in Wajanarat as a group classifier so this makes it unlikely.

As with Mon, the Khmu described by Smalley also has a classifier for holes: *hntu*?. It is found with such things as windows and entrances. In Khmu Yuan, on the other hand, entrance is given as a repeater and the *hntu*? form is not cited.

In Khmu Yuan, there is a classifier for bracelets, pooy', that may or may not have anything to do with circularity.

In Mal, some of the other items normally classified by classifiers for three-dimensional forms in Mon-Khmer languages are found with the general classifier mo? or with repeaters: gong for holes, boh for mountains and deh for bowls.

4.1.3.2 Sources of the classifiers

The Khmu system for three-dimensional forms described by Smalley (1961), Delcros (1966), Maspéro (1955) for Southern Khmu and by Lindell et al. (n.d.) for Northern Khmu is again mostly a simplified Lao system just as the classifiers for animates were. In Table 4.1, one can see the similarities and differences in the Khmu and Lao systems. (The Lao system is that described in Kerr et al. 1972.) An interesting variation in the Khmu dialects is that their one hnuey form covers all the different objects classified by the two dialect variants in Lao. The last four of the Lao forms: dua:ng, met, bay, vóng are not attested in any of the Khmu data available to me. Also, the hntu? form for hole in the southern dialects and the kmlò and pooy forms in Khmu Yuan do not appear to be classifiers in Lao or other Tai languages.

Interesting differences are found when one compares the Khmu Yuan system in Northern Khmu to the more Southern Khmu dialects cited in Table 4.1. First, Khmu Yuan uses the form luuk` meaning 'fruit' for the fruit-plus class as well as the nuay form. This is a Tai form but does not appear to be a classifier in Lao. However, in two Tai Yuan sources available to me, Khanittanan (1973) and Ra'ttana'prasit (1965), one finds this form. In the dialects described by Khyanittanan the luuk` form is used to classify bottles, eggs, mountains, etc. The luuk` form is also found in addition to the nuay form in the Tai Yuan dialects described by Khanittanan. This luuk` form is also a classifier in other Tai languages, for example Siamese. In Siamese, it is employed to count children, young animals, birds and fruit; however, these are not the items that are typically classified in Khmu Yuan. Khmu Yuan, then, has two borrowed forms for fruit-plus classes, nuay and luuk`, and they may have been borrowed from the same Tai language, or perhaps from two different Tai languages, for essentially the same purpose. Second, the mak

form for fruits in Southern Khmu is also borrowed. It occurs in Lao and is a prefix in Tai generally for trees and fruits. This is a form that Southern Khmu dialects use which the more Northern (Yuan) dialects do not appear to have.

Table 4.1: A comparison of the classification of three-dimensional objects in Khmuic and Lao

Southern Khmu dialects	Khmu Yuan (Northern dialect)	Mal	Lao
hnuey fruit, grain, body parts, furniture, utensils mak fruit koon pills, eyeballs, pill-shaped objects hntu? holes, windows (only cited in Smalley)	nuay' (same as Southern also houses) luuk` for same items as hnuey koon' small parts of things, bricks kmlò for lumps of things pooy' for bracelets	le? (same items as Khmu hnuey; also sun and moon) ngui lumps of things	nuay fruit, egg, furniture nūa:y cloud, fruit, breasts, buttons ma:k fruit kò:n pieces of stone, brick, morsels, pills dua:ng round and heart-shaped (with a light?) met 'seed, grain' for seeds bay hats, leaves, plates, round objects vóng 'to ring, encircle' for hoops

As with the classifiers for animates, the source of the forms in Mal is not in the available data. As one can see from Table 4.1, they are definitely unrelated to the Lao system. Hmong, a neighbouring non-Mon-Khmer language, has lu55 for round or hollow objects. While the initial here matches the initial of the fruit-plus classifier in Mal, le?, the vowels are not related, so this source is not very likely. This le? form for fruit, etc., in Mal is also found in Mal in compounds like stone: $nguu\ le$? The interesting point here is that the two languages in this subbranch, Khmu and Mal, are so different from each other in the forms used for classifiers even though the dimensions employed are very similar. This is the same pattern that was found in the classification of animates.

4.1.4 Khmer

4.1.4.1 Styles and sources for the classification of three-dimensional objects

Khmer, as with the classification of non-human animates, seems to have a very small system for the classification of three-dimensional forms. The small size of the set here cannot be attributed to incomplete data since Khmer and Vietnamese are the two Mon-Khmer languages with the best descriptions available. The most general classifier for round things in Khmer is $kr \partial p$

'stone, kernel, pip' and is for all things in the form of a ball. Unlike all the other Mon-Khmer languages, except for Katuic ones and Chrau (South Bahnaric) and perhaps Mon, there is no morpheme for classifying the bulky three-dimensional items like large fruit, household utensils, furniture, and houses as has been found to exist in all the other languages. $Kr \partial p$ appears to be applied only to hard, smooth items such as grain, pills, pellets and bullets. Jenner and Pou (1981) also cite jum/cum/ as a classifier for necklaces and bracelets. The form is a verb or noun meaning 'to encircle, orbit' or 'a circuit'.

The other forms found in Khmer are only marginally likely to be classifiers; most likely they are of the quantifier type either for groups of items or for temporary measures. There is $d'\delta m$ 'piece, lump' for meat, earth, nuggets, but also for blocks of houses; $h\delta\dot{n}$ for balls of things, mostly string; and $v\grave{u}eng$ 'circle' for ensembles of orchestras. This last form looks like the $v\grave{o}ng$ found in Lao, but the Lao form is used with individual items like rings. It also resembles waing in Burmese. It is also related to the $k\bar{q}r$ - $vy\bar{q}ng$ form for 'rings' in Gold Palaung. Its true origin is hazy.

4.1.5 Bahnaric

4.1.5.1 North, East, and West

4.1.5.1.1 Styles of classification

One of the major fruit-plus classifiers in Bahnaric, pom, has been described in Chapter 3. As was noted there, this classifier occurs in all the North Bahnaric languages, in Cua, an East Bahnaric language, and in two of the Western Bahnaric languages: Oi and Brao. The meaning and function of this form closely parallels the *?()mrl/r form in Palaungic. Both forms, where a meaning is known, mean 'round' and both forms are used with food stuffs, with inanimate things like stones and baskets as well as with animals. However, as in Palaungic, the Bahnaric usage with both fruits and round things and with animals is not attested in all the languages. The reason for this may be the same as the possible explantion for this disparity in Palaungic, the small amount of available data. However, as happened in Lawa in Palaungic, it may be that other classifiers have taken over some of the territory of the pom classifier in some of the Bahnaric languages.

In both Jeh and Sedang (North Bahnaric), one finds other forms for the fruit-plus category. In Jeh, one finds the form *klong/hlong* which is cognate with a form *klong* in Sedang for sections of bamboo. In Jeh, this form is found with food stuffs like fruit, vegetables, and eggs; with naturally occurring items like stones; and with household items, like baskets and jars. This fruit-plus classifier is not used with animates. In Jeh, the *pom* form is used for animals and also possibly for some round items like fruits. If this is true then Jeh has two candidates for a fruit-plus classifier *klong* and *pom*. However, as described in Chapter 3, there is some possibility that there are two *pom* forms in Jeh. If there is only one, it is also possible that the *pom* form is more limited in the inanimates it can apply to than *klong* is.

The fruit-plus classifier in Sedang is 'nóang. It does not appear to be the same form as the Jeh classifier; however, the items it is used with are identical to those categorised by klong/hlong in Jeh.

In Halang, Jeh, and Sedang some kinds of roundish foodstuffs are classified separately. Halang and Jeh use *bùam* for tubers and roots. In Sedang, some squash have a special classifier, *pôu* meaning 'melon'. These classes should be considered natural kind classes.

Sedang also has a class for short stubby things according to Smith (1975a) that includes objects that we have found elsewhere with classifiers for round smooth hard objects. The classifier for the class is *poléang*, and it is used with bullets and teeth as well as quills, fingers, hair and arrows. The body parts in this class are all objects that one can think of as rooted in the body and then growing in separate stalks or parts. We shall see in the next chapter that some of these parts, such as hair, are often classified with trees or leaves on the basis of this growing style. It is hard to tell how important this concept is in this particular Sedang class or how it relates to the arrows and bullets also in the class.

4.1.5.1.2 Sources of the classifiers in North, East and West Bahnaric

The pom form, as was described in Chapter 3, is glossed as 'round' in several of the languages where it occurs. Just as with the *?()mxl/r form in Palaungic, we find that when the fruit-plus classifier includes animates it has a very general meaning, that of roundness.³

The *klong* form in Jeh and Sedang (North Bahnaric) functions in very different ways in these two languages. In Sedang, where it is for sections of bamboo, it can easily be considered a part/whole quantifier. What has happened, then, is that in Jeh, its meaning has been generalised for use with individual wholes such as baskets, jars and eggs. Jars and baskets, of course, can be made from sections of large bamboo, so there is a definite material connection among some of the objects classified by *klong* and they are also clearly related to the use of the classifier in Sedang. However, other items like eggs, cucumbers, and stones are harder to explain except for their size and shape resemblance.

Cognates to this *klong* form are also found as classifiers in the neighbouring Katuic branch. There, Katu and Pacoh both use *klong* but with an infix, resulting in *kanuung* in Katu and callong in Pacoh. However, in Katuic these forms seem to be for counting smaller items such as seeds and grains, small fruits, stones and jewels rather than for some of the larger things like back baskets and wine jars that the form is used with in Jeh.

In both cases, where a particular kind of foodstuff is classified separately, the classifiers for these items are nouns also referring to foodstuffs. In the case of Jeh and Halang, the buam form for classifying tubers and roots has cognates in other Bahnaric languages in the form of nouns meaning 'tuber'. Perhaps it is possible to consider this form in Jeh and Halang as a repeater or as a compounding form like $pl\bar{e}$ 'fruit', where the noun for the general category 'fruit' or 'tuber' is joined with a particular name to label the plant. For example, this would be like 'lime tree' in English. On the other hand, we have seen before how the word 'fruit' can be used to classify fruit; that is, the general head noun is the classifier for specific fruits. Perhaps this is just the same

phenomenon. The other classifier for foodstuffs found in Sedang, as mentioned above, is itself a noun meaning 'melon'.

4.1.5.2 Central Bahnaric4

4.1.5.2.1 Styles of classification

Both the Bahnar dialects and the Rongao dialects have the *pom* form that was described above. In both the Pleiku dialect of Bahnar described by Banker (1973) and in the Bahnar dialects described by Guilleminet and Alberty (1959, 1963), this form is used with the number one and is a general classifier, except that it is not employed with humans. Therefore, this form in Bahnar is not really a classifier for three-dimensional objects, but one for all non-human objects counted by one. In most of the Rongao dialects, however, there is a difference in the usage of this *pom* form from that of the Bahnar language.

In the Rongao dialects described by Anonymous (n.d.) and Neo and Gregerson (1974), the pom form is used for fruit and household items like jams, making it like a typical fruit-plus class. In Anonymous' description, it is not used for animals as in some of the other Bahnaric languages. Animals in this dialect are classified by to. This makes the use of pom and to in the Rongao dialect described by Anonymous much like the use of the same forms in Sedang, a northern language. Since the dialects described by Anonymous and by Neo and Gregerson are northern in location, this makes sense. In the Rongao dialect in the central area, described by Guilleminet and Alberty, the pom classifier is listed as a classifier for use with 'one', just as it is in the Bahnar dialects they describe. They do say, however, 'ce mot est peu usité par les Rongao...[they prefer the specific classifiers like to, kotah]'. So even in the central area, the use of pom in Rongao seems much like Northern forms and appears to be a real fruit-plus classifier unlike in Bahnar.

Both Bahnar and the Rongao of Guilleminet and Alberty have two three-dimensional classifiers that may be fruit-plus, but may also be of a more limited nature. The forms are găr and komon/komoún (J). They can be considered fruit-plus because their major function is to classify foodstuffs of a three-dimensional nature and, in addition, as described in Chapter 3, both forms can be used with fish that are round. Găr is also used with small children and in a deprecating fashion with adults. The differences between these forms and other fruit-plus classifiers are (1) they are not for animals in general as the fruit-plus classifiers were in Palaungic and in some North, West, and East Bahnaric languages; and (2) it is possible that inanimate items, such as household objects, are not included in these classes. There are no examples with these two forms to indicate that they are used with inanimate or non-plant items. For example, one item found in other languages in the usual fruit-plus category is bullets. However, in Rongao, they are classified with arrows, shots and other weapons, by mrâm. Based on available data, these two forms, găr and komon, would mostly seem to be for food objects except for their use with humans.

The difference between the găr and komon classifiers in Bahnar and Rongao seems to be that they function to classify items of slightly different sizes and shapes. The form, găr, is employed for small round objects including fruit and grains and fish. The other form komon is used for

oblong shaped items, forms that are not quite spherical or that are cylindrical. Listed as classified by the $k\sigma mon$ form are also fruits, vegetables and fish of this shape.

Many household items, for example, jars, have separate classifiers in Rongao and Bahnar rather than being classed in a three-dimensional class as happens often in other Mon-Khmer systems. It should be pointed out here that in the northern Rongao dialect of Anonymous, jars can be counted by pom, the round classifier; however, in the Rongao dialect of Guilleminet and Alberty and in Bahnar, jars are singled out for special treatment.⁵ In these cultures, jars are sometimes used as currency, and thus, the dimensions for classifying a jar often depend on the material and its value and the nature of the contents. There is a general classifier, ge, for jars in Bahnar and Rongao (Central). Another classifier, dram/ram is for porcelain or clay jars. A third classifier, sêm in Rongao and tonom (E)/tom (EJK) in Bahnar, is used with filled wood jars. The major function of this classifier is to classify living trees and plants, so the use with this kind of jar is obviously based on a material connection. In addition to these forms, there is trom in Rongao, as well as krôm (EKJ)/trôm (EKJ) in Bahnar, which is employed to classify empty and worthless jars. Valuable jars, on the other hand, are classified by tông which is also used for other things of value, such as rifles, axes, granaries, stems, stalks and grand persons. Finally, there is in some dialects of Bahnar also a disparaging classifier for jars: krek (BK)/krč (S).6

Also classified separately in Bahnar and in Rongao are household items like gongs, pots, kettles, drums, and axes. Their grouping together is probably not based on three-dimensionality but on shared material of silver or metal as well as on the fact that they are artifacts. In Rongao, one finds kotah as a classifier for these items. In the Bahnar dialects, the form used to classify such items is hlak. Also in Rongao, as reported by Anonymous, there is a form hnyu which appears to be a classifier for pots out of linen instead of metal.⁷

Also in both Rongao and Bahnar, there is a classifier for holes and openings: bolôh. This form, however, is not related to any of the other classifiers for holes in the other Mon-Khmer languages.

4.1.5.2.2 Sources of the classifiers in Central Bahnaric

The forms used for the limited fruit-plus classes described above come from quite different sources. The găr form used for small round objects is a noun meaning 'seed, grain, pit' or 'berry'. As we saw before, Mon and Khmer both use different morphemes with this meaning to classify round objects. It appears in all these cases that these forms seem to be used to classify smaller three-dimensional objects. The other form used for more cylindrical objects is komon/komoún. This form, according to Diffloth (p.c. 1982), probably means 'nephew' and is an infixed form of the noun kon 'child' which has cognates throughout Mon-Khmer. As a matter of fact, this form is also a classifier in Vietnamese. However, in Vietnamese, the form is not infixed. The use of this cognate in the two languages is quite different. In Vietnamese, it is for animals and many other items viewed as suggesting animacy, for example, eyes (see Chapter 3). However, the only non-human animates classified by komon in Bahnar are fish. The connection in Bahnar between cylindrical fruits and vegetables and nephews is unclear from the available data.

As we saw above, there are many different classifiers for jars in Bahnar and Rongao (Central dialect). Their use with different types of jars is related to their meaning. Ge, the classifier for iars in general, itself is a noun meaning 'iar'. Again, one has a noun referring to the general type of items classified functioning as the classifier. The form for filled wooden jars, sêm in Rongao and tonom (E)/tom (EKJ) in Bahnar, is a noun meaning 'trunk'. So the classifier itself refers to the material of the jar. This noun has cognates throughout Mon-Khmer which are discussed further in Chapter 5 since the form is a classifier in several languages. In other languages, except in Sedang (North Bahnaric), sêm/torm is not a classifier for wooden jars, but rather plants and trees, and indeed, it has this function also in Bahnar and Rongao. The classifier for empty and worthless jars, trôm, is a noun meaning 'cavity' or 'hole'. Here, the classifier emphasises the idea of emptiness. Tong is the classifier used with valuable jars. This form means 'handle' and is discussed at length in Chapter 5 since it is a cognate used in several Bahnaric languages to classify long things. The concept of value in Bahnar is not transparent except that many other long things in this class like rifles and axes are of value, and thus, the concept seems to have become a generalised organising principle in this class. An interesting point about tong and also sêm/tom is that they are both classifiers for long things used to classify jars which are frequently classified by a round classifier in other languages. This makes perfect sense, however, in the case of sêm/tom if one considers that the jar's material affects its shape.

It may be that some of these forms for classifying jars are used as temporary measures. For example, sem in Anonymous' description of Rongao is used with the noun 'wine' in a phrase like a jar of wine, so that 'jar' is actually specifying an amount and, therefore, is a 'measure'. Ge, meaning 'jar', which is for jars in general, may also be of this type. Since there are few examples with these classifiers, it is hard to know which others may function in this fashion. However, some forms like tong and tron/krom almost certainly are for counting the jars themselves and not their contents and, therefore, are typical classifiers.

The classifiers kotah in Rongao and hlak in Bahnar for gongs, pots, etc., are discussed also in Chapter 6. Hlak is one of several morphemes meaning 'leaf' which are classifiers for flat things in Mon-Khmer. So again, we have items that are frequently classified as three-dimensional or round classified by other criteria. In this Central Bahnaric case, they are metal artifacts which tend to be flat in form.

4.1.5.3 South Bahnaric

4.1.5.3.1 Styles of classification

Mnong Gar and Sre, two of the South Bahnaric languages, also have fruit-plus classifiers: Mnong Gar, plee and Sre, nay/ponai. The Sre form is given as classifying fruit, grain, chunks of meat, rocks, and artifacts like footballs. The difference between the Sre and Mnong Gar forms and some of the fruit-plus classifiers in other languages is that they are not used for non-human animates. Other forms in both these languages fulfil this function. (See Chapter 3.)

In Sre, there is another classifier for round objects, *khôèng*. It is described by Drouin (n.d.) for round objects, but the only item it is shown with is a bracelet. In addition, in Sre, there is

another classifier for necklace: konăc. So round jewellery items are not all in the same class in Sre.

Chrau, another South Bahnaric language, has the classifier coc for small round objects such as stones. This form may only be used for small, hard, smooth items, like kroop in Khmer, but more data are necessary to know for certain. It is possible that Chrau has no special three-dimensional classifier that includes large round items as we found in Palaungic and Khmuic. Such items may be classified by the general classifier.

Chrau and Sre share a classifier for household items that are frequently classified as round. Sre has $k\delta p$ for jars and bowls, and Chrau has $c\delta p$ given with dishes, gongs and bottles. In Chrau, this form is translated as 'unit', but this is similar to using the word 'piece'. It is very inexplicit and a more precise definition would be necessary to reveal whether some concept of three-dimensionality or material is involved here. Sre also has another classifier $p \breve{a} n g$ that includes some household objects like baskets and bowls. However, the organising idea of this class seems to be flatness (see Chapter 6).

In Chrau, other household items and artifacts such as mortars and pestles and rings are not classified by three-dimensionality as is common in many Mon-Khmer languages. Both of these items are included in the $t \partial ng$ class in Chrau. This form is employed for long things and means 'handle'. This usage is not surprising, however, because it is not uncommon in these cultures for mortars and pestles to be made from sections of bamboo. Again, the object's material and also its shape is important in determining its class.

4.1.5.3.2 Sources of the classifiers in South Bahnaric

The two fruit-plus classes in Mnong Gar and Sre have the same form for their classifier. The classifier is *plee*, a noun meaning 'fruit'. In Mnong Gar, it occurs in its nominal form; however, in Sre, it has been infixed giving the form *ponai*. The other form in Sre, *nay*, is this same infixed noun 'fruit' but with the first syllable lost (Diffloth p.c. 1980). This *plee* form is not employed elsewhere in Bahnaric as a classifier, though as a noun it has cognates throughout Mon-Khmer. However, in Vietnamese and Muròng, Mon-Khmer cultures in contact with the South Bahnaric culture, this cognate, 'fruit', also operates as a classifier for three-dimensional objects. What is more interesting is that this same morpheme, with the same function, a classifier for round objects, is found much further west in Lamet (Palaungic).

The classifier for necklaces in Sre, konăc, may be an infixed form of kăc 'harvest', 'backbasket for harvest', according to Diffloth (p.c. 1980). There may be no relation to roundness here. Diffloth suggests that the form may refer to the strap used to carry these baskets, and hence its use with necklaces.

The form found in Chrau for small round objects, $c\check{o}c$, is likely cognate to a classifier in Brou (Katuic). The form in Brou is couiq, and according to Diffloth (p.c. 1982), the -iq in Brou is from *-c. The two forms are not used with the same items in the examples that are available, but they are found with items of similar shape. In Chrau, the form is cited with stones. In Brou (Katuic) it

is given as a classifier for root vegetables. However the exact meaning of the morpheme itself is not in the available data.

4.1.6 Katuic

4.1.6.1 Styles of classification

The Katuic languages have several three-dimensional classifiers. However, in all cases, as occurred in Khmer, these forms appear to be for small round things and possibly also for hard or smooth items. Katu and Pocoh share one form: Katu-, kanuung; Pacoh-, callong. In Pacoh, the form is listed with seeds, grain, small fruit, stones and jewels. In addition to this form shared with Pacoh, Katu has another classifier, kaliang, also for small objects and a third one, khuk, for stones. Brou, the only other Katuic language with such examples, also has two classifiers for small round items. One is oc which functions to classify things like pills, teeth, stars and papayas. The other is couc, used for small hard round things like stones, ginger, charcoal and potatoes.

Other items that are frequently found with the fruit-plus classifiers in other languages are treated in different ways by Katuic languages. In Pacoh and Brou, fruits and vegetables that might not be classified with the morphemes mentioned for small round objects can be classified by the general classifier. In addition to this style of treatment, fruit and vegetables may also be found in natural classes. For example, in Pacoh, there is also the apong form for ears of corn. Besides this form, the Katuic languages also have classifiers for root and onion-like vegetables. In Kui, one finds tsha? for roots. In Brou one finds couiq for root vegetables and clu for onion-like vegetables.

Other types of objects that may be in a general round class in some languages but are found in a separate class in Katuic are household objects, some musical instruments, and jewellery. Pacoh and Brou share the classifier beng for household artifacts such as pots, bowls, gongs and also jewellery. This is similar to the style of classification in Central and South Bahnaric where the material, i.e. metal, was important. However, the different branches do not use the same morpheme as the classifier. In addition, Pacoh uses adeh as a repeater for pots. This same form with the same usage has also been reported for Mal (Khmuic).

In both Katu and Pacoh, separate classifiers are given for necklaces: sayar in Katu and nchâr in Pacoh. These forms have not been found elsewhere for classifying jewellery. It is possible also that these classifiers mean something like 'string of beads' or 'length of beads' rather than being related to a three-dimensional concept like 'circle' or 'encircle'.

4.1.6.2 Sources of the classifiers

As mentioned in the section on North Bahnaric, the two forms, *kanuung* in Katu and *callong* in Pacoh are cognate to the classifier *klong/hlong* for round things in Jeh and to *klong* in Sedang. They are infixed forms of the cognates in Bahnaric. In Sedang, the form is a part/whole classifier for sections of bamboo. In the other languages, it has been extended for more general use. Another form similar in its semantic nature to *klong* is found in Brou. The classifier *couc* means 'a small section of a whole'. It is found with ginger and charcoal which can certainly be

considered as small sections of a whole. However, it is also used with stones and potatoes. These items are less likely to be viewed this way. This class in Brou looks like one that also could easily be extended to use with individual whole items.

As with Mon, Khmer, and Bahnar, one of the classifiers for small round things means 'seed'. This is the form *kalieng*, found in Katu. All these different branches have classifiers with similar meanings, functioning in similar ways, but none of the classifiers are cognates with each other. Mon uses $m\dot{e}$? [ma], Khmer uses $kr\dot{o}$ and Bahnar uses $g\ddot{a}r$.

As mentioned in Chapter 3, the classifier for roots in Kui tsha? is a noun meaning 'body'. The use of this form with roots could either relate to shape or to the concept of the lower part of something. This same form is found infixed in Kantu (Katuic) as a classifier for humans. It is not unusual in Mon-Khmer for the same form to be found as a classifier in different languages with very different functions. This 'body' form is particularly interesting in this context because the two languages that share the cognate with radically different functions are in the same branch.

Another form for classifying roots has cognates in the Bahnaric branch. As mentioned earlier, the *couiq* form in Brou is cognate with the *coc* form in Chrau (South Bahnaric). However, the meaning of this form is unknown, but in Chrau it was used for stones. So these items in these cultures are definitely seen as related to each other.

4.1.7 Viet-Mường

4.1.7.1 Styles of classification

Both Vietnamese and Muròng have the fruit-plus classifiers found in several other Mon-Khmer languages. As mentioned above in the descriptions of other branches, they both have the *plē* 'fruit' cognate functioning as the classifier in this context. In Vietnamese and Muròng, this cognate is found as the form *trái*. In Vietnamese, this fruit-plus class subsumes the typical food-stuffs of fruits and vegetables as well as natural objects like hills and pieces of earth; body organs such as heart and liver; and inanimate round things like bombs, balls and globes.

In addition to the fruit-plus class in Vietnamese and Murong, there are several other natural kind classes for fruits and vegetables. There is another classifier for counting fruit in Vietnamese, qua? This form is listed only with fruit in my data, but it could have a broader usage, perhaps with some inanimates. According to Huynh Sanh Thông (p.c. 1984), it is more common in the northern dialects. Vietnamese also has a classifier $c\vec{u}$ which is used for tubers. Murong has $p\hat{u}$ ong for ears of corn, a form also found in Pacoh.

Vietnamese also has two classifiers for hard, three-dimensional items. One is *viên*, employed specifically for items artificially rounded. This includes bricks, tiles, stone, pills, bullets and jewels. The other form is *hòn* meaning piece, ball or stone. It functions to classify many of the same items as *viên*: pebbles, pieces of bricks and diamonds. In addition, it is used for islands. Similar to this form is *cuc* 'ball, piece, lump' for blood, ice cubes, etc. This form is probably a part/whole quantifier.

Other items which can be classified by three-dimensional classifiers are categorised by a variety of forms in Viet-Mıròng. In Vietnamese, as described in Chapter 3, the classifier for animals, con 'child', is also used with eyes, dice and toy tops. Cái the general classifier in Vietnamese and Muròng is used with many objects including hills. In Vietnamese, hills, which can also be classified in the fruit-plus class, are also found with the classifier ngọn 'top, summit, head' which also classifies candles, flames, trees, mountains, rivers and flags. Stars which have been classified as small round objects elsewhere are classified in Vietnamese by a form ngôi meaning 'kinship or the throne as a symbol' which also classifies graves and tombs. Holes in Vietnamese are given as unclassified.

4.1.7.2 Sources of the classifiers

As mentioned in the sections on Lamet (Palaungic) and Sre and Mnong Gar (South Bahnaric), the *trái* form in Vietnamese and Mırờng is cognate with the *plē* and *ponai/nay*, fruit-plus classifiers in these languages. In Vietnamese and Mırờng, just as in these other languages that use this form, when the fruit-plus classifier means 'fruit', it is not found classifying animals. Vietnamese and Murờng use *con* for this purpose.

Two of the forms for classifying round items in Vietnamese are borrowed from Chinese according to Gage (1979). These two forms are *qua* meaning 'fruit' for classifying fruit and *viên* meaning 'pill' for classifying artificially rounded objects including pills.

As with classifiers in other Mon-Khmer languages for round items, especially small round objects, some of the forms in Vietnamese may be part/whole classifiers, that is, used with items that are parts of a whole. These forms include hòn, given as meaning 'piece', also 'ball' or 'stone', and cuc also given as meaning 'lump, piece' as well as 'ball'.

The forms for classifying tubers, $c\vec{u}$ is itself a noun meaning 'tuber, bulb'. This is another example of the classifier for a natural class referring to the category of items it counts. While classifiers for tubers and bulbs occur in Bahnaric and Katuic, the forms are not cognate with the Vietnamese one. A classifier for bulbs, cuk, 'topknot', is also found in Siamese. It is possible that this form is related to the Vietnamese classifier cu.

4.2 Nicobarese subfamily

4.2.1 Styles and sources for the classification of three-dimensional objects

The classification of round objects in Nicobarese is perhaps the most interesting of all. Nicobarese violates a very general principle described by Allan (1977:301) for all types of classifier systems. Allan found that all classification systems, except those in Australian languages (which are not numeral classifier systems), have classifiers for one- and for three-dimensional classes. However, in Central Nicobarese, there is one class that is for both typically round and typically long items. In this class, objects found in typically round classes in other Mon-Khmer languages are animals, fruit, eggs, boxes, baskets, fishhooks, rings and seeds. Also in this class, items that we will find in typically long classes in other Mon-Khmer languages (see Chapter 5) are

spears, ropes, legs, fingers, teeth (sometimes), noses, and baskets. The classifier for this class is $n\bar{o}$ ang and it is described in Man (1889) as meaning 'cylindrical'. This is a concept that includes both length and roundness. The same form is found in Car Nicobarese. However, there, Braine (1970) only describes it as a classifier for animals and long things. She says that fruits, stones and houses, objects frequently in round classes, are typically unclassified. If this is true, then Car Nicobarese has lost or never had the round aspect of this class and has no classifier based on three-dimensionality at all. This cylindrical type class is unusual in the Mon-Khmer subfamilies. Only in Bahnar (Central Bahnaric) was there a form something like this, komon for cylindrical fruits, vegetables and fish.

The Car dialect does have a prefixed form miki.cə that has examples of fruit and eggs with it.⁸ As mentioned above in the discussion on $no\bar{a}ng$, Braine claimed that fruit was mostly unclassified. The contradiction here is not explained by Braine: perhaps it has something to do with different kinds of fruit. This class represented by miki.cə does seem to be some kind of natural kind class, i.e. for food, if not one for round objects. In Car, there are also two classifiers for small pieces, micu.e and milo.e0, but no examples are cited that would help determine their meaning.

Both Car and Central Nicobarese have a special classifier for bamboo utensils filled with lime: $k\hat{a}h\hat{a}$ in Car and hinle((*p-n-lee?)) according to Diffloth (p.c. 1982)) in Central. These are the only two forms in the data that are found 'household' items, objects that are frequently in three-dimensional classes. These two classifiers are not related to each other and are not like any other category found in Mon-Khmer languages.

4.3 Aslian subfamily

4.3.1 Styles and sources for the classification of three-dimensional objects

Buah is a classifier in Aslian for classifying objects on the basis of three-dimensionality. This form is found in Sakai of Korbu River (Senoic). This particular classifier is borrowed from Malay (Austronesian) where it is a classifier for large bulky items such as houses, islands, and is a noun meaning 'fruit'. Basically, in Malay, the form is for anything the size of fruit and larger. It is used in Aslian for the same purpose.

4.4 The classification of houses

At several points in the discussion of the classification of round objects, we have seen how the same objects may be categorised by more than one criteria. For example, with jars and baskets, the object's material often affects its shape, the other objects it is associated with, and hence, the class it belongs to. One cultural artifact that receives a variety of treatments is the house. Of course, houses and shelters are not of the same type in all Mon-Khmer cultures, so that one would expect houses to be classified differently on occasion on the basis of their shape or material, for example. However, it is still interesting to take this one item and see the variety of categories in which houses can be included. The difference in treatments is not just among the different languages, but even on occasion in the same language (see Table 4.2).

Table 4.2: The classification of houses

	As just like everything else (general classifier)	As a construction type		By part of the whole				As a round	As
		building	house	back	roof	stalk	bay (traverse span)	thing fruit	nothing
Mon-Khmer Palaungic Larnet Angku Monglwe Arnok Gold Palaung En Son Wa Kengtung Drage's Wa Wa proper Khmuic Khmu Khmu Yuan Khmer Bahnaric Sedang Bahnar (Pleiku) Katuic Pacoh Viet-Murong Vietnamese Car Central Aslian Senoic	to	*hlang (PW) *hlang (PW) *hlang (PW) hlang hlang tòa hen momti	kaang *nya?(PW) *nya?(PW) *nya?(PW)	krōng khnana /knaaŋ/	prang borbúng nóc	lvena /Iwɛɛŋ/ tarcong	pl€	nuay´/luuk`	x
Sernai Sernai Sakai of Korbu River Valley			dwwng					bua	

The Khmer sources are ones which treat houses in a variety of ways. In many sources on Khmer, houses are unclassified. However, Ehrman (1972) cites knoong as the house classifier, while Jenner and Pou (1981) give lvena/lweena/as a house classifier as well as the form that Ehrman gives (khana/khaang/). In other languages, houses are counted by the general classifier. This is the style in Sedang (North Bahnaric), for example. However, it is also common for houses to be included in the fruit-plus class or the class for large bulky items; in Lamet (Palaungic), houses are in the plē-class. In Khmu Yuan they can be in either the nuav or luuk` class, both of these being fruit-plus classes. In some Aslian languages, they are also found in the buah 'fruit' class. The form in Aslian and its function for classifying houses are borrowed directly from Malay (Austronesian). In Khmu Yuan, while the classifiers themselves are borrowed from Lao and/or other Tai languages, their use with houses is not: in most Tai languages, there is a separate classifier for buildings, *hlang meaning 'back'. So the Khmu Yuan use appears to be an innovation on the Lao system. The Lamet (Palaungic) classifier is a native Mon-Khmer form. However, there are non-Mon-Khmer languages in the Palaungic area that classify houses in their general three-dimensional class, for example, Burmese. Given this information, often it is hard to tell whether this style of treating houses is native to Mon-Khmer or borrowed.

While Lamet in Palaungic has houses in its fruit-plus class, other Palaungic languages treat houses differently. Several of the languages both in Palaungic and in other branches have borrowed from Tai languages the general classifier for buildings, hlang, for this same purpose. The languages which treat houses as a building type in the hlang category are Angku and Monglwe of the Angku division, the Wa proper dialects and the Lawa dialects. In proto-Waic, this form actually means 'house' (Diffloth 1977) although in Tai the form means 'back'. In Brou (Katuic), this hlang form classifies cars in addition to houses. In Khmuic, Smalley lists it for his Khmu dialect, and Lindell et al. cite it for counting both mosquito nets and houses in Khmu Yuan. So in Khmu Yuan, there is not only the building classifier for houses, but there is also the fruit-plus class for houses described above. Filbeck (1978) also cites it in the Mal branch of Khmuic. Nicobarese dialects have a general building class too, but the dialects have different classifiers. Car uses hen for its building classifier, and Central Nicobarese uses momti. Vietnamese, in another branch, also has a general building class represented by the classifier tòa.

Several Palaungic languages also use a noun meaning 'house' to classify houses. We saw above that the borrowed Tai form hlang means 'house' in Waic and is used to classify houses. Several other Waic languages, En, Son and Wa Kengtung, use the noun, *nya? 'house' (Diffloth 1977), as the classifier for houses. In Amok (the Angku group), the classifier for house is kaang, which is cognate with the classifier for house, ciang (*gaang Proto-Mon-Khmer Diffloth p.c. 1982), in the Mal dialect (Khmuic), described by Wajanarat. Wajanarat glosses this form as meaning 'house'. However, in Khmu Yuan, this form is glossed as 'foot, hind leg, bottom'. If this is its normal meaning, then this is an example of a style discussed below. Some Aslian languages also use a noun meaning house to classify houses. In Semai for example, the classifier for houses is dəngnuung, which is an infixed and reduplicated form of the noun meaning 'house', *duwng.

In Palaungic, one also finds another typical style of handling houses. It is quite common for some part of the house to serve to classify the whole house. For example, in Gold Palaung (the Rumai group), the classifier used for houses, boats and rooms is krāng. This form is cognate with a Proto-Waic noun *krang meaning 'the back' (Diffloth 1977). One of the Khmer classifiers for houses also refers to 'back, rear, surface' of items. In Khmer, the other house classifier also refers to a part of the house: lvēna/lweeng/means 'the bay of a house, especially one on a separate piling'. The same style of classification, using parts of the house as the classifier morpheme, is found in many branches. In Drage's Wa (the Waic group), prāng is the classifier for houses. The Proto-Waic form for this is *prang meaning 'roof'. In the Pleiku Bahnar dialect (Central Bahnaric) a noun meaning 'roof', bobúng is the classifier for houses. In Vietnamese (Viet-Muròng) another noun meaning 'roof', nóc, can also classify houses.

Another variation of the part for whole is found in Pacoh (Katuic). There houses are classified by *tarcong*, a noun meaning 'stalk'. While this noun may refer to some part of the house, it is interesting in its use because other items are also in this class, namely, stalks of fruit and grains. Here, houses are treated as an extension of a natural kind class.

Several other languages have classifiers for houses whose meaning was not identifiable from the available data. These include the *rot* form in Chrau (South Bahnaric), the *rườn* form in Maspéro's Khmu dialect, and *děnú* in Sakai Ulu Bertung (?Senoic). However, even without these forms, there is real variety within the branches and subfamilies in their classification of houses.

4.5 Conclusion

Many of the Mon-Khmer languages have a fruit-plus classifier; that is, a classifier used for roundish foodstuffs as well as for other three-dimensional items, especially artifacts such as utensils, furniture, houses and natural objects of large size like hills and mountains. A few of the languages in question also have animates included in this category. The languages with this characteristic are the Waic languages with *?()mvl/r that do not have a separate non-human animate classifier, and the North, West and East Bahnaric languages with pom that do not possess a separate non-human animate classifier. This last particular style of classification, with the inclusion of non-human animates, is unusual in the South-East Asian area. It does not commonly occur in Burmese, Tai or Chamic languages.⁹ Although in Siamese (Thai), luuk `can be used for fruit, marbles, kids and young animals, this is not the dominant pattern since animals (particularly mature ones) are normally classified separately by tua. On the other hand, the fruit-plus style of classification without non-human animates is common in South-East Asian languages and can be seen in Lahu, Burmese, several Tai languages and Cham. Here, these languages classify together in one category the same kinds of objects as the Mon-Khmer languages.

A few of the languages in Mon-Khmer seem to have a classifier only for smaller round items and others have a class like this in addition to one for larger round objects. The languages which appear to have a class only for smaller round objects include Khmer, perhaps Mon, Chrau (South Bahnaric) and the Katuic languages. Vietnamese and Khmuic have this kind of classifier in addition to the fruit-plus classifiers. This style of classification, where classifiers for items of different size, material or hardness occur in a language, is fairly common in South-East Asian

languages. However, with regard to classes based on three-dimensionality, not all the languages neighbouring Mon-Khmer ones have this style. Burmese, for example, counts large and small items all together by *lôun*.

Perhaps this style of counting in Burmese explains why in Palaungic it is less likely for there to be classes for small, round, hard objects and more likely to be a general class for three-dimensional objects. On the other hand, in the section on Khmuic, where the set of classifiers for Lao is discussed (see Table 4.1), one can see an example of another language family where there are classes for small round objects in addition to ones for larger items. ¹⁰ For example, in Lao, pills and small pieces of bricks are in a separate class and there is a separate class for grains. The Khmuic languages have borrowed some similar distinctions. However, as we saw in the discussion on the classification of houses, the Khmuic languages have slightly varied the Lao system by including even larger items like houses in their class for sizeable round objects.

Another language family where some of the languages have a distinction between bulky items and small ones when counting is Austronesian. In Malay, one finds buah 'fruit' to count really large items like houses and islands, in addition to bidji and butir 'seed', which are both for small round objects, like seeds, cannon balls, etc. This style is also found in Rhade, a Chamic (Austronesian) language in contact with Bahnaric, Khmer, Katuic and Vietnamese. First of all, what is interesting here is that the natural source of the classifiers in Malay and Rhade is much like that in the Mon-Khmer languages: that is, nouns for fruit and seeds. Secondly, this style of classification in some Austronesian languages, along with a possible influence from some Tai languages, may explain why one finds so many classes for small round objects in the Eastern branches of Mon-Khmer. In fact, in Khmer, Katuic and some Bahnaric languages, one seems to find these classes only.¹¹

Natural kind classes for round objects have also been found in several Mon-Khmer languages. That is, there were classes specifically for fruits and vegetables, some specifically for roots or tubers. In the case of Bahnar (Central Bahnaric), there are what even seem to be classes in between fruit-plus classes and natural kind ones. In the găr and komon classes, round fish and also, poetically, humans could appear. These natural kind classes are not uncommon in other language families, and perhaps even the luuk class in Siamese described above for fruit, fish and young animals is something like the găr and komon classes in Bahnar.

Classifiers for other characteristics of three-dimensionality and roundness also exist in Mon-Khmer languages just as they do in non-Mon-Khmer languages of the area. So for example, there are classifiers for jewellery based on the idea of a circle. In Bahnar, Khmu and Mon there are classifiers for holes. These two types of categories are also found in Burmese showing that these kinds of divisions are not unique in any sense to Mon-Khmer. A few of the classes in some Mon-Khmer languages do not appear, however, to be common in neighbouring non-Mon-Khmer languages. We saw that household utensils are frequently classified alone on the basis of material artifact or worth rather than shape. In Bahnar, there were some classes exclusively for jars, and to the extent that one can be certain that these forms are classifiers and not quantifiers, we have a category that is not found in non-Mon-Khmer languages, a reflection of the importance of these items in Mon-Khmer culture.

In the addition to the unique treatment of jars in Bahnaric, other household items could be and were put in separate classes in various Mon-Khmer languages. Some items, like gongs, dishes, axes, were grouped together because of their commonality of being artifacts created from sheets or 'leaves' of metal. For example, see the *hlak* class in some Bahnar dialects (Central Bahnaric). In the available data, classes like these have not been found elsewhere, although in Siamese, one counts buckets and oil tins together by *bay* on the basis of their being a round hollow object. The most interesting example of a class unique to Austroasiatic is the cylindrical class for non-human animates, and round and long objects in Nicobarese. This is a style of classification not found elsewhere in the available data.

NOTES

- 1. Denny (1976a), as was noted in Chapter 1, argues that languages with the classifiers for round outlines or circles only occur in cultures with permanent dwellings and land divisions. This fits the Gold Palaung culture; however, if the morphemes in Gold Palaung or even the concept for the class are borrowed, this criterion is irrelevant.
- 2. Khanittanan's dialects represent speakers who have moved to the central Siamese area and have been separated from most Tai Yuan speakers for several generations according to Strecker (p.c. 1976). Their dialect has been influenced by Siamese. Collins (1906) does not cite this *luuk* classifier in his Siamese Yuan dictionary.
- 3. There is also in Tai Dam a pom form for rounded things. Perhaps it is related to the Bahnaric forms. However, the Tai Dam communities are located considerably north of the Bahnaric area. (See the maps in the Appendix.)
- 4. In this chapter, the Rongao dialect for which there are the most data is the one described by Guilleminet and Alberty (1959, 1963). Since many of the forms they list are identical to those found in Bahnar, it is best to discuss Rongao in this section.
- 5. For some information on the cultural importance of these items in Mnong society, another Bahnaric culture, see Condominas (1977).
- 6. The meaning of disparaging forms was described in Chapter 3 in section 3.1.6.2 on the sources of classifiers for humans in Bahnar.
- 7. Exactly what these would look like or how they would function is unclear.
- 8. The *mi* prefix means 'a', 'one', but in this context is a kind of unitiser since it is found in numeral phrases with the number 2, for example.
- 9. Lolo has a general classifier, ma-, which includes animals. However, I do not know it to have anything to do with three-dimensionality.
- 10. It should be noted here that not all Tai systems of classification of round items are the same.
- 11. Becker (p.c. 1982) says this pattern is true of Javanese also.

Chapter 5

CLASSIFICATION OF INANIMATES: ONE-DIMENSIONALITY

5.0 Introduction

As mentioned in Chapter 1, numeral classes based on the concept of one-dimensionality, according to Allan (1977), were to be found in all those languages he surveyed, except in Australian classification systems. The classifier systems in Mon-Khmer and Aslian are no exception to this finding and for that reason such classes are the next topic for consideration. However, as was noted in Chapter 4, Nicobarese is an exception. In Nicobarese rather than two classes, one for typically round things and another for typically long things, the numeral classifier systems in these languages have only one class for one- and three-dimensionality. This class is described by Nicobarese speakers as cylindrical, thus combining both dimensions. The classes that are described as one-dimensional in the data that follows are also frequently described in other texts as long. One-dimensional here means that one dimension of an object extends a much greater distance than the other two dimensions, thus resulting in a typically long item.

As with the classification of three-dimensional objects, the classification of one-dimensional or of long things is approached here both according to the semantic dimension organising the class and according to the type of items classified. By first considering the items classified by morphemes referring to concepts of 'long' or 'thin' and then by considering the classification of all long items, one can proceed to observe the classification of these items in other contexts where the meaning is unknown or where the items are classified by semantic dimensions other than shape. These latter dimensions include such things as function, material, artifact and natural kind, all described in Chapter 1. In this chapter, the classification of the following sorts of objects, both natural and artificial, will be described: (1) plant forms including trees, stalk-type plants, vines and roots; (2) geographic features like rivers, waterfalls, roads; (3) body parts like intestines, veins, tusks, teeth, and hair; (4) animates like snakes and worms; (5) building parts such as posts, pillars, beams, floors and nails; (6) household items such as pencils, pens, toothpicks, brooms, clotheslines, thread, ropes, and needles; (7) combustibles like candles, lamps, cigarettes, matches and firewood; (8) weapons of all sorts; and (9) clothing like loincloths, belts, jewellery, and umbrellas.

There are several styles of classifying these kinds of objects and many of them are found repeatedly in the different subfamilies and branches. A typical pattern is one in which all kinds of items are grouped together on the basis only of their one-dimensionality. A second typical style is

for a language to have two different classes for long items: one for rigid items and another for flexible ones. Many of these classes for long rigid items can be described as tree-plus classes, similar to the fruit-plus classes described in Chapter 4. That is, in most of these classes, the classifier itself means 'tree' or some part of a tree. In addition, the first item listed as classified by such morphemes is often trees themselves. The rest of the items in the class include other natural objects and artifacts of various kinds.

In addition to these classes based on the perceptual features of objects, there are also natural kind classes for one-dimensional items in many of the languages. For example, there are classes for trees and classes for certain species like bamboo. We shall see in these classes some interesting objects grouped together as natural kinds.

As mentioned in Chapter 3, trees and plants are interesting items with respect to their treatment according to the considerations of animacy/inanimacy. Trees are included in this chapter because they are so often grouped in classes with inanimates such as in the tree-plus classes described above. However, this does not mean that trees and plants are regarded as inanimate items by the cultures described here. As we saw in Chapter 3 in Bahnaric and Katuic there are some classes that treat trees and animals in the same category. For example, in Chrau (South Bahnaric), we saw that felled animals and trees were both counted by *vanong*. In this chapter, we shall see trees and growing body parts counted together as one category. Izikowitz (1951) provides one example of a Mon-Khmer culture that considers plants to have animate aspects. In his discussion of the Lamet (Palaungic) he describes this northern Mon-Khmer culture as regarding rice as having the same kind of soul as humans. Other plants, while not having a human soul, definitely have spirits.

...I have tried to show that it is possible that rice and the accompanying conception of the soul of rice are something of recent introduction, and that the Lamet have then probably given the peculiar growing "power" of the rice the same name that they had for the soul of humans. They have identified, so to speak, a new conception of life "energy" in plants with that they already had in regard to people. This could explain why rice and no other plant is considered to have a soul in the mind of the Lamet. On the other hand, it is quite another thing that certain trees, stumps, branches, etc., are able to have spirits, which according to the understanding of the Lamet belong to other categories of supernatural beings, however. (1951:336)

Benjamin (1979) also discusses the belief among the Temiar and Semang of the Aslian subfamily that plants, animals and mountains have souls and that other objects may also have them if so revealed to a shaman.

In addition to natural kind classes, some of the languages described here also have classes specifically for artifacts. As a matter of fact the *tuut* and *hlem* classes in Khmu distinguish between growing trees and trees that have been cut for some purpose. These cut trees are included in the *hlem* class which is full of artifacts. In a couple of the languages, the artifact notion and not a natural kind one is the basis for the long-rigid class. Examples of this style include the *tong* classifier in Bahnaric which means 'handle'.

Some types of artifacts also have their own classes. Among such examples are classes for weapons, ones for bladed instruments, sometimes for musical instruments and one for boats. In most of these cases, the semantic basis for such classes should be considered as either a function or an artifact one.

5.1 Mon-Khmer subfamily

5.1.1 Palaungic

5.1.1.1 Styles of classification

In a few of the Palaungic languages, one finds an all purpose long classifier that can be used with both rigid and flexible one-dimensional objects. In Gold Palaung, the form ngiang (Shorto 1957) / ngyāng (nyāng/nyōng) (Milne 1921) is found with plants like trees, bamboo, flowers (with few petals), cactus and long fibrous roots. In addition, long objects made from trees and bamboo such as sticks, floors, pencils, matches and bows are in this class. Other rigid non-wood items in the class are needles and candles. Flexible items, often classified separately in Mon-Khmer, are also in this class. Such items include veins, braids of hair, chains, rosaries and belts.

Antisdel's Wa and Drage's Wa also both appear to have classifiers of an all purpose nature. However, the examples cited with them are few, and a definition of the precise nature of these classes must wait for further examples. In Antisdel's Wa, *nyaing* is described as a classifier for long and comparatively narrow or slender things. It is used to count string, a flexible item, and rattan and roads which may or may not be considered flexible. The rattan in particular can vary in its interpretation depending on whether it is the whole plant or part of it. In Drage's Wa there is a classifier that also appears to classify rigid and flexible items together. However, there are only two examples with the classifier, needle and chain, so the exact dimensions for classification in this case are unknown. Perhaps it really has something to do with the material, metal. The form used for this class in Drage's Wa is *te*, and it is not related to the form in Gold Palaung and Antisdel's Wa for all purpose one-dimensionality.

Several of the Palaungic languages have classifiers for use with trees. In Kawa, one finds ngkong and in Drage's Wa both kawng and rawng. Antisdel's Wa has gaw as a classifier for uncut trees. In U, the classifier form for trees, ngèp is also part of the head noun ngèp sì?, so it is a repeater of some type. As cited in the various sources, most of these classifiers sound as though they represent classes that are natural kinds; that is, for growing plants, perhaps mostly trees. However, in Drage's Wa, both kawng and rawng are given with 'standing things like trees' (Drage 1907), so perhaps their application goes beyond just natural kinds of artifacts. One interesting point in Palaungic is that in Gold Palaung, with its numerous classifiers, trees are in the all purpose one-dimensional class rather than in a separate class for growing items.

In Palaungic, one also finds numerous classes for various artifacts which can be considered one-dimensional objects. In Son, Wa Kengtung, and Lawa-Umphai dialect, there is the classifier *pla? (Proto-Waic: Diffloth 1977:89)² for tools or knives. As was described in Chapters 3 and 4, there is a different tool or instrument classifier in Gold Palaung: $k_{\bar{q}}$ - $m_{\bar{q}}$. This classifier, as we

have seen, is also part of a gender marking system and means 'mother-seed'. So the classification of tools in Gold Palaung has nothing to do with one-dimensionality.

There are also special classes for other long weapons with blades like spears and swords. In Son and Wa Kengtung, in addition to *pla? which is used for swords, these two languages, as well as Amok (Angku group), have a classifier for counting spears of the form de, dai, do respectively. In Angku and Monglwe (also the Angku group) another classifier for spears and swords is found: tin. It is employed with spears and swords in Angku but only with swords in Monglwe. In Monglwe, spears are classified by ?an. A different form is found in Amok (Angku group) for counting swords: it is tung. So while swords and spears are regularly classified objects, there are a great variety of forms for this purpose.

Gold Palaung and Drage's Wa also have a special classifier for guns, which are items that are frequently in one-dimensional classes. In these examples, if the classifier in question, $l\bar{a}u$, has no other usages, then this morpheme could be considered an artifact classifier. However, in Gold Palaung, it is also for the sound of an explosion.

Another item frequently included in classes for one-dimensional items is boats. In Drage's Wa, boats can be in an artifact category by themselves. The classifier for this class is *lam*. Drage's Wa also uses the classifier *lāng* for boats as well as carts. In Gold Palaung, boats are also in two different classes. One is the *hlāng* class found also in Drage's Wa. In Gold Palaung, the form is used with small boats in addition to arrows, tripods and chairs. Large boats, on the other hand, are classified by *læōng*. This form was discussed in Chapter 4 because of its use with houses. As described there, this classifier is also used with altars, biers and rooms. Its meaning, 'back, rear', makes it unlikely that this is a class based on one-dimensionality. 'Back' seems more like a flat body part, as well as a long one, and 'rear' is a relational concept.

Gold Palaung has several classifiers used with roads, rivers, and connecting paths. There are $kl\bar{a}ng$ and $pl\bar{q}ng$ for streams or channels of water; $d\bar{a}ng$ for villages and streets. In addition, $t\bar{\imath}$ in Gold Palaung classifies waterfalls, ponds, bridges, and many other things like cracks, curtains, and elbows that are not roads, rivers or paths. No doubt there are many more forms like this throughout the branches.

5.1.1.2 Sources of the classifiers

The sources of the classifiers for one-dimensional items vary according to whether the items in question are natural objects or are artifacts which are likely to be borrowed. Among the classifiers for natural objects are ngkong in Kawa and kawng in Drage's Wa for trees and growing plants. These two forms are cognate to several other classifiers in the various subfamilies, branches and subbranches of Austroasiatic. In Katuic, this cognate takes the following forms: tarcong in Pacoh, racong in Brou, and sakoong in Katu. The cognate has the meaning 'stalk' in all these languages and has essentially the same function as in Palaungic; that is, it is used to count growing plants. In all the Katuic languages it is used with things with stalks, such as rice and flowers. Perhaps it is also found with trees as in Palaungic. However, as we will see later, there are other forms that can be used with trees in Katuic. In addition to counting stalks in Pacoh, it is used with houses

(see Chapter 4:4.4). This use is associated with the basic meaning of the form, 'base', 'essential part', 'mother', according to Diffloth (p.c. 1982). The classification of houses by this form is an example of a part/whole relationship, the base standing for the whole. He also cites this meaning as the one for the cognate kneeng in Semai (Senoic-Aslian) where it is also a classifier for trees just as in Palaungic. This cognate is also found in two South Bahnaric (Mon-Khmer) languages. Sre uses nkong for stalk-like things as in Katuic. Chrau also uses ncong for stalk-like items such as rattan, palm stalks, sugarcane and bamboo. In addition, it is employed in Chrau for logs, posts and pencils: the first two being cut stalks, the latter an artifact that is made of wood or the stalk of something. As we shall see with other classifiers of the same meaning, these are very commonly the kinds of items first introduced into natural kind classes.

While the *nkong* classifier for natural items in Palaungic, e.g. trees, is found to have cognates throughout Mon-Khmer and Aslian, several of the classifiers for artifacts in Palaungic are borrowed from Tai languages. This is not surprising since many of the artifacts in question are also likely to have been borrowed. Since, the Palaungic cultures are not the only Mon-Khmer ones to have borrowed things from the Tai, some of these borrowed classifiers are shared with other branches in Mon-Khmer. The *lau* classifier for guns in Gold Palaung and Drage's Wa and for the sound of an explosion in Gold Palaung is from Tai. In Shan, a Tai language that has been the donor language in the case of other forms in Palaungic, this form is found as a classifier for guns, weavers' reeds and flutes. The form in Shan is from a verb meaning 'to be long and straight as bamboo': *law*; and the class can thus be considered to be based on material and dimensionality. However, any one of many Tai languages could have been the source of the classifier in Palaungic. This must be the case for example in Brou (Katuic) where this classifier is also found, since Brou speakers are too far east to have had contact with the Shan.

For spears, swords, and other bladed items, the source of the Palaungic classifiers is also Tai in some cases. The *tung* classifier in Amok for swords is found thoughout Mon-Khmer for various kinds of instruments: Khmu (Khmuic), *nuang* for knives and spears; and Brou (Katuic), duong* for crossbows and musical instruments. The Tai source could again be one of several languages. Interestingly, while Shan is a common source of classifiers in Palaungic, this particular morpheme does not seem to be a classifier in Shan. Therefore, the source of the form in Palaungic is not clear. In Khmu (Khmuic), Lao is most certainly the donor language. In Lao, the form dua:ng is reported with lights, stars, knives, and round or heart-shaped objects. As with lau, the gun classifier, the usage in Tai of dua:ng is much broader than in Palaungic or the other Mon-Khmer languages. If the Mon-Khmer languages in the process of borrowing this form have maintained its unifying semantic principle then these items are not classified on the basis of one-dimensionality, but on roundness.

Another borrowed Tai classifier for spears and swords also has nothing to do with onedimensionality. The ?an classifier for spears in Monglwe is also found in Khmu (Khmuic) for various objects and tools. Smalley (1961) claims that in Khmu it is most likely to be used with objects borrowed from Laotian culture. This particular classifier, whether in its original Tai usage or in its borrowed usage, should best be considered an artifact classifier and not a dimensional one. The borrowing of these various classifiers for spears and swords is not surprising especially in the case of items made from iron or other metal. In a discussion of the manufacturing of utensils, Izikowitz says of the Lamet society:

The Lamet can neither weave, make clay vessels <u>nor forge iron tools</u> [underlining added]. All these things form an important part of their import, and are brought from the Thai peoples. (1951:146)

This situation probably can be generalised to other Palaungic cultures at various stages in their cultural histories.

The other common tool and knife classifier in Palaungic, *pla?, is also found in other Mon-Khmer subbranches. It is used in Katuic to count knives, etc. There, it means 'blade' or 'cutting edge'. (Again in the case of tools and knives, we have items that may be treated as one-dimensional objects being categorised as artifacts instead.) This particular form is also related to a classifier found in some Austronesian languages. In Malay, this classifier takes the form of bilah 'piece' and is also for knives, daggers, and swords. However, this classifier is not found in the Chamic languages, the Austronesian languages which are commonly the source of classifiers in Mon-Khmer. The Chamic languages use a 'long' classifier for weapons, one that also occurs in Katuic languages (see below).

One of the classifiers for boats, *lam*, is also a Tai classifier. This form is found not only in Drage's Wa, but also in Khmu Yuan (Khmuic). The form in Siamese is more general in nature than in the Mon-Khmer languages. It includes natural items as well as the artifact boats. In Siamese it is used with stalks of standing or cut cane and bamboo as well as boats. The organising principle of the classifier in Tai is much like that for pencils and posts, etc. in Mon-Khmer. That is, when a natural object is used as the material for an artifact, then the artifact frequently fits in the class to which the natural object belongs.

The other classifier for boats in Gold Palaung and Drage's Wa, $l\bar{a}ng$, is related to the concept in the Tai lam class, but it is not a classifier in Tai languages. The form may very well be Mon-Khmer, as it is also to be found in Khmuic. $L\bar{a}ng$ is a classifier for things made of bamboo, and this material basis of the class explains the rather wide diversity of items found in this class. In Khmu, $hl\bar{a}ng$ is found classifying traps, combs and bows; in Gold Palaung, $l\bar{a}ng$ is used with boats, arrows, tripods, and chairs; and in Drage's Wa with carts as well as boats.

Some of the classifiers for places and water are not as easily identified as those for artifacts. The $d\bar{a}ng$ classifier in Gold Palaung was given as counting streets and villages; but it is also cited as generally used for things that are long and narrow. This same form, $d\bar{a}ng$, is found in Khmuic. In Khmu Yuan, it is cited as a classifier for traps and has been borrowed from Lao where it is used for the same purpose. Given this difference in usage, perhaps the form in Gold Palaung was borrowed at a different time, or at least from a different Tai language, thus explaining its more general use for things including locations.

One of the classifiers in Gold Palaung for streets, roads and waterways, $kl\bar{a}ng$, Shafer (1952:154) claims is from the Burmese classifier system, where it is also for streams of water. He also says that the $t\bar{\imath}$ form in Gold Palaung for ponds, waterfalls, and drops of water is borrowed

from Burmese, but Becker (p.c. 1982) finds the suggestion of a Burmese origin doubtful. However, a Tibeto-Burman origin is possible since *ti is a widespread Tibeto-Burman root for 'water' found for example in Karen but not in Burmese. In Shan, there is a classifier meaning 'place', ti, that is for places. If Shan is the source of the Gold Palaung form, this meaning might explain the wide variety of items that ti is found with. On the other hand, it is also possible that this ti form is a native Mon-Khmer form meaning 'hand' (Diffloth p.c. 1982). Two of the possible source morphemes for ti in Gold Palaung are found in Khmu Yuan. There is ti 'meaning 'hand', 'arm', 'foreleg', which is a measure term for bundles of things. (The morpheme itself is classified by plah.) The form ti is a classifier for markets, gardens and plantations. While a source is not cited for the ti form, the nouns that it classifies are cited as Lao, so it seems more than likely that this is the source of ti also. In this case, the Lao form is not cited as counting as many different items as the Gold Palaung forms and neither is the Shan form, thus perhaps discounting the Tai forms as the source.

5.1.2 Mon

5.1.2.1 Styles and sources of classifiers for one-dimensional items

Mon has several classifiers which are used with long things, but mostly with natural items such as plants. The forms are employed with only a few artifacts. Mon does not possess a classifier for a wide variety of one-dimensional items, either rigid or flexible ones. As with round objects, the majority of long objects are not classified in Mon.

One classifier in Mon, nom [tnam] appears to be exclusively for use with plants, trees and other tall growing plants. This classifier is an infixed form of tom meaning 'foot of a tree'. In Middle Mon and even Modern Mon, this form is also used as a prefix before tree names to form compound names similar to our 'apple tree', for example. This particular classifier has numerous cognates throughout the Mon-Khmer subbranch which also function as classifiers either for growing plants or for artifacts. This form will be discussed more thoroughly in the section on Khmer, since, in Khmer, it is not only a classifier for plants but also for various artifacts.

There are two other classifiers that deal with plants, i.e. stalks of things. One is *tnor* [tnar] the infixed form of *tor* [tar] and the other is *to* [taw]. Both of them mean 'handle' or 'stalk', and they are cited as classifying the same kinds of things. It is the infixed form *tnor* which is cited in Shorto (1971) as a classifier for stalks of things in Middle Mon. The *to* form is also cited as used to count stems of things or stem-like things in Halliday (1922). Shorto (1962), however, does not list this second morpheme as a classifier but gives it as a noun meaning 'handle', 'shaft', 'stalk', 'pin' and 'pencil', which is used to form compounds. While neither of these two forms is found in other Mon-Khmer, Nicobarese, or Aslian languages as classifiers, morphemes with this same meaning quite commonly occur as classifiers for long things in these other languages.

Shorto (1962) cites another classifier for cylindrical objects: *kən3ng* [kaṇun; knun; taṇun; tnun]. It can be used to count stalks of things including sugarcane. The other kinds of cylindrical items it can count are not cited, but it is used as a compound with banks of streams and toes and

fingers, all natural items. The meaning of this form is not like the two classifiers above even though it can also be used with stalks. This form as a noun means 'tip' or 'end'.

Another classifier, *habom* [thabom, thbom], is used for cut pieces of bamboo and is a noun meaning 'log'. It may be that this form in most of its applications is really a quantifier or measure term. However, it is also used to count corpses, and in this case, it can only be considered a classifier for individual units.

Lastly, Halliday (1922) cites a classifier for guns, thakoe. In Palaungic, as mentioned earlier, Gold Palaung and Drage's Wa also had a separate classifier for guns. This form appears to be the same form as the noun hako? cited in Shorto (1962) [thakui?, dako?, thakui]. It refers to a cylindrical container of wood or bamboo and is used in a compound noun 'needle-case'. Shorto does not give this form as a classifier, however.

It is not unusual for Shorto to disagree with the citation of Haswell (1901) and Halliday (1922). The differences in interpretation of these forms may be related to the problems in distinguishing between compounds and classifiers described in Chapter 1. While the order of the numeral phrase in Mon, noun-number-classifier, would appear to make this kind of confusion less likely than in Vietnamese where the order is number-classifier-noun, it may be that in Mon classifiers are omitted when they are the same as part of the noun. This kind of omission in the case of partial repeaters is common for example in Siamese (see Adams and Conklin 1974).

For the most part, then, the classifiers for long items in Mon are either for plant and plant parts or have as their meaning a plant part. Only one artifact, guns, and one naturally occurring form other than a plant, i.e. corpses, are counted by these forms. Other things such as pencils, pins, toes, etc. may not be counted by these forms, but may only be parts of compound forms. In addition, none of the forms which are classifiers can be considered classifiers for flexible items, but only for long rigid objects. This system is very different from the Palaungic ones described above and as we shall see is very different from the Khmuic ones described below.

5.1.3 Khmuic

5.1.3.1 Styles of classification

The Khmuic system for classifying one-dimensional items is interesting in two ways. First, unlike the classification of humans and of three-dimensional items, the Mal system for counting one-dimensional objects is not the same as those found in Khmu and Khmu Yuan even though they use some of the same forms. The Mal system resembles that of Palaungic where there is an all purpose one-dimensional classifier. However, in Khmu and Khmu Yuan we see a new style of classification different from Palaungic and Mon. The northern (Yuan) and southern dialects of Khmu distinguish unfelled trees from felled trees and long rigid objects and from long flexible objects. In addition, in these dialects there are some special classifiers for artifacts and connecting paths.

As mentioned above, in the Khmu and Khmu Yuan dialects, the numeral classes distinguish unfelled trees and other growing plants from those that are cut, and therefore, have become objects of use for people. This distinction can be seen in classifying the morpheme s?cong. When this

form is counted with *tuut*, it means 'tree'. However, when the same morpheme is counted with *hlem* it means 'log'. The *tuut* classifier is used with plants in their natural state including trees, grass and bamboo. However, the main function of *hlem* seems to be to classify long slender artifacts of varying sizes. In addition to logs, the form is used with pencils, books, needles and drinking straws which are fairly small. It is also used with medium sized tools, with narrow blades for digging such as dibble sticks, as well as with large artifacts like canoes.

However, the use of the *hlem* classifier is not strictly for artifacts. It is also used with various body parts, such as quills, horns, antlers, fingers and bones. Of course, many of these items can be used as artifacts of various kinds and do not necessarily have to be still attached to the animal when counted. Whether *hlem* is for both attached and unattached body parts cannot be discerned from the available information. In Khmu Yuan some body parts are included in the *hlem* class which are frequently in a natural kind class in other languages. In Khmu Yuan, both head and body hair are included in this class. It may be that *hlem* is used with these items when they are cut, but perhaps not. In other Mon-Khmer languages, see for example the section on Bahnaric (5.1.5), hair is considered to be the same natural kind as plants.

The *tuut* 'classifier is not the only one for plants in the Khmu Yuan dialect. There are also the two morphemes, *kroong*', and *tlngok*' both of which mean 'stalk' and are used for stalks of things. In addition, large cut logs can be counted by *toon* 'rather than *hlem* in Khmu Yuan.

Besides the natural kind classes for plants and the long rigid class for cut plants (i.e. logs) and for other artifacts like pencils, boats, etc., the Khmu dialects also have a long flexible class. The classifier for this class is sen. Sen counts things like chains, string, thread, rope, intestines and hair. (In Khmu Yuan, hair can be in two classes, lem' and sen', the difference in use is not described.) In addition, the sen' classifier is used with roads which are not flexible in the same sense as the other objects, but their winding shape resembles flexible items.

The most interesting aspect of the use of *sen* in Khmuic is that this classifier is also found in Mal. However, in Mal, it is both for rigid as well as flexible items. It is found with string-like objects, roots and roads, just as in Khmu and Khmu Yuan. However, in Mal, it is also used with tree-like items and rigid items such as needles, pencils and teeth.

A further difference between Mal and the Khmu dialects is that in Mal felled trees are not counted by a different classifier from unfelled trees. In Mal, as reported by Wajanarat (1978), the sen classifier is used for trees also. However, there are some classifiers for plant parts in Mal. For example, gai 'stalk' is used to count stalks of things and is a repeater with nouns that are compounds including gai.

The other Mal dialect described by Filbeck (1976b), only gives *pa*- as classifying long things. Information on whether it is employed for both rigid and flexible one-dimensional objects is unavailable.

In addition to these classifiers for one-dimensional objects, there are many classifiers for various kinds of artifacts. One classifier, *laang* (*hlaang*), occurs with some long things like traps and combs. However, this form occurs with a wide variety of artifacts like jews harps, crossbows and tinder boxes, so it is not possible to argue here that the classifier is only for one-dimensional objects. In addition to this form, some of the tools that are classified by *hlem*, e.g.

digging sticks, can also be counted by ?an in both Khmu and Khmu Yuan. However, this classifier is not just for one-dimensional objects either: it is essentially an artifact classifier, and it can be employed with a variety of objects. Many of the items classified by ?an, e.g. knives and other artifacts, also have other classifiers. There is ?nuang for knives and crossbows in Khmu; in Khmu Yuan, there is thian for swords, axes and knives. Guns, on the other hand, are classified by book in Khmu Yuan.

In Khmu Yuan and Khmu, there are also a couple of classes that include rivers and roads. (Rivers are items that are frequently counted by classifiers for long flexible items, as are roads.) However, the northern (Yuan) and more southern dialects do not use the same forms for these classes. In the more southern dialects of Khmu described by Smalley (1961) and Delcros (1966), hrong is used to count bodies of water, including rivers, lakes, and ponds. Here the organising principle of this class is not one-dimensionality, but a natural class of water. In Khmu Yuan, the classifier for bodies of water such as rivers, lakes and dams is slung. The basis of the class appears to be the same as that in Khmu. In Khmu Yuan the other class that includes roads, besides lem', is not based on dimensionality but probably on the concept of connecting paths. The classifier for this class, rngtaang', is used with fords, passways and footbridges, for example.

5.1.3.2 Sources of the classifiers

As has already been noted in earlier chapters, the Khmuic system strongly resembles, both in classes and in classifiers, the Lao classifier system. In the Khmu and Khmu Yuan systems, the resemblance to the Lao system manifests itself in the existence of different classes for trees,³ for long rigid items, for long flexible items and for some artifacts. However, there are points of differences in these systems as can be seen from Table 5.1. One difference in the use of the Lao classes in Khmu seems to be that when the classifiers and classes were borrowed, they were frequently narrowed in their application. For example, ?an is most commonly used to classify borrowed artifacts in Khmu, but it can be used as a general classifier there. However, in Khmu Yuan, ?an is described as a general classifier as it is in Lao and does not seem mostly limited to borrowed artifacts. Lam, for boats, is also used for more objects in Lao, e.g. tubular things, than it is used for in Khmu Yuan. There, its use seems limited to boats.

Another point of difference among the Khmu and Tai systems is that one of the classifiers for these shared classes is not a Lao, or even more generally, a Tai classifier. The *tuut* classifier for trees in Khmu and Khmu Yuan has cognates in other Mon-Khmer languages. In Pacoh (Katuic), there is the form *tom-atut* for trees planted on each side of a house. The meaning of this form is 'trunk'. As we have seen in Palaungic and will see in Khmer (sections 5.1.4), morphemes with this meaning frequently are classifiers for trees in Mon-Khmer and Aslian.

A third point of difference in the Khmu and Khmu Yuan systems and in the Lao system is that there are some classes with their classifiers that are not in Lao. These include the 'stalk' classifiers (see Table 5.1), the classifiers for bodies of water, the *hlaang* classifier, and the one for connecting paths. The *hlaang* classifier has cognates in Palaungic. It was noted in sections 5.1.1 that the basis of this class is material; that is, if an object is made from bamboo, it can be included in this class.

Table 5.1: The sources of classifiers for one-dimensional objects in Khmuic

Khmu	Khmu Yuan	Mal (Wajanarat)	Mal (Filbeck)	Lao	Tai Yuan
tuut 'unfelled trees'	tuut ''unfelled trees'			kók 'trees'	tôn 'trees, post, timber'
	kroong`'stalks of things'	gai 'stalks of things'			tillibei
	tlngok`'stalks of things'				
hlem 'long rigid objects'	lem ´ 'long objects'		<i>pa</i> - 'long items'	<i>lêm</i> 'long objects'	<i>lẽm</i> 'long objects'
	lam`'for boats'			<i>lám</i> 'boats, tubes'	lam 'boats'
sen 'long flexible objects'	sen ´ 'long flexible objects'	sən 'long objects in general'		<i>sên</i> 'long flexible objects'	sēn 'long flexible objects'
?nuang 'knives crossbows'				dua:ng 'knives, round or heart shape'	duang 'sun moon, stars, lamps'
	thian 'knives'				thìan 'knives, axes, chisels
?an 'artifacts'	an` 'artifacts'			?an general classifier	?an 'pencils, tables'
	book´ʻguns'			(kra:) boôk 'guns, tubelike'	boòk 'fire- arms'
hlaang 'made of bamboo'	laang ''made of bamboo'				
hrong 'body of water'	slung ´ 'body of water'				
	r ngtaang` 'connecting paths'				

As we saw in the classifier system for round objects and as we will see for the classifier system for flat objects, Khmu and Khmu Yuan do not always have the same Tai languages as the source of their classifiers. In this case, Khmu Yuan also has a classifier from more northern Tai languages. The *thian* 'classifier for knives is found in Tai Yuan, but it is not found as a classifier in Siamese or Lao.

The greatest deviation from the Lao system or the Tai systems in Tai Yuan or Siamese is to be found in Mal (see Wajanarat 1978). While the *sən* form found in Mal is a Tai form, its use has been completely restructured in Mal. In Mal, it has become a classifier for any kind of long item and not just flexible long items as it is in Tai.⁴ This use is unique to Mal. In all other Mon-Khmer branches where this form is found, i.e. in Kui (Katuic), just as in Khmu and Khmu Yuan, the classifier retains its use for flexible items.

5.1.4 Khmer

5.1.4.1 Styles and sources of classifiers for one-dimensional items

The Khmer system for one-dimensional items is basically like Khmu or like a Tai system; that is, it distinguishes rigid items from flexible items. However, it is unlike Khmu or some Tai systems in that it does not have a separate class for trees and other growing plants. Rather, Khmer has a tree-plus class which includes trees and long rigid artifacts. In Khmer, the classifier for this tree-plus class is *daəm* meaning 'trunk'. In addition to its use for counting plants and trees, it is recorded as classifying a few inanimate items such as pencils and cigarettes. Ehrman (1972) also cites it as classifier for things with motors.) In the case of pencils, there is a material and shape connection, and this is true of guns if there are wooden stocks on them. With cigarettes, guns and trains, the connection is shape, though cigarettes have a plant source. While *daəm* is found with the above inanimates, it does not, however, seem to have the versatility of other tree-plus classifiers. For example the *cây* 'tree' form in Vietnamese classifies many items which in Khmer are unclassified. Jenner and Pou (1981), unlike other sources, do not even treat it as a classifier, but as a 'generic head word'.

This daəm morpheme in Khmer has cognates throughout the area in the Mon, Katuic and Bahnaric branches. Diffloth (p.c. 1982) reconstructs the form as *təəm in Proto-East Mon-Khmer and *təm in Proto-Mon-Khmer. In most of these languages, it is a classifier for trees and plants only and should be considered a natural kind classifier; however, in a few of the languages it is also used with inanimates as it is in Khmer. In several of the languages, the cognate has a slightly different meaning, and in several it is found infixed with -n-.

Mon and Katuic are two branches where the form $*t \ni m$ is for plants and where there are infixed forms. In Mon, one has nom for the infixed form of this cognate. As described above, Shorto claims that in both Middle and Modern Mon the infixed form that still retains the t-, tnam, is a prefix used before tree names. In Katuic, one finds the infixed form in three languages, as well as the uninfixed form in one of the languages. In Katu there is $tan \hat{a} \hat{a} m$, in Brou naum, and in Pacoh tom, ntom, and nnom. The only time these forms are found with an artifact is in Brou

where a fetish made with leaves is counted with *naum*. However, in this usage, the item still strongly resembles a plant and probably should not be considered an artifact in the sense of appearance. In some of the Bahnaric subbranches the form is also for plants only. These languages include \hat{O} i and Boloven (West Bahnaric); here the form is without an infix. Also, the infixed form in Chrau and the uninfixed form in Proto-Mnong (South Bahnaric) are for trees only.

*Təəm either infixed or uninfixed is recorded in all the subbranches in Bahnaric except the Eastern one. It is in this branch that one finds the form used with artifacts. As noted above, some of the Bahnaric languages use the form for trees only. However, in Rongao and Sedang (North Bahnaric) and in Rongao and Bahnar (Central Bahnaric), the cognate is found categorising trees and jars made from trees and filled with wine. In Sedang the form is given as meaning 'immediate family' and in Central Bahnaric 'principle', 'base' or 'origin'. In Central Bahnaric it is used in both an infixed and uninfixed form. In Stieng and Sre (South Bahnaric) the form is also with artifacts. In Stieng, tom can be used to count pipes as well as trees. In Sre, the form ndòm is used with rolling pins in addition to growing plants. In most of the cases the artifacts that this form is used with are wooden in material. However, as we saw in Khmer, they can extend to have only a shape relation to the basic items in the class, growing plants.

According to most sources, the classifier for string-like things in Khmer is səsay meaning 'bloodvessel', 'nerve', 'fibre'. However, Jenner and Pou (1981) cite the string-like classifier as sarasai/saarsaj/. The səsay form is not found in other Mon-Khmer languages. However, in Siamese there is saăy, a classifier for roads, ropes, string, bracelets and belts, which appears related to the form in Khmer. This form throughout the Tai language family means 'sash, line' (Li 1977:287:414).

5.1.5 Bahnaric

5.1.5.1 Styles of classification

The Bahnaric subbranches share several classifiers for one-dimensional items in addition to sharing several classes which are based on the same organising principles. Classes for natural kinds are one type that is very common in Bahnaric. As was mentioned in preceding sections (see Khmer, for example), several of them have the *təm cognate which in some of the Bahnaric languages is a natural kind classifier employed to count growing plants. These languages include Oi and Boloven (West Bahnaric) and Chrau (South Bahnaric). In other subbranches this same morpheme is found with some artifacts in addition to plants. In Rongao and Sedang (North Bahnaric) the classifier is also for wooden jars. The same holds true for the form in Rongao and Bahnar (Central Bahnaric). In two South Bahnaric languages, it is also found with artifacts: pipes in Stieng and rolling pins in Sre. In all of these languages, the artifacts counted by these forms are wooden ones.

The *təm classifier is not the only one associated with classes for growing plants. In addition to *təm, there are a couple of classifiers representing classes for trees and for stalks and some which appear limited in use to bamboo. On (West Bahnaric) has a second class for trees in addition to *təm mentioned above. On also employs $y\hat{o}$ for this purpose. In South Bahnaric, Sre

and Chrau also have a classifier meaning 'stalk' that is found with plants. This morpheme is *nkong* in Sre and *ncong* in Chrau. In Sre, it is purely a natural kind classifier for stalks of things. In Chrau, in addition to stalks of rattan, bamboo and sugarcane, it is employed to count logs, posts, and pencils: that is, artifacts of wood. While this classifier is for stalks specifically and not for trees, the artifacts it can be used with are similar to those that classifiers for trees are found with.

Bahnar and Rongao (Central Bahnaric) are the languages with the greatest number of classifiers for plants. In Rongao, there is *gor* for stalks of things. In the western dialects of Bahnar, *joi* is used for the same purpose. In the Alakong dialect of Bahnar, *hlak* can also be used for this purpose. Besides these stalk forms, there is *toking* in Jolong and *tokong* in other Bahnar dialects which Guilleminet and Alberty (1959, 1963) cite as the same in use as *joi* in the western dialects. These two forms are found with stalks and with slender vertical items including hair. In addition to the stalks classifiers in Bahnar, there is *plông* in the Western dialects for trees whether they are standing or felled.

As was mentioned above several of the languages have classes especially for bamboo. These languages include: Sedang (North Bahnaric) that employs 'do; Rongao (North Bahnaric) that uses ronoh for large bamboo; Bahnar (Central Bahnaric) which employs adēand Sre (South Bahnaric) which uses nrāng. What is interesting about these forms is that none of them are the same morpheme even though their function seems the same. However, it may be that there are shades of differences of meaning not specified in the data. Given the importance of bamboo as a material, there are probably many more classifiers of this type in other languages. As we saw in Palaungic and Khmuic, there is a material classifier, hlāng, for artifacts made out of bamboo.

While a few of the classes for growing plants subsume some artifacts, for the most part inanimate one-dimensional artifacts are classified together by the classifier tong. This particular classifier is cited in three Bahnaric subbranches: North, Central, and South. In North Bahnaric, it is found in Rongao, Jeh and Halang. In Jeh and Halang it is a morpheme for counting long implements such as knives and bushhooks; weapons such as rifles; and one form of transportation, bicycles. In Anonymous Rongao, tong is also for guns and sabres; however, in Rongao the transportation artifact is boats. In Central Bahnaric this form is found in both the Rongao dialect in this area and all the Bahnar dialects. In these languages, tong counts rifles, sabres and axes just as in North Bahnaric, but its use is broader than in the Northern subbranch: it can be used with granaries and paddy stalks and also with things that are seen as valuable including jars of certain types and some people. In South Bahnaric, this form also appears in Stieng and Chrau, where it is employed with some weapons like guns. In Chrau, in addition to its use with long weapons like guns, knives and crossbows, it also counts tools, mortars and pestles, and fishing poles. It is also found with sticks and stalks and shelters as in Central Bahnaric. However, in Chrau, it is employed with vehicles in general and with long animals like lizards.

Another classifier found with a variety of artifacts is beq in Cua (East Bahnaric). In the Cua data, beq is cited only with trees. However, this classifier is also found in Katu and Kantu (Katuic). There, the form (a)beq is given as a classifier for inanimate items. This information, along with the fact that it is found in Proto-Chamic (Austronesian) as a classifier for cylindrical

objects make it extremely likely that the form in Cua (East Bahnaric) is also an artifact as well as a tree classifier.

There are several other classifiers in Bahnaric that refer to various artifacts. In Sedang (North Bahnaric) there is poléang which was described in Chapter 4 also because a few of the items that this form counts can be considered three-dimensional. However, several of the items are ones also frequently counted by one-dimensional classifiers; such items include fingers and hair. Other items in the class are teeth, bullets and quills. Anon's Rongao (North Bahnaric) has a different classifier for certain of the items that poléang counts in Sedang. This form is mrâm, and it is found with shots, bullets, and arrows. It is not unusual for weapons and related items to be in separate classes; this was true for example of guns in Palaungic.

In Bahnar and Rongao (Central Bahnaric), there is a separate class for weapons. However, some of the items in this class may also be in the tong class. The classifier for this class is ronak. Scars, the permanent testimony to the use of weapons and to the existence of disease, also belong to a special class in Bahnar. The classifier for this class is kola/tola. In the Eastern Bahnar dialects, Alakong, Bonom, Golar and Tolo as well as in the Kontum dialect, there is also a depreciating classifier for scars: roka. The occurrence of these two classifiers demonstrates again some of the uniqueness of the Central Bahnaric subbranch in the forms and semantic bases for classification.

In the various subbranches of Bahnaric there are some classifiers for long things typically classified in long flexible classes. This branch in that sense resembles Khmu and Khmer by having separate classes for some flexible items. Most of the North and Central Bahnaric languages share the same classifier for long, thin and frequently flexible items. In Sedang, Halang, and Anon's Rongao (North Bahnaric) the classifier in question is rono, roh and oroh respectively. In Sedang the form, which is infixed, is found with narrow clothing like loincloths, with growing plants like rattan and gourds and with various cold-blooded creatures such as snakes, earthworms, fish and eels. Since Sedang does not have the tong classifier it may be that the rono classifier has a broader application in Sedang than in the other languages that have both. In Halang, the roh form is given only as being used to count long things. In Anon's Rongao, this form appears in both an infixed and an uninfixed form. In its uninfixed form, oroh, it is cited with some different items than in Sedang: cords, necklaces and small rivers. In its infixed form, ronoh, it is cited for big, long things like bamboo. It is possible that in its infixed form in Rongao the classifier is not for flexible or nonstraight items as the oroh form is.

This same classifier is found in the Bahnar dialects of Central Bahnaric. There the form is roh/ring (W). In Bahnar, it is used to count stretched-out cords, necklaces and rivers, just as in Rongao (North Bahnaric). It is also with non-winding roads and beams in Bahnar.

The other Bahnaric languages use a variety of forms for classifying long, thin, and flexible things. In Jeh, another North Bahnaric language, two forms are found: sigu and tru. These two forms count the same kinds of objects as oroh in Anon's Rongao: thread, rope, wire, bark and leaves (long narrow ones). In Cua (East Bahnaric) raq is cited as a classifier, but without examples. This same form is found in the Chamic (Austronesian) languages in the area and is a classifier for long, mostly flexible things in these languages, so it is possible to infer that this is

also its function in Cua. In Southern Bahnaric, the languages all have different forms for long flexible things. In Stieng, there is *jar* with rope; in Chrau, *rawây* with cord and body hair; and in Sre, *dăng* for pieces of rope. This last form, as well as some of the others, may be quantifiers in that they may be for specific lengths of cord.

5.1.5.2 Sources of classification

Two of the classifiers for growing plants, *təm and nkong, have been described above as they have cognates in several other branches. The *təm cognate meaning 'trunk' has been previously described in section 5.1.4.1. As was mentioned there, this cognate is found in Mon, Khmer and in Katu, Brou, and Pacoh (Katuic). For the most part, this is a natural kind classifier. However, in Bahnaric, the form is found with wooden artifacts. In Khmer, its use has been extended beyond materially related artifacts to include items like trains. As described in section 5.1.1.2, the nkong form found in Sre and Chrau (South Bahnaric) is also found in Kawa and Drage's Wa (Palaungic) in Pacoh, Brou and Katu (Katuic), and in Semai (Senoic-Aslian). As mentioned there this form means 'stalk' and generally functions as a classifier for growing stalks. However, it is also used in South Bahnaric for artifacts made of wood or stalk material. This extension of a natural kind class to include artifacts made from that material is very common.

Two other forms for classifying natural kinds also have the same meanings as the *nkong* and *təm classifiers. Plông in the Western Bahnar dialects means 'trunk' as *təm does. This particular form is probably related to $pl\bar{q}ng$ in Gold Palaung for channels of water. The tokong form for stalks means 'stalk'.

The tokong classifier is interesting because it represents a pattern of classification that is found several places in Mon-Khmer. In addition to its use with stalks, it is also used with hair on the head, making the human body a stalk. In Anonymous Rongao (North Bahnaric) body hair, fur and bamboo are classified by nhoi which means a 'small twig'. In other languages hair can be found in the long rigid class. For example, this happens in Khmu Yuan (Khmuic). In some other languages, hair is found in leaf classes (described in Chapter 6). Because it is not unusual for hair to be associated with plant parts, it is possible to consider hair as the same kind of natural object as plants. Trees or stalks and hair are all living items sprouting from a flat surface, having roots and growing mostly in stands or groups. Also the association of hair with leaves, stalks and even branches may be based on an image of coverings or appendices on trunks with the animate body being the equivalent of the plant trunk. The strong associations between these two kinds of items makes it very likely that plants and their parts and hair should be considered as belonging to the same natural kind class in many cases. This thesis is supported by a class that exists in Burmese which also combines the same kinds of objects. This form is pin for long slender and vertical living or recently living things including plants and hair (Burling 1965:251). Of course hair is not always treated this way. We saw above that it could be in the long flexible class with cords in Chrau.

The toking form which Guilleminet and Alberty (1959, 1963) give as an alternative to tokong the stalk classifier, according to Diffloth (p.c. 1982), is really a morpheme with an entirely different meaning. He claims that it actually means 'head' etymologically. Of course, this does

not preclude it from functioning as a classifier for stalks of items which do often have 'heads' of fruit, of grain and of flowers on them.

The tong classifier for inanimate items, that is found throughout Bahnaric is interesting in its origin. The form has various glosses in the languages it occurs in: a classifier for 'long tools' or for 'instruments' or for 'pole-shaped items'. While the cognate may have experienced a shift in meaning in some of the languages, it is basically a noun meaning 'handle'. Many of the items in the tong classes are certainly things with handles, i.e. knives, bushhooks, rifles and even bicycles, which are in the Jeh class. In addition, sticks and poles which can be used to make handles are in this class in some languages. However, several of the other items are not things that really have handles, but are items that are handled, i.e. mortars and pestles, pencils, crossbows, fishing poles and even boats. The use in Chrau with lizards does not fit with either of these concepts. The relationship here would seem to be dimensionality, i.e. long and cylindrical. This may also explain the inclusion of shelters in this class in Chrau (South Bahnaric).

The use of this tong form is most interesting in Bahnar and Rongao (Central Bahnaric) which have made innovations in the function of this class. There the classifier counts many of the same items as in the other languages: axes, guns, sabres, oats, paddy stalks, and shelter type constructions like granaries. However, the form has also taken on the concept of valuable because so many of the items in this class are items of great worth in Bahnaric culture: guns, drums and axes for example. Therefore, other items of value such as expensive jars, probably made by and purchased from other cultures, and important people are included in this class.

Classifiers with meanings similar to the *tong* form are found both in Burmese and Mandarin. The form in Burmese, *le?* means 'hand' and is used with hand tools. However, neither of these languages are ones in contact with the Bahnaric languages that have the handle form. In Lao, *dàam*, 'handle', is also found as a classifier, but its use is restricted to pens and pencils, unlike the wide variety of items the *tong* classifier is used with in Bahnaric. It appears that most of these classes, since they all use different morphemes, are not borrowed from each other, but are shared because the use of tools is a distinguishing feature of human culture.

The classifiers described above in this section all seem to be native Austoasiatic forms. This also seems true of the *roh* form for long things. Not only is this form found as a classifier in Bahnaric and perhaps in Brou (Katuic), but it also functions as an adjective meaning 'thin' in Jeh (North Bahnaric). As mentioned above, Jeh uses two other forms to classify many of the items that *roh* is found with in Bahnaric languages. In Bahnar (Central Bahnaric), the *roh* classifier is given as meaning row, line or put in a line. The line concept also carries the notion of thinness. The 'put in a line' idea in Bahnar explains it use with stretched out or straight items such as beams and non-winding roads. However, as mentioned above this form can be used in other Bahnaric languages to count typically flexible and winding or curving things like rivers and roads. Unfortunately, in Bahnar, there is no information on how winding roads would be classed. The exact semantic basis for including items in the *roh* classes is unclear to me except for the notions of long and thin. Flexibility may or may not be important. And, of course, different languages may have developed these notions to different degrees.

In Bahnaric, there are several classifiers for one-dimensional objects that are found in Austronesian languages also. The beq classifier in Cua (East Bahnaric) as reported above is found in Chamic (Austronesian). In Rhade (Chamic), this classifier is described as counting cylindrical objects and is reconstructed as *?be? in Proto-Chamic by Tharp and Y Bham Đuôn-ya (1980:16). The organising principle in this case appears to be dimensionality, unlike the tong class. While the Bahnaric languages have often borrowed forms from Austronesian, it seems quite possible in the case of beq that the borrowing went the other way. This argument is supported by two things: one, this form is only found in Chamic and not in other Austronesian languages and two, that the classifier in Rhade has no specific meaning nor function as another part of speech. This classifier is also found in Katu (Katuic).

The raq form in Cua (East Bahnaric) is also a classifier in the Chamic (Austronesian) languages. In Cham, the form is ra' and in Rhade aruăt. However, this classifier, unlike beq, is a native Austronesian form. It is found throughout Austronesian (*PAN uRat) meaning 'vein', 'artery' and is a common classifier for strand-like things. The contrast between beq and raq as organising semantic principles appears to be flexibility since veins and tendons are pliable. Perhaps size is also important. Cylinders could be any size, but veins and tendons tend to be narrow. Certainly some of the items in the aruăt class in Rhade (Chamic) are not flexible, i.e. branches and twigs, so size may be important in these cases. Also a binding or connecting function that tendons may have, i.e. they are used as rope in many cultures, could be another important concept. Of course, it may be that the Bahnaric and Katuic languages which share these two forms with Austronesian do not use them in entirely the same way.

The last form which might have an Austronesian origin is the depreciating classifier for scars, roka. This form is cognate with the noun, luka meaning 'wound' in Malay. However, it might also be from Sanskrit roga 'disease' or Thai rôog 'disease'. In either case we have an example of a classifier whose meaning is identical to the noun which refers to the object it classifies or to the related effects of the object.

5.1.6 Katuic

5.1.6.1 Styles of classification

Many of the kinds of classes that occur in Katuic are ones that are fairly common in Mon-Khmer and Aslian. For example, there are several classes for natural kinds, in this case plants. Also there are several artifact classes for tools and weapons. And, as one found in some Palaungic languages and in Mal (Khmuic), there is also an all-purpose long classifier. The Katuic system is also made up of classifiers that are found in many other branches. Only a few are unique to Katuic. The interesting aspect of the Katuic system for one-dimensional items is that several of the classes overlap in the items that are subsumed in them.

Two of the classifiers for natural kinds have been discussed fairly extensively above. These are the *təm cognate and the nkong cognate. In Katuic, their use parallels that found in the other branches in that they are almost exclusively for natural kinds. The only variation, as was mentioned above in Chapter 4, is that tarcong in Pacoh can be used to count houses. Here houses

are being counted by the concept of 'base', one of the meanings of *nkong*. In the Katuic languages, the *təm 'trunk' cognate is infixed. In Katu, one finds tanââm; in Brou naum and in Pacoh nnom, ntom and tom, the uninfixed version. There does not appear to be any meaning difference in the use of these forms in Pacoh. The variation may have more to do with the infixing process than with the classifier itself.

There are a few other classifiers in Katuic for plants. For example, in Brou, there is *coâl* for living plants. In addition, Brou has another plant classifier that is unique in the natural kind classes. This is *lansor* for long thin fruits and vegetables, like tamarinds, pea pods and string beans. In addition, it is used with one artifact: bullets.

While there are all these natural kind classifiers for plants in Katuic, trees and other plants may also be counted together with other non-natural items. Specifically in Katu, Pacoh and Brou, trees can be counted by the form *ntrayh* which is an all-purpose classifier described by Miller (1964) for Brou as counting 'stick-like' and 'string-like' objects. In addition to its use with growing plants, the typical stick-like objects that this class includes are felled trees, fishing poles, spears, cigarettes and crutches. Some of the typical string-like objects are rope and belts and string-like plants including vines. In addition, geographic features such as rivers and streams, that are long and winding and thus resemble flexible items, are also in this class. Cold-blooded creatures like intestinal round worms, earthworms and snakes can also be counted by *ntrayh*. The length of the artifacts and objects in this class can vary a great deal from small things like needles, earrings and bracelets to very long things like crossbeams of houses, front porches and rivers.

The interesting thing about this all-purpose classifier in Katuic is that there still occur in the Katuic languages in question other classifiers for string-like items and some for rigid items. This does not seem true in Gold Palaung (Palaungic) and Mal (Khmuic) which also have an all-purpose classifier for counting flexible and inflexible long items.

It is possible that in Katu the application of the *ntrayh* form may be much narrower than in Pacoh and Brou. First, the classifier is only listed with trees in the Katu source. However, this may be misleading since there is so little information on Katu. Second, Katu has both a long inflexible and a long flexible classifier in addition to *ntrayh*. Katu has both the (a)beq and raq classifiers that were found in Cua (East Bahnaric). While the data for both Katu and Cua systems are meagre, those for Cham and Rhade (Chamic Austronesian), which also share these forms, are fuller. On the basis of the use of ?be? in Rhade, it can be inferred that the beq form is used for a class based on the idea of inflexible one-dimensionality and that aruăt is for strand-like things, mostly flexible ones, although things like twigs, branches and thorns can be included in this class. Perhaps aruăt is also for smaller narrower items than ?be? and not just a flexible/inflexible difference. Between these two forms and in addition to the fact that Katu also has the classifier sayar for necklaces which are typically in long flexible classes, the objects that ntrayh applies to may be significantly reduced in Katu.

Brou also has several other classifiers for long flexible items. One is the *prốh* form that was mentioned above in the Bahnaric branch as possibly related to the *roh* forms for long, thin items. In Brou it is cited with things like wire, string and necklaces. *Choang* in Brou is given also for wire and veins, and *cansái* covers almost the identical set of items as *prốh*: wire, rattan rope,

necklaces, and string. The differences in function among these three forms is not clear from the data. However, it is not unusual in Brou to have several forms for the same purpose (see Chapter 7). These forms can count some of the same items as *ntrayh*, e.g. rope, so this is also another example of overlapping in the use of classifiers in Katuic.

Kuy has a separate classifier for long flexible items, sen. As was pointed out in the Khmuic section, this is also a borrowed form, but from Tai languages, not Austronesian.

In the Katuic languages there are also several classifiers for artifacts of various kinds. Pacoh and Brou have a classifier for long-handled tools: rang and riang respectively. The function of this class is like that of some of the more restricted functions of the tong classifier in Bahnaric. In Pacoh and Brou the form counts bushhooks, swords, sabres, razors, knives, axes and digging tools. Many of these items can also be categorised in another class in Pacoh and Brou. The classifier for this other class is pla which was described above since it is also found in several Palaungic languages for the same purpose. In addition to these two classifiers, there are also several others that are cited with only one or two items that are artifacts. Brou has clong for quivers and lau for guns. As mentioned above, the bullets for guns are counted by lansor. Brou also uses duong for crossbows and musical instruments. Pacoh also has the duong form but only for reeded instruments. For crossbows Pacoh uses tamprang.

5.1.6.2 Sources of the classifiers

The all-purpose classifier in Katuic, ntrayh, is cited in Pacoh as meaning 'length' or 'board'. This means that the idea of dimensionality is important as an organising principle. However, as one can see from the variety of items this form categorises together, the 'length' definition cannot refer to some consistent scalar distance. The form is used with items as small as needles and as large as front porches. Many of the meanings associated with 'board' do not seem to carry over to or to limit the objects in the class. The 'board' concept here also does not seem to imply that ntrayh can only be used with artificially cut items. Included in this class are unfelled plants and rivers and streams whose ends are not normally artificially cut except perhaps by dams. In addition, the live creatures in the class like snakes and earthworms are items that can be considered as having natural end points, though perhaps weakly defined ones in the case of worms which can regenerate. There are other classifiers in Mon-Khmer which also have the meaning 'board': konāng in Bahnar (Central Bahnaric) and tâm in Vietnamese. However, in both of these cases, the classifier is for broad flat things and not long narrow ones. The ntrayh form itself does not appear to occur in any other branches.

While *ntrayh* seems limited to Katuic, several of the other classifiers are found throughout Mon-Khmer and Aslian. The *təm and nkong forms, as mentioned above, are found in several other branches and nkong is in the Aslian subfamily. The *lansor* form for long fruits and vegetables in Brou, according to Diffloth (p.c. 1981), is typically Austroasiatic in shape, but specific cognates remain to be found. Also the *proh* form in Brou may be related to the *roh* forms for thin things found in North and Central Bahnaric.

Another form for flexible items in Brou has a Mon-Khmer origin. The *cansái* form is an infixed form of the noun *casái* meaning 'vein'. This form is related to *khsae* 'string' or 'cord' for classifying books and papers in Khmer. The meaning of this form, 'vein', is similar to the meaning of the *aruăt* form in Chamic that has been borrowed by Katu and Cua. So while the languages have used the same source for an organising principle they have a different form. The metaphor with 'veins' would seem to be based on shape, manipulability and perhaps a tying or connecting function.

The pla form for weapons is also found in Palaungic as well as in Brou and Pacoh. This particular form is described as meaning 'cutting edge'. For this reason, this class should be considered as having an artifact or function base for its organising principle. This classifier may also be related to a classifier in Malay bilah 'piece' for knives, daggers and swords. However, if it is, the surprise is that this form is not a classifier in Chamic, which one would expect to be the source.

Several of the other classifiers in Katuic have either been borrowed from neighbouring non-Austroasiatic languages or have been loaned into these same languages. The Chamic (Austronesian) connection of (a)beq and raq has already been described in the section on Cua (East Bahnaric). As was pointed out there the two may have gone in entirely different directions: (a)beq being borrowed by Chamic and raq being borrowed from Chamic by Bahnaric and Katuic.

The other non-Austroasiatic language family that has been the source of several classifiers in Katuic is Tai. Two of these classifiers are ones for artifacts and may have very well been borrowed along with the artifact. One of these classifiers is *lau* for guns which some Palaungic languages also have borrowed. Another is *duang* for crossbows and/or musical instruments including reeded ones. This form has also been borrowed in Khmu (?nuang) for knives and crossbows and in Amok (Palaungic) for spears. The only Tai form which is not for artifacts is sen for string-like things. This form has also been borrowed by Khmuic languages.

5.1.7 Viet-Mường

5.1.7.1 Styles and sources of classifiers in Vietnamese

Vietnamese basically follows the patterns in other Mon-Khmer branches: a natural kind of class; one for flexible items; one for rigid items and a couple of artifact classes. The class for rigid items is a typical tree-plus classifier. That is, the classifier for the class, $c\hat{a}y$, means tree and the class counts trees as well as other items. In Vietnamese, in addition to trees and other plants like mushrooms and toadstools, $c\hat{a}y$ 'tree' classifies all sorts of items made from trees or items that resemble objects made from trees either in their shape or their function. For example, while this class includes building parts such as posts and pillars made from trees, it can also include stone pillars where the material is different, but the function and shape are the same as their wooden counterparts. Clothing items in this class are paraphernalia like umbrellas and fans that have wooden (or metal or plastic) ribs. This class also includes all sorts of items like weapons such as guns and axes; writing tools; and combustibles such as sticks of fuel, candles, lamps, and firecrackers. Many of these items can have wooden parts or can resemble sticks in their one-

dimensionality; however, there is no material connection with items like candles and fire-crackers, only a shape relationship and perhaps a combustible function relationship in that wooden sticks of fuel are in this category.

A very interesting aspect of this tree classifier in Vietnamese is that it is possible to use this classifier for trees only and to switch inanimate items to the *cái* or inanimate classifier. This separation of plants and artifacts, as was noted above, also occurred in Khmuic with the *hlem* and *tuut* classes. However, in Khmuic what one had was a division between growing trees and long rigid items. This is not the case in Vietnamese. The division here is between trees and inanimate things of a variety of shapes and sizes all counted by *cái*.

In Vietnamese, in addition to the *cây* form, which can be used exclusively for trees, there is also *thân* meaning 'trunk, body' which is for trees alone unlike the *cây* form which is normally also with inanimate long items. (Morphemes meaning 'trunk, body' are a common nominal source for tree classifiers.) According to Huỳnh Sanh Thông (p.c. 1984), gardeners also use *gốc* 'base' for short bushy trees. The form *ngọn* means 'summit' and is also found with tall trees and some other long objects like flags and lamps. However, as mentioned in Chapter 4, its meaning makes it also a classifier for mountains.

The classifier for flexible things in Vietnamese is soi, meaning 'thread, fibre'. The form counts hair, thread and some clothing.

Vietnamese also has some classes for weapons. In addition to classifying weapons in the treeplus class, Vietnamese has thanh for long thin pieces of rigid matter including swords and sticks. Thanh is a one-dimensional classifier but appears to be used only for very limited items. For guns, Vietnamese has borrowed a Chinese form, khẩu, meaning 'mouth, opening'. In addition to its use with guns, it is used for bites of sugarcane. As we have seen before, it is not unusual for guns to be classified by a non-native form. Both the Katuic, Khmuic and Palaungic languages have all borrowed forms from Tai languages to count guns. (In Bahnar one finds the native form tong.)

5.2 Nicobarese subfamily

5.2.1 Styles and sources of classifiers in Nicobarese

In Nicobarese, both languages have a class for trees, but they do not use the same morpheme for the class. In Car one finds maa? and in Central Nicobarese, chanang. In Central Nicobarese, this natural kind class includes hair as well as posts. The maa? form in Car may be related to a form in Bahnar and Rongao, tomaak/komaak, that is used for logs rather than trees.

The Nicobarese languages also have a form for cylindrical things which was described fully in Chapter 4. This classifier, *noāng*, is a unique one, because it counts objects that are commonly found in round as well as in long classes.

In the Central languages there is also recorded a classifier for flexible things like ropes and fishing lines. This form is *kamilâng*. While it is probably an infixed form, its meaning was not found in the available data.

Lastly in Central Nicobarese one also finds a special class for boats. Since the class only includes boats, which have been found in other languages with one-dimensional items, the class should probably be considered an artifact class and not a dimensional one. The form recorded for Nicobarese, danòi, is not related to any of the other boat classifiers in Mon-Khmer which come from Tai.

5.3 Aslian subfamily

5.3.1 Styles and sources for the classification of one-dimensional objects

In Aslian, there are also classifiers for long items. Although the data are meagre, it looks as if there is a natural class for trees in Semai (Senoic). In Semai, one finds *kneeng 'base of tree', 'mother' used to classify trees (Diffloth p.c. 1982). This form is related to the sakoong 'stalk' classifier in Mon-Khmer, which also can be a classifier for a natural class, although in some cases these classes also include artifacts in Mon-Khmer. Perhaps this is true in Semai also. The meaning of this cognate is basically 'the base (of a tree)', 'the foundation', 'the essential part' and hence 'mother'.

In Mah Meri (Běsisi of Kuala Langat) (Semelaic), there is also a classifier for long things. In Mah Meri the classifier, *těkáh*, is used with arrows. According to Skeat and Blagdon (1906), the meaning of the classifier is 'a post' or 'stem of anything'. The meaning of this classifier is similar to other classifiers for long things in Mon-Khmer. There is an obvious material as well as shape connection here between the meaning of the classifier and the item it counts.

5.4 Conclusion

As described above, the Mon-Khmer languages handle one-dimensional objects in a variety of ways: in an all inclusive one-dimensional class; in a tree-plus or tree and long rigid versus long flexible style; in a cylindrical or cylindrical versus strand class which seems to have size connotations; or in a variety of artifact, function and material styles. However, as mentioned in discussions on the classification of other objects, more than one principle may be important in a single class. These methods of classification and the semantic origin of many of these forms are not, however, unique in classification systems in the South-East Asian area.

Throughout the above description, forms were mentioned that are borrowed from other South-East Asian languages. Among these forms are those found in Katu (Katuic) and Cua (East Bahnaric) which are geographically close to each other. They both share the system found in the Chamic (Austronesian) languages on the mainland: that is (a)beq for cylindrical, mostly rigid items and raq for thread-like items. Unfortunately there are so few examples available for Katu and Cua that it is impossible to know if they use the forms in the same way as the Chamic languages.

Besides these borrowed Austronesian forms, the Khmuic languages have systems composed mostly of borrowed forms from various Tai languages. These Khmuic systems are basically like each other and basically follow the Tai systems; however, there are some differences. All the Khmuic languages and also Kuy (Katuic) have the *sen* form for rope-like objects from Tai

languages: however, in Mal it is applied more generally to all kinds of long items, flexible or not. Khmu and Khmu Yuan both have *hlem* for long rigid items just as the Tai systems do. In addition, the separation of trees or natural kinds from long rigid objects and from long flexible ones is like that in many Tai languages. However, one difference in the Khmu and Tai systems is that the form for trees in the Khmu languages, *tuut*, is a native one, though the other two, *sen* and *hlem*, are Tai.

The distinction of long rigid and long flexible is also found in languages without Tai classifiers. For example, Vietnamese has a distinction like this. Of course, Vietnamese has been influenced in many ways by Tai, so it is conceivable that Tai has also influenced these semantic divisions, even in Vietnamese.

The Tai languages also have been the source of several classifiers for artifacts like swords, knives and spears. This is not surprising given the fact that many Austoasiatic cultures trade for these objects. Again, the Khmu languages have borrowed these kinds of classifiers. In Khmu, one finds ?nuang, a form occurring in Siamese and Lao for knives, etc. As noted above, this form is also in some Katuic languages. However, in Khmu Yuan, the form for this function is thian 'which is found in Tai Yuan, but is not listed in sources used here as a classifier in Siamese or Lao. This difference in sources in the Khmuic branch is like the one noted for the classification of three-dimensional items.

There are other forms for artifacts in the Khmuic languages and other languages which are from the Tai language family. The form throughout Tai for guns, kra:book, is used in Khmu Yuan. The lau form for guns in Palaungic and Katuic also has a Tai origin. The Tai form lam for boats is found in Khmu Yuan and Drage's Wa (Palaungic). Also the ?an form for inanimate objects is found in some Mon-Khmer languages for tools. Another form found in Siamese as a classifier, saăy, for roads, ropes, string, etc., and as a morpheme meaning, 'sash, line' elsewhere in Tai appears related to the səsay form in Khmer.

As mentioned above, not all the Mon-Khmer languages have a distinction between long rigid and long flexible as is observed in most Tak languages and in many Mon-Khmer ones. For example, Mal (Khmuic), Gold Palaung and Antisdel's Wa (Palaungic), and the ntrayh class in Katuic lack this distinction. There are also non-Mon-Khmer languages with this style, for example Burmese. Châun is used with rigid items like teeth, digits, pencils, umbrellas, needles, knives and firewood, and with flexible items like tails, rope, braids, cotton yarn, bamboo strips. (However, rivers and roads, frequently in flexible classes, can be in a category with cutting tools in Burmese.) The flexible items that are classed together with rigid ones in Burmese are many of the same items that are in the all-purpose long class in Gold Palaung. So the style but not the classifier morpheme in Palaungic could have Burmese as a source. However, this does not account for the occurrence of such classes in Katuic.

Also in Burmese, one finds a natural class for trees, grass and hair much like that in Nicobarese and some other Mon-Khmer languages. But the similarity here is likely to be accidental and based on similar perceptions rather than influence through contact.

The Nicobarese cylindrical class for long and round things does seem unique to the area.

A cursory examination of the classifier systems in other languages of the South-East Asian area also shows similar semantic sources for the classifiers to those in the different Austroasiatic languages. For example, in Malay and Iban (Austronesian) a form meaning 'stem', 'trunk', or 'principal member', batang, is used for rod-like forms: sticks, posts, trees, rivers and human bodies. The meanings of the form and the items it classifies are much like the *tom and nkong classifiers in Palaungic, Mon, Khmer, Bahnaric, and Katuic. However, not all languages with 'stalk' as a classifier used it in the same way. For example in Classical Chinese, stalk was used for small round items.

Also the classifiers for long flexible items which are frequently drawn from a form meaning 'vein' or 'tendon'. However, the languages where these forms are found are all in contact with Chamic languages which also use a noun like this. Since so many of the classifiers are drawn from plant parts, it is surprising that they are not in this case. In Mandarin, however, there is a classifier meaning 'root' for some long flexible items, but it has not influenced the Mon-Khmer systems.

For many of the artifact classes, there are also parallel kinds of classifiers to be found in non-Mon-Khmer languages. In many Tai languages, including Shan, a form meaning 'blade' is the classifier for things like spears, swords and needles. As described above, a form meaning 'blade' pla, is the classifier for corresponding items in several Palaungic languages and in Katuic. In the case of the Palaungic and Shan languages, the styles of classification could have inspired each other. However, while the Katuic languages and White and Black Tai also use this form and while they are all located in Vietnam, the distance between the groups makes inspiration less likely. Also as we noted in Bahnaric, many tools and long rigid items are classified by a form meaning 'handle'. This same type of category is found both in Burmese and Mandarin. Burmese has a form meaning 'hand' and Mandarin has one meaning 'take hold'. However, neither of these languages are ones in contact with the Bahnaric languages that have the handle form. In Lao, 'handle' dà:m, is close to Bahnaric, but it is much more limited in its function than the Bahnaric form. Also, several classifiers for guns have a form meaning tube-shaped or cylindrical, including Lao and Malay. This type was also found in Mon. Here again, languages which share a classifier with the same meaning as the one in Mon-Khmer are not ones found in the same area as these Mon-Khmer languages.

All in all, then, many of the styles of classification for one-dimensionality found in Mon-Khmer are to be found throughout South-East Asian classification systems. While there are obvious borrowings and some possible influences in style though not in form (for example, between Burmese *châun* and Palaungic *ngyāng*) in many of the cases described above, it would seem necessary to argue that similar experiences and perceptions account for the resemblances, not direct contact.

NOTES

1. The Khasi systems also violate Allan's findings because there is only the basic human/non-human distinction. However, given the small size of the system, this seems like a minor violation of the general trend. The Nicobarese exception is much more interesting.

- 2. Diffloth (p.c. 1982) thinks the form is really */plaa/. The glottal stop form for Proto-Waic *pla? he believes is only found in Waic.
- 3. The felled/unfelled distinction does not seem to hold in other neighbouring Tai languages. In Tai Yuan *lem* is listed with trees also.
- 4. Not all Tai languages have the same set of classifiers for the long flexible class. In the available Black and White Tai sources another form is used. In Black Tai (Fippinger 1975) and in White Tai (Minot 1949) *lem* is also for flexible items.
- 5. This is an unusual use because in most languages and dialects in Mon-Khmer this morpheme is a classifier for flat items.
- 6. In Jeh, other vehicles are in the pom class.
- 7. Sedang (North Bahnaric) has a classifier kotôu for things held in the hand. However, since no examples were included with it, it is hard to tell whether its function is similar to that of tong or whether it refers to amounts of things.

Chapter 6

CLASSIFICATION OF TWO-DIMENSIONAL OBJECTS (A LEAF COVERS ALL)

6.0 Introduction

This chapter discusses the classification of two-dimensional objects: those that have both length and width, but no depth. Allan (1977:301) reports that all classification systems have categories for one- and three-dimensionality, but that they do not necessarily have them for two-dimensionality. However, in Mon-Khmer, Nicobarese and Aslian there are numerous classifiers dealing with two-dimensional or flat items, and many of these classifiers categorise these items on the basis of their dimensionality. Other classifiers deal with other features of these two-dimensional objects such as their material or their function. We will see here, as we have seen before, how classes frequently combine ideas of shape, material, and function.

Among the items which can be treated as two-dimensional are natural forms like plants and plant parts such as mushrooms, leaves, flowers; animals such as turtles and fish; body parts such as skin, hair, cheeks and hearts; and natural objects like stones. Also treated as two-dimensional natural forms are physical features such as the earth and sky and numerous places such as fields, gardens, forests, markets, and the bottom of lakes. Many different kinds of artifacts are also dealt with in this fashion. Among such artifacts are parts of buildings and building materials that are flat in nature: ceilings, aisles, shelves, windows, rooms and walls; and boards, planks and bricks. Many furnishings, linens, and utensils are also subsumed here, including screens, pictures, mirrors and curtains, as well as serving and cooking dishes. Also all sorts of clothing, including items made of leaves and bark or ones woven from thread are treated as flat in nature. Artifacts for food gathering such as traps, some bladed items, and nets, and also artifacts asociated with boats like paddles and sails can be included here. Lastly, all kinds of items that are paper or written on like paper are almost exclusively treated as two-dimensional.

The classes for two-dimensional items are not easy to characterise. The various Mon-Khmer languages treat the same items in several different ways, and often, other than shape, it is hard to discern the relationships among items in a class.

One kind of class in Mon-Khmer and Nicobarese includes a wide variety of objects on the basis of their two-dimensionality. Examples of this kind of class are the class represented by *kan-blě-a* in Gold Palaung or by *kota* in Sedang (North Bahnaric). These classes normally include natural objects as well as all kinds of artifacts.

Another kind of class for two-dimensional objects is one that is frequently described as a class for flat flexible items (see Cohen 1976). These classes are usually for clothing and often for linens like mats, rugs and awnings. Examples of classes like these are represented by plah in Lawa (Palaungic) and Drage's Wa (Palaungic), hpun in Antisdel's Wa (Palaungic) and plah in Jeh and Halang (North Bahnaric). However, in such classes perhaps 'flat', 'flexible' is not the most appropriate description. Often these classes do not include other flexible non-clothing or noncovering items. In this case, these kinds of classes could also be described by other characteristics. For example they could be classed by the material which the items in the class are made of and which also accounts partly for their shape and flexibility. In addition, it is also possible to treat them as function classes - the function of most of these items being to cover and protect - or it is also possible to treat them as artifact classes. Even when such classes are used for more than just clothing and linens, it does not mean that these classes then become exclusively based on the characteristic of shape and flexibility. Take for example the pön classifier in Gold Palaung (Palaungic). This class is mostly for flat flexible things like linens, clothing and hides. But as noted above these kinds of items can also function as covers. This class in Gold Palaung also contains envelopes, and envelopes can also be described as flat, flexible items. However, the fact that they cover letters also should not go unnoticed: this concept obviously continues to have some importance. As has been pointed out in earlier chapters, it appears much more useful to view classes for two-dimensional items as having more than one possible organising principle.

If one does characterise some classes as flat and flexible, then there should also be classes that one can consider as flat and inflexible or rigid. The occurrence of both classes would fit in with the pattern described in the last chapter of long rigid and long flexible classes that were found in some subbranches of Mon-Khmer. As noted in Chapter 5, this type of distinction very likely was borrowed from the Tai languages. This same distinction among flat items, which does occur in Mon-Khmer, may also have had its origin in Tai languages. In the section on the Khmuic languages, Table 6.2 cites two classifiers in Lao which employ this kind of distinction: phɨn and phèen. The Khmuic languages have borrowed this distinction along with the classifiers. Even in Gold Palaung (Palaungic) where only one of the classifiers, pön, has been borrowed from Tai, the system has been adjusted in Gold Palaung to result in one that is much like the Tai rigid versus flexible distinction. This Tai influence, however, only applies to a few classes and many times in Mon-Khmer and Nicobarese the classes for two-dimensional items include both flexible and rigid items.

Another concrete characteristic that is present in a few flat classes is size. There are a couple of classes in Vietnamese and one in Bahnar (Central Bahnaric) that distinguish items on the basis of how large or small the item is.

Some of the classes seem to be based on the idea of an object that has been split off from something else, such as logs or slices of meat and frequently pieces of paper. Forms like this are found in Mon and Sre (South Bahnaric) for example. It is questionable to include such classes here because they can be characterised as really describing a part/whole relationship and, therefore, really being quantifiers. Indeed, no attempt has been made to include all such classes that were given as examples for 'slices'. However, in some cases, for example with the *plah* classifier described in Bahnari (Central Bahnaric) dialects, although the form may originally be related to

something having to do with splitting, the class now includes items like rugs, which can not technically be considered as a split item. It seems useful to include a few of these classes as examples of the possible origin of some classes now based on two-dimensionality.

There are classes for two-dimensional objects based on natural kinds. Examples of such classes are ones for leaves and related natural objects like flowers and hair. In Mon-Khmer leaves and fields are so often associated together that one wonders if fields should not be treated somehow as the same natural kind as leaves. Many classes in Mon-Khmer that include leaves have been extended to include all sorts of artifacts. Therefore, they can no longer be considered as natural kind classes.

Some classes for places might be considered as natural kinds, and occasionally one finds classes for the earth and sky as one has for example in Katu (Katuic). However, most classes for places include both natural places like the bottoms of lakes and also human constructions like markets or spirit houses.²

There are some artifact classes for two-dimensional objects in addition to the examples of clothing and linens mentioned above. For instance Bahnaric has classes for items that are mostly implements like hoes or axes and also things like pots and drums. In Anonymous' Rongao (North Bahnaric) a couple of these classes are described as being for tin leaves. Here the material and the shape are obviously part of the basis for classification. However, tin leaves are not naturally occurring items and, therefore, the artifact or even function concept also seems important.

Books are another artifact that is frequently found in special classes. However, as we shall see, books can be included in classes with other items on the basis of their shape and their material, two concepts which are often closely related.

Further artifacts that are frequently included in separate classes are nets and traps. Again, as with the classifiers for some places, the inclusion of traps in this chapter is not really on the basis of their shape; their inclusion there is due to their association with nets. Nets, because they are woven items, are often included in classes with clothing, linens or just flat things. However, since nets and traps have the same purpose, they sometimes are together in one class; a class that would seem to be based on function. It seemed natural then to include traps in this chapter even when they form a separate class. In the case of Sedang (North Bahnaric) where one finds fish traps, gardens and plots of ground all together in one class, it makes what originally seemed like only intuitive reasons for the inclusion of places and traps in this chapter appear to be correct for they have reality in Sedang categories. However, what the explicit connection is in Sedang thought remains unknown here unless it has something to do with their association as providing food. If so, then this class is not based on dimensionality.

6.1 Mon-Khmer subfamily

6.1.1 Palaungic

6.1.1.1 Styles of classification

Some of the classifiers for flat items found in Palaungic are wide ranging in the kinds of items they can apply to, but many are more limited in their application. Several of the languages in the

branch share two classifiers, *plah Proto-Waic (Diffloth 1977) and pön. However, the usage of these forms by the different Palaungic languages is not the same. The coverage these items have appears to vary because of the occurrence in some of the languages of other classifiers that take over some of the territory of the *plah and pön forms (see Table 6.1).

Gold Palaung has one classifier, *kan-ble-a*, that must be considered an all-purpose flat categoriser. It can be used with a variety of the kinds of items described at the beginning of this chapter: for natural phenomena like clouds; building parts like ceilings and bricks; linens like mats; things written on like letters and banknotes; and flat food like biscuits. *Tī*, another classifier in Gold Palaung, also applies to a variety of flat items such as curtains, pieces of land, and ponds. However, its application to other things like vegetables, knots, elbows, accounts, bridges, and cracks makes it look as though two-dimensionality is not its organising principle. (This classifier has been discussed in Chapter 5.)

Other classifiers in Gold Palaung that are employed with flat or two-dimensional items cover a smaller range of items than kan-blě-a. In Gold Palaung one finds the form pön used with objects that could be considered as fibrous coverings. For example it is used with curtains, awnings, screens dividing a room, blankets and carpets. In its usage with carpets it overlaps with kan-blě-a which is cited with mats. Pön is also used with other coverings and fibrous items like envelopes, skin and books. This same form occurs in Antisdel's Wa as hpun, and there it is also a class for fibrous coverings. However, in Antisdel's Wa, the classifier is cited only for clothing such as coats and trousers.

Drage's Wa and Lawa also have separate classes for clothing, but they employ another morpheme besides the *pön* form. They both use **plah* Proto-Waic (Diffloth 1977), a classifier for sheet-like things found throughout Mon-Khmer. In Lawa it is listed only with clothing, but in Drage's Wa in addition to clothing, it is found with mats and leaves, both also fibrous coverings since it is possible for clothing to be made out of leaves.

What is interesting about the *plah classifier is that it is also found in all the other Palaungic languages covered here, including Bible Wa, Kawa, Antisdel's Wa and Gold Palaung. However, in Antisdel's Wa and Gold Palaung its main function is not to classify clothing and fibrous coverings as in Drage's Wa and Lawa. This function appears to have been taken over by pön/hpun in these two languages. In Antisdel's Wa, it is employed with books and papers which in Gold Palaung are classified by pön along with flexible fibrous coverings. In Gold Palaung, the *plah form is also found with dishes and boards as in Antisdel's Wa. In addition, in Gold Palaung this classifier subsumes leaves (just as in Drage's Wa) and mushrooms. The use of *plah in these two languages cannot be considered as a form exclusively for inflexible flat things, but a form that includes some of these kinds of items in addition to items that can also be considered flat and flexible. The biggest difference between the two uses of *plah found in Gold Palaung and Antisdel's Wa on one hand and Drage's Wa and Lawa on the other hand is the omission of clothing in the former as compared to the almost exclusive use of the form for this purpose in the latter two languages.

Table 6.1: Palaungic classifiers for two-dimensional items

		leaf	linens: e.g. mat, awning	clothing	book	things written on (paper)	skin	flat food	dishes	board/ brick	cloud	place
Gold Palaung	kạn-blĕ-a		х			(letter)		(biscuit)		х	х	
	*plah	х						(mushroom)	х	x		
	pön		х	x	x	(envelope)	x					
	chān									(hanging shelf)		
	tii		x									x
Antisdel's Wa	*plah				x	x			x	x		
	hpun			х								_
Bible Wa	*plah	(?)							=			
Drage's Wa	*plah	x	x	x								
	nglöch											x
Kawa	*plah	(?)				:						
Lawa	*plah			x								
	pap				x							
	hla?	х										

In addition to these four classifiers: kan-blě-a, tii, *plah, and pön, which seem to be employed for several kinds of items both natural and artificial, there are several classifiers in the different Palaungic languages which deal with limited kinds of items. In Gold Palaung, there is kan- $d\bar{a}$, a classifier for cheeks, sometimes considered a flat body part. Also in Gold Palaung, there is a classifier $ch\bar{a}n$, which is used for shelves and hanging trays. In Drage's Wa, there is $ngl\ddot{o}ch$, a separate classifier for books and in Lawa, there is hla? for leaves and 'related items' which are unspecified in the source (Mitani 1966, 1972). As we shall see, it is not unusual for leaves, books and places to be treated as a separate category in many of the other subbranches. These items are frequently in their own artifact or natural kind class.

6.1.1.2 Sources of the classifiers

Of the classifiers for two-dimensional items in Palaungic, some have cognates throughout Mon-Khmer, and others are borrowed from neighbouring non-Mon-Khmer languages. In the case of the non-Mon-Khmer forms there does not appear to be any strong correlation in most cases of a borrowed artifact also being the reason for the borrowing of the classifier since borrowed items like books, paper, banknotes occur both with the non-borrowed classifiers that have cognates throughout the branch and with the borrowed classifiers. In addition the borrowed classifiers, pön for example, are also used with traditional Mon-Khmer artifacts.

The all-purpose flat classifier in Gold Palaung, kan-blě-a/kan-blǐ-a, appears related to the classifier kə?bli? for thin sheets in Karen. Diffloth (p.c. 1981) claims that the Gold Palaung form should be reconstructed as something like *bliɛ(k) which is very close to the form in Karen. It is difficult here to establish the direction of the borrowing. What is interesting is that the Gold Palaung form is infixed in a typical Mon-Khmer style, so that if the form is borrowed from Karen this means that the language can also infix non-Mon-Khmer forms. If one assumes that Karen borrowed the form from a Palaungic language then, the form Karen borrowed would not have been the classifier itself as it is in Gold Palaung, but the noun or other word class the classifier was from. This of course is possible. Karen also has phlò? for round items (see Chapter 4), which is from Mon-Khmer plē 'fruit'. Since Mon-Khmer has been a source for classifiers in other cases, perhaps it is this time also. What is clear is that there has been influence between the two systems.

The hla? form in Lawa for leaves and related items has cognates throughout Mon-Khmer. In many of these languages it is also used for leaves and other items as it is in Lawa. This cognate is discussed further in the section on Bahnaric.

Another form that is found throughout Mon-Khmer is the *plah classifier. Diffloth (1977) reconstructs it for Proto-Waic as *plah. As we have seen, it is also in Gold Palaung of the Rumai group of Palaungic. In addition to its occurrence in Palaungic, it is found in Bahnaric and Katuic. Again, as with *pla? described in Chapter 5, we see a classifier existing in Mon-Khmer languages which are widely separated from each other while the intervening Mon-Khmer languages do not utilise the form as a classifier.

In Diffloth (1977), *plah is glossed as a classifier for sheet-like things, and in other languages, for example Pacoh (Katuic), it is glossed as 'leaf'. The use of 'leaf' as a unifying concept for classes of flat items can be due to several functions of leaves. In Brou and Pacoh (Katuic) and in Bahnaric, the plah form functions much like it does in Drage's Wa and Lawa, mostly occurring with linens and clothing. The form which is sometimes glossed as 'leaf' is also used to classify leaves, as it does in Gold Palaung. The connection of leaves and clothing is obvious from Pacoh (Katuic) where it is used with leaf raincoats and bark clothes. Also plant fibres can be used to weave material. This can also be part of the reason to associate other woven items with leaves as well as the continuation of the similarity in shape and in the function of covering. In Pacoh (Katuic) and Gold Palaung and Antisdel's Wa (Palaungic), the use of *plah with serving utensils like trays and dishes may also be because leaves could serve this function. In some Bahnaric languages, the form plah is also found with fields. The association of leaves and fields is frequent in two-dimensional classes in Mon-Khmer. The use of plah with flat logs and boards in Gold Palaung and Antisdel's Wa (Palaungic) is also found in Bahnar (Central Bahnaric), the connection of these forms with leaves is not clear except for shape. However, the discussion below may explain it.

The plah form is definitely related to a form found in Chamic and appears related to a form found in Akha on the other side of the region close to Palaungic. In Akha, the form bla is a classifier for flat things like dishes, boards, and slate. This use is very much like the use of *plah in Gold Palaung and Antisdel's Wa but not its use with clothing in Drage's Wa and Lawa. The influence seems to be from Palaungic into Akha, since the form is not found in languages related to Akha. In Chamic, plah is found as a classifier in Cham and Rhade, two languages on the mainland in the Vietnamese area. The form is not found as a classifier in Malay or other Austronesian languages off the mainland, so it may be that the form with this use is borrowed from Mon-Khmer into Chamic. In Cham, the form is plah, in Rhade, blah, and in both languages, it is used for flat objects.

The pön/hpun forms in Gold Palaung and Antisdel's Wa are borrowed forms from Tai classification systems. However, it is not so easily determined which Tai classifier is the source. There are three forms in Shan which are all used for the same kinds of items; phen² for flat things – cloth and boards; phun⁴ for anything flat – books, mats, clothing; phin for flat things – books, mats and clothing. Phonologically, the last two forms seem most likely to be the origin of the form found in Palaungic. However, since each of the Shan forms classify items that are found in the single Palaungic class, it is not possible to distinguish which one of the Shan classifiers is the source of the Palaungic ones. In other Tai languages, there are also several classifiers of this shape. In Siamese, there are phiin for fibrous flexible things like cloth blankets and rugs and phèn for rigid flat things like paper, bricks, tiles and slabs. In phonological shape, the phiin form looks like the source. This would fit with the items categorised by the Palaungic forms also, except for the inclusion of books and envelopes in Gold Palaung which might seem more appropriate with the phèn form found in Siamese. However, phiin does seem the most likely source.

It would appear that in Gold Palaung and Antisdel's Wa, the borrowed Tai form *phŧin* has taken over some of the territory of *plah. As we have seen in most Mon-Khmer languages, *plah

is found with fibrous items which are flexible, but not in these two Palaungic languages. The borrowed *phɨɨn* form serves this function for them. What is interesting in these two Palaungic languages is, while they borrowed only the one form, the result is a two category system that looks much like the two category system in Siamese represented by *phɨɨn* and *phɛn*, with the former for flexible items and the latter for more rigid ones.

While Palaungic systems often have some relationship to the Burmese system, a comparison of flat items in these two systems gives mixed results. In Burmese, there is one class for clothing; one for flat things that includes bricks, plates and linens like mats; and one for very thin things like leaves and paper. As can be seen on Table 6.1, many of these items in different classes in Burmese can be in the same class in Palaungic, like clothing and mats or leaves and bricks. In Antisdel's Wa and Lawa there are classes that seem to be for clothing only, and in other subbranches, we will see classes for only leaves and paper. However, the lack of morphemes specifically borrowed from Burmese and the differences in the kinds of items that can be grouped together would indicate that there has beeen little influence of Burmese on Palaungic in this case.

The form *tii* in Gold Palaung has two possible connections. In Khmu Yuan and also in Shan one finds the form *tii* also glossed as 'place'. In Khmu Yuan it is used for geographic locations rather than the variety of items associated with the Gold Palaung form. Shafer (1952) on the other hand claims that the form is Tibeto-Burman and is a classifier there for water, etc. It is also possible this is cognate to a morpheme in Mon-Khmer meaning 'hand'. (See Chapter 5, 5.1.1.2 for a further discussion of this form.)

6.1.2 Mon

6.1.2.1 Styles of classification

Mon shows only a marginal set of classifiers for two-dimensional items, or at least the amount of data available makes it appear that only a few items from the examples presented at the beginning of this chapter are classified. Many items that were classified in Palaungic, for example clothing, curtains, clouds and so on, are unclassified in Mon. One does not get in Mon the kind of comprehensive classifier for many kinds of flat things that one finds in Gold Palaung.

One form found in Halliday (1922), kanah, is cited for small flat things but with no examples of what kinds of things other than a bell clapper. This form is interesting because again, while in Palaungic the classifiers can be used for sizeable items, in Mon the classifier is given for small flat things. In Chapter 4 it was noted that while the classifier for round things in Palaungic could be used for sizeable items including houses, in Mon the round classifier also seems limited to smaller items like clocks and pills.

Two other forms found in Halliday (1922) and Shorto (1962) are for limited sets of items. There is *kəreak* [karek] for boards, split pieces of cane and bamboo and paper. Secondly, there is *hətəh* [gateh] also used for boards, coins and cloth.

Other classifiers in Mon are for specific artifacts. Not surprisingly, given the literate culture in which Mon is spoken, there are several classifiers for books: *up*, *kənop* [kanap, knap], [wak] and *cong* (Halliday 1922). There is also a separate classifier *cäng* for nets cited in Halliday (1922).

Finally, as is quite common among Mon-Khmer languages, there is a separate classifier for fields: $k \ni na$? [tana].

6.1.2.2 Source of the classifiers

In Mon, the source of the classifiers for flat things such as boards and paper and cloth are part/whole classifiers. Originally, kəreak comes from a verb meaning 'to split' or 'divide' and as a noun means 'a part split off'. Hətəh also means a chip or fragment and is from a verb teh 'to hew'. This concept of splitting and the resulting objects being the source of the classifier morpheme was described above in Palaungic with respect to the plah form: so this is a semantic dimension found elsewhere in the family, even though the forms signifying this dimension are different in the different subbranches.

Two of the classifiers for books in Mon are borrowed, which is not surprising given the nature of the artifact. Up is from Burmese 'up, and wak is from Pāli Vaggo (Shorto 1962). The latter is for a specific type of book, a twelve page division of palm leaves. Of the other two classifiers for books, kənop means 'sheath or scabbard' and is related to the shape of books, this shape being due to the material that books are written on: long leaves. The other form cong found in Low (1837) and Halliday (1922), is glossed as 'writing' and refers to the action itself or to its result. We can see in this one example several different concepts for classifying books.

The classifier for nets, as seems true in many other languages, does not come from a reference to the shape or even to the function of the item or to the material it is made from, but to the body part it is meant to ensnare. Here the form *cang* means 'the leg including the foot'. This same form is found as a classifier in Khmu Yuan. However, there it has nothing to do with traps, but is the classifier for mushrooms. This pnenomenon of the same form with different functions in two different Mon-Khmer languages is one that we have seen several times before. (See the discussion of *mat* in Bahnaric, Chapter 3 for an example.)

6.1.3 Khmer

6.1.3.1 Styles of classification

Khmer is much like Mon in that of the possible number of two-dimensional items mentioned at the beginning of this chapter, only a few are classified and of those items that are classified in Khmer, many are related to paper and items written or drawn on. For example, sonlyk is for leaves as well as paper although Jenner and Pou (1981) cite the form as a classifier for flat things, so perhaps it counts more items than these few. Another form given by Jenner and Pou is pandaḥ/banteəh meaning a 'thin flat piece' which counts such items as lumber and meat. But it may be more like a quantifier. Then, there are the many classifiers in Khmer for books and paper. There is cbap for books, paper and writing in general. There is krap (Maspéro 1915) meaning 'covering' used for paper bound books, just books, and pages. For cloth books, there is kàmpi (Maspéro 1915) and for those tied by a string, khsae. There is also kan and kba:I for volumes of books. Also in Khmer, there is rù:p used for pictures which are flat items that can be described as something drawn on. However, the inclusion of rù:p here is marginal since the meaning of this

classifier is 'image', and it is employed with all sorts of images that are not two-dimensional such as statues and monks. It has been described earlier in Chapter 3. Jenner and Pou (1981) is the only source for classifiers of household items: one is panlā' sa/banlah/ for a change of clothes; the other is kantapa/kandaap/ for palm leaf mats.

6.1.3.2 Sources of the classifiers

The origin of most of these forms as with so many in Khmer, is foreign. The sonly k form meaning 'leaf', which looks like an infixed variation of the morpheme hlak also meaning 'leaf' and used as a classifier, is not connected to Mon-Khmer cognates according to Diffloth (p.c. 1981). He claims this is a false etymology and that the form is actually Sanskrit. Not surprisingly, several of the forms for books are also Sanskrit. This includes kàmpi from Sanskrit kalpa (Maspéro 1915), kan from Sanskrit kanda (Maspéro 1915) and kba: I from Sanskrit kapāla (Headley et al. 1977). The rù:p form mentioned above is also from Sanskrit. Both rù:p and kba:l were described in Chapter 3 because of their use with animate items as well as inanimates. The kba: I form is associated with homed creatures and heads. The connection with volumes of books is probably in the idea of a set of items. The use of $r\dot{u}$:p for pictures as mentioned above has nothing to do with dimensionality but with the concept of pictures being only an image of the real object or person. The pandah form may be related to ones in South Bahnaric described below. Jenner and Pou give this as an infixed form of a word meaning 'panel, siding'. The classifier for a change of clothes according to them is also an infixed form of a verb meaning 'to convey, change, substitute'. Lastly the classifier for palm-leaf mats according to Jenner and Pou is the same as the noun referring to a wooden round over which palm leaf mats are folded for stitching.

6.1.4 Khmuic

6.1.4.1 Styles of classification

The Khmuic system is much more like that of Palaungic in that there are classifiers for a great variety of items. The basic class types as well as many of the classifiers in the Khmuic systems are the same as those in Tai languages. However, this is true only of the Khmu subbranch. The Mal classifiers are not Tai. It should be noted here that many of these same types of classes found in Khmuic are found in other Mon-Khmer branches and are not necessarily Tai. In all the Khmuic languages, the classes are basically for the same kinds of objects. There are special classes for fibrous coverings, for flat rigid items, for places, for fields, for leaves, for nets, for traps and for books. However, none of the classifiers in this branch seem to have the widespread application that kan-ble-a does for example in Gold Palaung.

6.1.4.2 Sources of the classifiers in Khmu

In Table 6.2, the two Khmu dialects are compared with the Lao classes for two-dimensional items. Also in the fourth column, there are some examples of classes in other Tai languages. As one can see from the table, the phiin classifier for clothes is shared by all three languages. As

noted above, this is also the form found in Antisdel's Wa and Gold Palaung (Palaungic). The only difference here seems to be with the Lao usage for nets. But perhaps, the Khmuic languages can also extend the classifier for this purpose.

Table 6.2: Comparison of classes for two-dimensional objects in Khmu dialects and Tai languages

Khmu Yuan	Khmu	Laonian	Other Tai languages
phiin 'for clothes'	phɨɨn 'cloth, blanket, clothes'	phɨɨn 'net, cloth, clothes'	Tai Dam piêng 'large flat items'
phεεn´ 'sheet of paper'	piang 'plates, plank, board'	pheèn 'plank, flat objects'	White Tai péng 'disc, board, plate slab'
taar` 'flat surface, sheet of paper'	hla 'leaf'	bay 'leaf, hat, plate, document, card, round objects'	
	s'map 'letter, fascicules'	sábáp 'letter, document'	
	ram 'letter'		
daang´ 'net'		daang 'fishnet'	
rà 'network, meshes'			
tii 'place, market plantation'	?moon 'place, garden, ulcer, river bottom, comer of box'	bāān 'place, village garden, forest'	
		hēēng 'place'	
lang 'field allotment'		thòng 'rice field'	
		haay 'worked rice field'	
trloong` 'trap'			
laang ''traps, etc.'	hlaang 'traps of bamboo'		

The relationship of the Khmu forms to the second Lao form, pheen is more interesting. The Khmu Yuan form and the Lao form are the same phonologically, though the Khmu Yuan form is cited only with paper and the Lao form with larger objects. It should be noted here that both phɨɨn and pheen also occur in Tai Yuan, so the source of the classifiers in Khmu Yuan is not necessarily Lao, just some Tai language in the area. The Khmu form piang, which is used with some of the

same objects as the Lao from phèen, is not, however, the same phonologically: it differs for example in the final consonant. The Khmu form seems related to forms found in other Tai languages rather than to Lao. Tai Dam has piêng for large flat objects and White Tai has péng for discs, boards, plates and slabs. Since these languages are spoken in the same area as the Khmuic languages, they or another Tai language could have been the source for Khmu piang, a classifier for flat inflexible items.

Khmu Yuan has taar, a second form for the classification of paper, which does not seem related to any of the Tai languages.

The Lao classifier bay 'leaf', another classifier for flat things, is not found in any of the Mon-Khmer languages. However, we see in Khmu that the form hla 'leaf' is used for leaves and paper. This form, also hlak and lang in the eastern branches and the Khmer form sonlyk all meaning 'leaf' are found throughout Mon-Khmer. In many of the Mon-Khmer languages, these 'leaf' forms subsume the same kinds of items as the Lao form, for example, hats, plates, leaves and papers. However, there are differences in usage. For example, the Lao form is used for round flat items; the Mon-Khmer ones usually are not. The Mon-Khmer ones are often used with fields, the Lao form is not. While it is possible that the Tai languages, and Lao in particular, have provided the influence for a 'leaf' category in Mon-Khmer, it seems just as likely that the use of 'leaf' in the two language families is an example of independent parallel developments based on the wide-spread usage of leaves for a variety of similar purposes.

Khmu also has two classifiers for letters and documents: s'map and ram. The first one is probably related to the sábáp form in Lao which is used for the same purpose. Another borrowed form is daang for nets in Khmu Yuan. This form is found both in Lao and in Tai Yuan. As mentioned in Chapter 5, this classifier is also found in Gold Palaung for long narrow items. Khmu Yuan has, in addition, another form, rà, applied more widely both to networks and meshes. There is no information on the origin of this form.

As is common in many languages, a form meaning 'place' is used as a classifier for places. One 'place' classifier is shared in Khmu and Lao: $b\bar{a}\bar{a}n$ in Lao, and 'moon in Khmu. The kinds of items they classify are similar: in Lao, gardens, forests and villages; in Khmu, gardens, fields and lake bottoms, and also ulcers and box corners. The Khmu form appears to have wider application than the Lao equivalent. $H\bar{e}\bar{e}ng$, another Lao form me; aning 'place', is not given as a classifier in Khmu or Khmu Yuan. The form found in Khmu Yuan meaning 'place' is $ti\lambda$. It is used for items similar to those found with 'moon in Khmu. The $ti\lambda$ form is perhaps related to tii found in Gold Palaung (Palaungic) also. However, in Gold Palaung, as we saw, it is used for a very wide variety of items other than just places.

Fields often have separate classifiers and the classification system in Khmu Yuan is no exception to this style. However, the *lang* form in Khmu Yuan is not a Tai form (see Table 6.2), but one that is also found in other Mon-Khmer branches: Bahnaric and Katuic.

Interestingly enough, the classifiers for traps in Khmu and Khmu Yuan, trloong and hlaang (see Table 6.2), appear to have no counterparts in Lao. The hlaang form was also described in Chapter 5, because its basic usage is for things made out of bamboo. It is a material classifier rather than a dimensional one. Except for this particular class, the basic categories in the Khmu dialects and those in Lao are very close even when the forms are not borrowed ones.



Table 6.3: North Bahnaric classifiers for two-dimensional items

	animate	leaf	linens	clothes	net	book	thing written on	body parts	food	dish	imple- ment	bldg. part (board)	field	place	trap
Anon's Rongao kotah										(pot)	(axe, drum)				
hlăk										-	(hoe)				
kômăk											(hoe)				
blah			x	x											
phū			(bed covering)												
lang			(coverings)								0				
la													х		
na		х					(paper)								
mang															х
pa					x										
Sedang kota		х					(paper)	(shoulder)		(tray, kettle)	(axe blade)	(stone)			
buang	1		x	x											
kopau				x											
báng/máng												х	(garden)	x	
Jeh ddah/ ko'dah						x	x				(gong)	(metal roofing)			
hla								77					x		
blah			x	x											
Halang blah			x				. I								

Table 6.4: Central Bahnaric classifiers for two-dimensional items

	animate	leaf	linens	clothes	net	book	thing written on	body parts	food	dish	imple- ment	bldg. part (board)	field	place	trap
Bahnar kotah										(pot)	(axe, drum)				
kơnang	х		(?)flat things												
hlak							(envelope)	(membrane over organ)		(pot cover)		(stone)	х	(sur- face)	
angla (Rongao, East Dialects, Tolong, Kontum)													x		
blah		х	х				ĺ					x	х		
lang		x	x									x	х		
ronang		(large)													
phū				x											
pŏk'				х											
bσl				х											
màng					х										
tsāp			x			(folded)	х								х

In Anonymous' description of Rongao (North Bahnaric) and in Guilleminet and Alberty's description of Bahnar dialects including Rongao (Central Bahnaric), the use of this particular form is much more limited. In these languages, the form seems to be mostly for flat metal utensils or just metal utensils in general. In the Anonymous source, *kotah* is cited with axes, drums and gongs, pots and pieces of silver. It appears that with this classifier the material is as important as the shape, unlike the usage of this classifier in Jeh and Sedang.

In some of the Bahnar dialects (Central Bahnaric), there is another form that seems to apply to many different kinds of items just as the $k\sigma tah$ form does in Jeh and Sedang (North Bahnaric). This form is $k\sigma n\bar{a}ng$, which is cited for flat things including animates such as fish and immature dogs, cats and children. Perhaps this form has taken over some of the territory that $k\sigma tah$ once had in Bahnar (Central Bahnaric) thus explaining its limitation to utensils. However, it is also as likely that the $k\sigma tah$ form in North Bahnaric might have originally been restricted in its usage to metal utensils and then become more general.

A second form in Bahnar (Central Bahnaric) is also associated with a class for a fairly large variety of objects. This second form *hlak* occurs with natural objects like stones, some paper items like envelopes and money, some artifacts like pots, but also frequently with surfaces and covers including membranes over organs and fields. However, this form is not identical to the North Bahnaric *kotah* form in the objects it can count. The difference in items between this *hlak* category in Bahnar (Central Bahnaric) and the *kotah* category in North Bahnaric is the inclusion of things like fields and the surface concept in the *hlak* category.

Interestingly, as kotah is narrowed in its meaning in Central Bahnaric, so hlak is narrowed in its meaning in Anonymous' Rongao (North Bahnaric), and in Banker's (1973) description of the Pleiku dialect of Bahnar (Central Bahnaric). In these dialects, the hlak form is glossed as 'tin leaf' and found with metal utensils like hoes and bush hooks.³ So not only is the class narrower in what it can apply to, but in both the kotah and hlak classes, the nature of these narrowed classes are the same – for metal utensils. Besides the hlak class, Anonymous' Rongao also has a kômăk class for things that are tin leaves.

While fields are included in the *hlak* class in most Bahnaric dialects described by Guilleminet and Alberty, in the Rongao dialect *hlak* is not employed with fields. In Rongao, fields are classified by *angla*. This form is also found in Central dialects and Kontum and Jolong dialects of Bahnar as *angla* or *hangla* for the same purpose of categorising fields.

As the angla example shows, it is not unusual for fields to be classed separately in Mon-Khmer, but they are also often included in with other items. Hlak described above was one example of this. In addition to this hlak class there are other classes in Bahnaric that have fields and other items treated as the same kind of object. There are some classes associated with the form hla 'leaf' where this form can be used with both fields and leaves. This form is found in all three branches of Bahnaric but is not used for fields in all of them. The items that this form is usually found with are leaves and then a variety of other objects.⁴

In Central Bahnaric, one finds some other classes for fields and leaves. Leaves and fields are classed together in classes of stackable items which have as their classifiers *blah* and *lang*. These classes include stacked linens such as rugs and piled up logs, as well as fields and leaves.

The blah form for stackable items is interesting in that it too can be found in North Bahnaric languages. However, as we have seen so many times before, its application is different in the Northern group than in the Central group. In Jeh, Halang and Anonymous' Rongao, the blah form appears exclusively for clothing and linens such as blankets and sleeping mats. While the use of blah in Central Bahnaric can be with items like rugs, that certainly is not its central focus; the concept of stackable is.

The existence of a separate class for linens such as blah in North Bahnaric is not unusual either in Mon-Khmer or more specifically in Bahnaric. In addition to the use of blah in the North Bahnaric examples above, there are other classes specifically for fibrous coverings and also sometimes for very specific kinds of clothing. Surprisingly, the blah form is not found in Sedang (North Bahnaric). There, there are two different forms for clothing and linens. One is buang and the other is $k\sigma pau$. The latter's use seems to be for garments only. There are three other forms in Bahnar dialects (Central Bahnaric) that are exclusively for clothing and coverings. These are $ph\bar{u}$ for coverings, $b\sigma l$ for skirts and linens and $p\delta k$ for men's jackets, waistcoats and shirts. These different forms perhaps have taken over some of the territory of blah in Bahnar (Central Bahnaric) so that it is not likely to be used exclusively for clothing but with stackable items in general including a few linens.

There is one other form in Bahnar (Central Bahnaric) that can be used with leaves and other items as hla, hlak and blah and lang can. This form is ronang for large leaves of trees and for large flat things. Unfortunately, no examples of large flat things were provided. This form is very interesting because here size is one of the considerations in the classifying of an item with this classifier. This concept has not appeared to be very important in most of the classes; however, it shall turn up again in the section for the classification of two-dimensional items in Vietnamese.

In North and Central Bahnaric, there are several classifiers for particular artifacts and places besides fields. In Bahnar (Central Bahnaric) of Guilleminet and Alberty, there is one form for folded paper and cloth as well as notebooks: $ts\tilde{a}p/ts\check{o}p>ko\check{c}op$. The absence of more kinds of classifiers for books is a reflection of the nature of this culture. The nature of livelihood in this culture also accounts for the existence of several classifiers for nets and traps. In Sedang and Rongao (North Bahnaric) and in Bahnar (Central Bahnaric), a form $m\bar{a}ng$ is reported. In Sedang, the form $b\acute{a}ng/m\acute{a}ng$ is used not only for fish traps, but also for plots of ground and gardens. In Anonymous' Rongao (North Bahnaric), it is reported for traps in general. Nets, on the other hand, are classified by the form pa. In Guilleminet and Alberty's description of Bahnar (Central Bahnaric), the form $ham \acute{a}ng/m \ddot{a}ng$ is used for both nets and traps. The use of the form is the most interesting in Sedang because of its application to places also. As described earlier, this class may be one for tools of subsistance.

6.1.5.3 Styles of classification in South Bahnaric

As mentioned above, except for the *hla* leaf form found in the Mnong languages and in Chrau, the classifiers associated with two-dimensional items in South Bahnaric are different from those in North and Central Bahnaric. Many of the categories are like those in North and Central Bahnaric, but not the morphemes used for these categories. The South Bahnaric languages share some

classifiers among themselves, but not beyond the subbranch (see Table 6.5). Sre and Chrau share the classifier păng for flat things. In Sre, the form seems to be mostly for flat flexible fibrous items like leaves, paper, cloth, mats, and woven items. This type of category is very common as we have seen. However, in Chrau the form seems to have a much broader usage. It seems almost as general in its use as the kan-blě-a form in Gold Palaung or kotah in Sedang or even konāng in Bahnar. Not only is it for fibrous coverings such as mats, loincloth, trousers and cloth, but it is also for metal items like gongs and for living creatures like turtles.

Both Chrau and Sre share another classifier for flat things: pandŏh-Chrau, pŏnđah-Sre. In Chrau, it is glossed as 'sheet' and is given for boards, books and money. However, in Sre, the only example given with it is a broken pot. Sheets of paper in Sre can be classified by păng. In addition in Sre, pět and klěh can be used with boards and paper as pandŏh is in Chrau.

Stieng also has a form for flat things; plurop. The only example cited with it is leaf, but its description makes it seem possible that it is used for more general items. Chrau also has a classifier cited only with leaves, ram & t. This form is, in addition to the n'ha form in Chrau, also for leaves as well as hair. This n'ha form is also found in Preh (Central Mnong): there, the form is not infixed as in Chrau and is for leaves and flowers (see Table 6.5).

In Mnong Rolom, there is also a classifier for clothing, dap, which is cited with shirts. Whether its usage is more general than this, for example for all sorts of fibrous coverings as păng is in Sre, is unspecified in the data. These types of separate classes for clothing are quite common in Mon-Khmer as the examples in other branches show.

In both Chrau and Sre, there are also classifiers for fish traps and traps, as there are in North and Central Bahnaric. In the South Bahnaric languages, however, different forms are used. In Chrau, one finds $g\delta c$; in Sre one finds dona/jona.

In Mnong Rolom there is a separate category for fields: *puuaar*. The classification of fields separately, as with the separate classification of traps, is very common.

6.1.5.4 Sources of the classifiers in Bahnaric

Most of the classifiers in Bahnaric languages seem to be Mon-Khmer forms. Only the *plah* form may be a borrowed one.

Several of the classifiers in Bahnaric are associated with leaves and are widespread throughout Mon-Khmer. First, there is the *lang* form which, as mentioned earlier, occurs in Khmuic and Brou and Pacoh (Katuic) as well as in Bahnaric. While it is glossed as 'leaf' or 'sheet' in Katuic, in Central Bahnaric it is cited as 'surface' or 'covering'. The classifier in all these languages is basically with leaves, paper and fields, and in Bahnar with stacking items like blankets and logs.

Two other forms also glossed as 'leaf' are hlak and hla. Guilleminet and Alberty (1959, 1963) and Shorto (1971) claim that these forms are related to each other. However, Diffloth (p.c. 1980) claims this is not so. These two forms are again to be found in Khmuic and in Palaungic as well as in Bahnaric. The hlak (hla?) form is found in Lawa (Palaungic) and Rongao (North Bahnaric) and Central Bahnaric. In Lawa, it is used only with leaves and related items. In Anonymous'

Table 6.5: South Bahnaric classifiers for two-dimensional objects

	animate	leaf	linens	clothes	net	book	things written on	body parts	food	dish	imple- ment	bldg. part (board)	field	place	trap
Stieng ploup			(?)	flat objects	_										
Central Mnong- Preh hla		x (flowers)				40									
East Mnong dap				х											1
puuaa											-		х		
Sre păng		х	х	х				_1			x				
pŏndăh			(?)	flat things						(broken pot)					
pět							(paper)					x			
kl ěh							(paper)					x			
dona/ jona									=						х
Chrau păng	(turtle)		x	х						(gong)					
pandŏh						х	(money)					x		-	
n'ha		х						(hair)							
gŏc								1							х

Rongao dialect, it is glossed as 'tin leaf' and is used with utensils. In Central Bahnaric, it occurs with a variety of items and, as *lang* was, is glossed as 'covering' or 'surface'.

The *hla* form is in Khmu (Khmuic), in Vietnamese (Viet-Mường) and in North Bahnaric and South Bahnaric. While it also is for leaves, paper and fields, it seems more restricted than *hlak* in its usage, except in Vietnamese where it occurs with many more items. There, besides the use with leaves and paper, it is also found with flags and some body parts.

This hla 'leaf' cognate is also found in Chamic (Austronesian). The form is not cited as a numeral classifier in Rhade. However, in Cham, it is given as a 'categoriel' which is the term used for classifiers in the source employed here (Moussaq et al. 1971). However, the examples cited do not include any number phrases, only examples of nominal compounds made with the hala 'leaf' morpheme. The compounds cited with this form are like those that are found in Vietnamese with the classifier la. These compounds include flags, pages of a book and panels of a door.

Another form that may also have the meaning 'leaf' is *plurop* in Stieng (South Bahnaric). Skeat and Blagdon (1906) claim that this form is related to a morpheme in Aslian meaning 'leaf', *plokng*, found in Běsisi of Ayer Itam.

The use of leaf as a unifying principle for a class shows again the use of a natural kind both as a classifier and as a form frequently classified. The use of 'leaf' classifiers are based on a variety of semantic extensions. The use of n'ha in Chrau (South Bahnaric) with hair as well as leaves is probably much like the tree/hair grouping described in Chapter 5. Since both leaves and hair cover growing bodies and are attached and are living things, they probably should be considered as the same natural kind. The use of these leaf forms with paper is a natural extension of the function of leaves since they were often used to write on, as paper is. This, as well as the shape similarity of leaves and modern paper, explains the use of leaf forms with any paper product like money. The fact that leaves can be used as a covering material in addition to their shape can also explain their use for categorising mats, blankets, envelopes and membranes. Of course, the use of leaves and other plant fibre for weaving also brings about a material connection with clothing and cloth. The common use of leaf forms such as lang, hla, hlak for fields could be based on several possible relationships; covering, part/whole, or two-dimensionality. This covering idea might be especially important in the Central Bahnaric group where blah and lang are both glossed as 'surface', 'cover'. Whatever the connection between these two items they are commonly associated in Mon-Khmer languages.

Plah, occasionally glossed as 'leaf', is also found in Chamic but not in the other Austronesian languages. The nature of this form has been described above in the section on Palaungic.

The $kon\bar{a}ng$ form described in the Bahnar (Central Bahnaric) dialects is an infixed form of a noun $k\bar{a}ng$ meaning 'board' which is found in another Bahnaric language, i.e. Mnong Gar. This is not the only example of a form with this meaning functioning in this capacity. There is a classifier of the same meaning in Vietnamese. However, the form there is not cognate to $k\bar{a}ng$. As described in Chapter 5, in the discussion on Pacoh (Katuic), a form meaning board can be used for long things, but more commonly it does seem to be the unifying principle for flat items.

The pondáh form found in Chrau (pandŏh) and Sre (pŏndah) comes from a verb form meaning to flatten: pondáh in Sre. This classifier then is based on a concept meaning to bring to a one-dimensional shape and may be related to the Khmer form pandah/banteəh/for thin, flat pieces.

As with the form for trap in Mon, the *māng* classifier for nets, traps, and sometimes plots of ground, refers to the part of the body that is ensnared. In this case, it is the pectoral fins. This form is also found in Vietnamese but not as a classifier. The interesting variation of this form in Sedang for plots of land and gardens is hard to explain. However, perhaps the organising principle is artifacts for subsistence. The *klěh*, *pět* forms in Sre are probably for slices of things like the Mon forms for paper and boards. In this case, such classifiers include both a shape and part/whole idea.

6.1.6 Katuic

6.1.6.1 Styles of classification

In Katuic, one finds again the typical classes distinguishing woven items, nets and traps, paper, and plots of land, though sometimes these items are put together into the same class. Brou and Pacoh share several of the same forms and classes. As with animate, round and long classifiers, the Brou and Pacoh systems resemble each other more than they resemble the systems found in other Katuic languages (see Table 6.6). In both Brou and Pacoh, for example, there is the classifier *plah* mostly for fibrous covering items like clothing and linens and for counting hair. But it is also used with woven items like nets and baskets and for other flat carrying items like trays. In Pacoh, it is also possible for nets to be classified separately by the form *talay*.

Katu does not have a general classifier like *plah*. It has two forms, *loop* and *klaang*, associated with clothes, but not individual pieces of clothing, rather clothing arranged in layers. There is also cited in Katu the form *tala*. It is listed only for flat sheet-like items, but with no examples. Its use may or may not be like *plah* in Brou and Pacoh.

In both Brou and Pacoh one also finds the classifier *lang* for leaves and paper. In addition, in Brou, this form is cited with rice fields. The grouping of these objects into one class is common in Mon-Khmer, see for example, the section above on Bahnaric. What is interesting about this particular grouping is that Brou has two other classifiers which classify the same kinds of items. There is $t \lambda m$ used with paper, fields and additionally, lumber and books. There is also *khleic* for paper and fields and things like slices of meat. There is nothing given in the description of these forms that helps to determine if they are used in different circumstances. In addition in Brou, there is another classifier besides $t \lambda m$ that classifies pieces of lumber. This form is *phein*. Besides boards, it is used with walls and windmills.

Fields are often classified separately in Mon-Khmer languages or with other places. However, as we have seen with the *lang* classifier above, in Brou, fields are often classed with leaves, paper and bodies. This is generally true in Katuic although there are a couple of forms for pieces of ground and physical features only. In Pacoh, there is *teah* for flat expanses. In Katu, there is a form *talang* for things like the earth and sky.

Table 6.6: Katuic classifiers for two-dimensional items

	animate	leaf	linens, mats, awning	clothes	net	book	things written on (paper)	body parts	food	dish	imple- ment	bldg. part (board)	field	place	trap
Brou ploah	(?)	flat thing													
phein												(wall, windmill)			
tâm						х						x	х		
liang		x					х					x	х		
khleic							x		(slice of meat)				х		
Pacoh olah			х	х	х			(body hair)		(tray, basket)				ı)	
lang		х					x								
talay					х										
eah													х		
nlom/ llom															x
Katu tala	(?)	flat sheet- like													
loop klaang				(in layers)											
talang														(earth sky)	

In several languages in Mon-Khmer, we have seen books treated as a separate category. However, in Katuic again the nature of the culture makes such separate categories unusual. Only in Brou and Pacoh is there any mention of items related to written forms other than pieces of paper. In Brou, books can be included in the *tâm* class with paper, lumber and fields, but are not classed separately. In Pacoh, there is a classifier *pluc* which is used for rolls of things particularly books. Books in Katuic culture seem to have their origin in Chinese or Vietnamese culture where written documents would frequently take the form of scrolls.

As has been common throughout Mon-Khmer, Pacoh has a separate class for traps. The classifier for this category is *nlom/llom* and is a morpheme not found elsewhere so far in Mon-Khmer for this purpose.

6.1.6.2 Sources of the classifiers

Several of the classifiers in Katuic are also found in other Mon-Khmer languages. The plah form found in Brou and Pacoh has been discussed above in the Palaungic section on the source of the classifiers. It was noted there that this form is found in Palaungic and Bahnaric as well as Katuic. The use of the form in Katuic is typical. As was noted there, this form is also found in Chamic languages. Since Katuic and Bahnaric languages are in contact with Chamic languages, the sharing of this form is not surprising. What is surprising is its occurrence in Palaungic.

The *lang* form found in Brou and Pacoh is also used in Khmuic and Bahnaric and appears to be a native Mon-Khmer form. In these subbranches *lang* was also used with leaves, paper and fields.

Brou also shares another form with another Mon-Khmer language. The tâm form for boards, paper and fields, etc., is also a classifier in Vietnamese. It is very possible that Brou borrowed this form from Vietnamese. If it did, this might explain why Brou has more than one form to classify the same kinds of items. The form in Vietnamese is for cut flat items and is also used for boards and pieces of paper. In addition, in Vietnamese, it is employed for many more flat artifacts than in Brou. For example, it is for pictures, mirrors, screens, nets and pieces of material.

Brou also shares another form with the Khmuic languages in addition to the *lang* classifier. This is *phein* which is cited with such items as planks, walls and windmills. However, as was pointed out in the discussion of this form in Khmuic, *phein* has a Tai origin. The closest Tai language to Brou with this form as a classifier is Lao, so perhaps it is the donor language.

One of the classifier morphemes for plots of land and physical features has cognates in Mon-Khmer but is not a classifier in these languages. The *teah* morpheme in Pacoh is found in Bahnaric meaning 'this here'.

The tala(a)ng classifier in Katu for flat things, physical features like the earth and sky, is found in other Katuic languages meaning 'palm of the hand'. This is not a common source for flat classifiers in Mon-Khmer.

6.1.7 Viet-Mường

6.1.7.1. Styles of classification

Vietnamese is the only Viet-Mıròng language for which there are data available on the classification of two-dimensional items. The classes found in Vietnamese are not like many of those in other nearby Mon-Khmer branches: for example, there is no special class for fibrous coverings like clothing, and there seems to be no special class for traps and nets. What one does find are classes for many artifacts associated with a literate culture and some for plots of land.

Two forms in Vietnamese classify very similar items. These forms are tâm and bức. Both forms are for artifacts like paintings, photos, mirrors and hangings. The two classifiers are also for some cloth artifacts like curtains, shades and screens. Tâm is cited also with hides, panes of glass, boards, planks and paper items like tickets, visiting cards and maps. Tâm is also given as the classifier for hearts and can be used metaphorically in the phrase 'a piece of husband'. Bức is also listed with things like windows, walls of brick, stone, wood and things written on like telegrams and letters. Part of the difference in the use of these two forms is to be seen in the inclusion of window pane in the tâm class and the whole window in the bức class, or it can be seen in the use of tâm with boards and bức with whole wooden walls. The difference in usage seems to be that bức is used with larger items. It is not very common for size to be the basis of a class. The only other place it has occurred before is in Bahnar (Central Bahnaric) where there was the classifier ronang for large leaves. In addition to the size difference, according to Huỳnh Sanh Thông (p.c. 1984), tâm is more general while bức is more common with items that are flat and hanging.

Another classifier in Vietnamese that can be used for several items is $l\acute{a}$. The class represented by $l\acute{a}$ can include some of the same items as the $t\acute{a}m$ and $b\acute{u}c$ classes. For example, it is used with written things like letters, visiting cards and playing cards. (Playing cards as noted in Chapter 3 can also be classified by con as an animate item.) Also $l\acute{a}$ is found as the classifier for some pieces of cloth, but ones with specific purposes: sails and flags. The interesting thing about sails and flags is that they are both items suspended from wooden poles, and in this sense, can resemble leaves on trees. This classifier is used to classify leaves and means 'leaf' itself. While 'leaf' classifiers are common in Mon-Khmer, the interesting addition in Vietnamese to this type of class is that $l\acute{a}$ can be used with all sorts of internal organs. Livers, spleens and lungs can all be counted by $l\acute{a}$. The inclusion of these organs in these classes seems to be on the basis of shape.

There are also separate classes in Vietnamese for written items as would be expected in such a literate culture. One class has as its clasifier $t\partial$, which is used for sheets of paper and sheets of paper written on for specific purposes like currency, contracts, written orders and ballots. The classifier ban is used for another class to refer to something printed like scripts, songs, maps and statements. For books of all sorts, there is the classifier cuon. It basically refers to a volume or roll.

Finally, there are a couple of classes in Vietnamese that include fields. Cánh is used for one class: this particular class is not for fields alone, but also for aisles, blades, and sails. The other class that includes fields is one that is marked by manh. This class is mostly for plots of ground like fields or small gardens, but it can also be used with non-full moons.

6.1.7.2 Sources of the classifiers

Some of the forms in Vietnamese are Sino-Vietnamese and ultimately of Chinese origin. This, of course, is true of the whole Vietnamese classification system, so that when one looks at any particular section of the Vietnamese system, one finds Chinese forms. However, what is even more interesting is that one also finds forms of Mon-Khmer origin in all sections of the system. This holds true for the classification of two-dimensional items. These Mon-Khmer forms are normally found representing classes very much like those found in other Mon-Khmer classifier systems.

One Mon-Khmer cognate is the *lá* form meaning 'leaf'. This form has been discussed in the section on the sources of classifiers in Bahnaric. The class represented by this cognate in Vietnamese is much like that found in the other Mon-Khmer languages that employ it, including Khmuic and Bahnaric languages. While it does seem to be found with more items in Vietnamese, this difference may not be real: it may just be that there are better data available for Vietnamese.

Vietnamese has a second classifier that is related to the concept of a flat plant part. This is cánh, the classifier for sails, fields, blade and aisles. It is glossed as 'petal', and 'wing' and is found as leaf in the compound 'door-leaf'. The connection among all the items that the form applies to would appear to be their two-dimensionality, in addition to the fact that they are all parts of things.

The concept of part of things is important in the use of the other form that applies to fields, manh. This morpheme means as a noun 'a piece' or 'bit' and as a verb 'to be slender or thin' and refers to things that are small and insignificant. This explains its use with non-full moons.

The tám form for boards, paintings, etc., seems to have the concept of cut flat things; however, it is not glossed with a specific meaning. This form is also found in Brou (Katuic). It may be that Brou has borrowed it from Vietnamese. We saw in earlier chapters that Brou seems to have done this with other forms. Whether tám is a more widespread Mon-Khmer form is not clear from the available data.

The $b\acute{w}c$ form which is used for items similar to $t\acute{a}m$ is Chinese according to Gage (1979:4). It is not unusual for Vietnamese to have both a Mon-Khmer form and a Chinese form used for essentially the same purpose. This is true for example of the fruit classifiers: trai is the Mon-Khmer form and qua? is the Chinese form. The side by side existence of these two forms for two-dimensionality might explain the development of size as part of the semantic difference between the use of the $t\acute{a}m$ and $b\acute{w}c$ forms. As mentioned earlier, this is an unusual dimension. Perhaps the Chinese form $b\acute{w}c$ was associated with some borrowed artifacts or with Chinese words for items that were considered fairly large.

According to Gage (1979:4), another Chinese form is cuốn, the classifier for books. It is given as referring to a roll of books. This form of book is also associated with Chinese culture where scrolls were common. Books as we have seen have also been classified as folded items in Bahnaric or as sheaths or scabbards in Mon, and also as rolls in Pacoh (Katuic). One can see from all this that books are, interestingly, often classified according to the shape they take. And

the shape of books depends on the culture from which they come and often on the material from which they are made.

6.2 Nicobarese subfamily

6.2.1 Styles of classification and sources of classifiers

Both Nicobarese subbranches use the same classifier for flat things: $t\hat{a}k$ in Central Nicobarese and in Car Nicobarese $t\hat{a}.k$. The class represented by this classifier seems to be for all types of items. In Central Nicobarese, $t\hat{a}.k$ is cited with fibrous coverings, like clothing and with other woven things like nets. In addition, it is used with paddles. In Car Nicobarese, it is cited with money, something whose classification can vary on the form of the money. The origin of this $t\hat{a}k$ form is not available from the data consulted here.

6.3 Aslian subfamily

6.3.1 Styles of classification and sources of classifiers

There is only one classifier for two-dimensional items in the Aslian data discussed here. In Semai (Senoic), there is a class for fields and hills. This appears to be a typical place class, similar to many of those in the Mon-Khmer subfamily. The classifier for this class is *snilaay*, which is an infixed form of the noun *slaay* which means 'field' (Diffloth p.c. 1982).

6.4 Conclusion

Most of the Mon-Khmer languages have a variety of classes for two-dimensional objects based on a variety of principles such as shape, size, flexibility, artifact and function. An exception to this is to be found in the Mon and Khmer languages. In these languages, the number of two-dimensional items that are classified is small. In Mon and Khmer, one mostly finds classified books, paper, boards and in Mon, also unspecified small flat items. (The small set of classifiers is not a reflection of poor data collection since these two languages are well described.) Another exception to the usual pattern of several classes for flat things appears to exist in the Nicobarese languages which have only one class for flat things. However, this class includes a large number of items unlike the couple of classes in Mon and Khmer.

In the different Mon-Khmer languages, one thing that does affect the appearance of classes for certain artifacts is the type of culture. So, for example, in Mon, Khmer and Vietnamese one finds several separate classes for written things like books. Also in many languages, there are separate classes for traps and nets, partially because of their importance in the societies in question.

Perhaps more so than with the classifiers for groups of animate, one- or three-dimensional items, all of the Mon-Khmer subbranches share a classifier morpheme for two-dimensional objects. For example, with the two leaf classifiers *hlak* and *hla*, one or the other of the two are found in use in Palaungic, Khmuic, Bahnaric and Viet-Mường. Khmer has its own form for 'leaf', sonlyk. The *plah* form is shared by Bahnaric, Katuic and Palaungic. Khmuic also shares

the lang form with Katuic and Bahnaric. Tâm is shared by Brou (Katuic) and Vietnamese and ciang is shared by Khmuic and Mon but for different uses: traps in Mon and mushrooms in Khmu Yuan.

An interesting aspect of these shared morphemes is that one repeatedly finds them being used with different kinds of objects even when the form is shared in the same branch. Kota described in the Bahnaric section is an example of this. It has a very broad usage in Sedang; a much narrower one for flat metal items in Bahnar. This was true also of hlak and plah in Bahnaric and of plah in Palaungic. An extreme example of this is the ciang classifier meaning 'foot' for traps in Mon, but used for mushrooms in Khmu Yuan. In most of the other cases, the forms at least overlap in some of the items they are found with.

The classifiers for two-dimensional items, where a meaning is known, are drawn from three or four basic concepts. Of the classifiers for large numbers of items, several of the classifiers have the meaning 'leaf'. Others are glossed as 'sheet', including some that are given as 'leaf' or 'surface' in other languages, for example plah. A few are from the idea of 'something split off', and related to this, are a couple of forms that mean 'board'. One might expect that classes which have a classifier meaning 'board' such as konāng in Bahnar (Central Bahnaric) would be only for rigid or cut items, but this is not so. For example, in Bahnar, the konāng classifier is used with fish and immature children, dogs and cats. None of these items fit this cut, rigid description. In the same way, one might expect those classifiers meaning 'leaf' to be used exclusively with flexible items. While this association is quite common, it is not unusual to have classifiers with the 'leaf' meaning used with inflexible objects like boards or bricks.

The meaning of the classifiers associated with separate classes for books and traps are interesting. Books have a variety of forms and the classifiers reflect this. The morphemes mean things like 'string' used with bound books, or 'scabbard' for those made of long leaves and 'rolls' for books which are scrolls. Traps are also classed by a variety of morphemes. A couple of them specifically refer to a body part which is to be ensnared; for example, 'leg up to the foot' or 'gill' in the case of fish traps.

There are several classifiers in the Mon-Khmer subfamily that are borrowed, and Tai languages are the source for many of them. As always, the Khmu languages have several borrowed classifiers and classes for Tai. As has been noted before, Khmu and Khmu Yuan have different Tai languages as the source of their classifiers. Gold Palaung and Antisdel's Wa (Palaungic) and Brou (Katuic) also each have a Tai classifier. In most of those languages that have borrowed Tai forms, one also finds a rigid versus flexible distinction in the system for classifying two-dimensional items.

Other sources of borrowed classifiers are also typical of the patterns seen before: Sanskrit and Pāli forms are found in Khmer and Mon, and Chinese forms are found in Vietnamese. The influence of Burmese or Tibeto-Burman is unimportant with respect to two-dimensional classification in Austroasiatic.

One form, *plah*, found in Palaungic, Bahnaric and Katuic is also found in Chamic (Austronesian). However, the direction of borrowing here may be from Mon-Khmer to Chamic. It also appears that Palaungic languages have been the source for borrowings in Akha and Karen.

Therefore, the sharing or two-dimensional classifiers in South-East Asia is not just a case of Mon-Khmer being the receiver of outside influence, but it has also been the donor.

NOTES

- 1. However, as we have seen one of the subfamilies, Nicobarese, does not follow this pattern. See Chapters 4 and 5.
- 2. The inclusion of places in this particular chapter is based on a series of associations since not all examples in place classes are two-dimensional in nature. Fields, as we will see, are often treated in classes based on two-dimensionality. On the other hand, fields are also often in classes for places. Because of this connection, I have included 'place' classes here.
- 3. There is also a *hlak* form in Bahnar-Alakong dialect (Central Bahnaric) that is for trunks and stalks. It was described in Chapter 5 for one-dimensional items.
- 4. In Jeh (North Bahnaric) hla and in Anonymous' Rongao (North Bahnaric) la are both used for fields. Anonymous' Rongao also has an infixed form of hla, na, which is for leaves and paper. Chrau (South Bahnaric) also has the infixed form n'ha/n'hla for both leaves and hair. In Proto-Mnong (South Bahnaric), the hla form is used for leaves and flowers.
- 5. We did see that in Bahnar (Central Bahnaric) the classifier *hlak*, meaning 'tin leaf' in some languages, can be used with the membranes covering organs.

Chapter 7

THE GENERAL CLASSIFIER

7.1 Nature of the general classifier

The general or cannibalising classifier (so described because it devours other classifiers in the system) is the topic of this particular chapter. The general classifier is often the one that people use when they cannot remember the correct classifier: an event which can occur as the system loses its vitality or when someone is just learning the language. However, certain classes and objects are strongly protected against attack even when there is a general classifier in the system. In Table 7.1, one can see that except for a couple of Bahnaric languages and two Katuic languages, humans (especially adult humans) are the last to be consumed by a general classifier. Classes for humans, because they represent or include the self, are unlikely candidates for oblivion.

In the Mon-Khmer languages, not all subbranches nor all languages in the subbranches have general classifiers. One might expect that those languages with the largest and most vital set of classifiers would not have general classifiers, since the classification system could be considered productive. But as we shall is this is not necessarily so. As a corollary to this assumption one might also expect that those languages with the smallest and least vital classes would have a general classifier, since such a classifier would be necessary to make items countable. Also one might expect that small systems were older ones which reflect the loss of other classes to a more general class. However, this assumption is also not always true.

The Khasi subbranch is one that has a small set of classifiers, one being a general one. As described in Chapter 3, Khasi has only two classifiers, one for humans and one for everything else. This Khasi system looks like what would be the final outcome of a cannibalised system. No other classes are left except the human one. However, it may not be appropriate to view such a system as a final stage, but it could be an initial stage or a system of long standing. Adams and Conklin (1973) and Adams (1986a) both note that in South-East Asia the category of animacy is primary and the one class that a system would be expected to have. In Khasi the class for humans fills this criterion.

Table 7.1: General classifiers

		Nos. limit				Inanimates					
			adult human	insult	child	spirit	animal	plant	round	long	flat
Khasi Standard	tllii					yes/no	х	х	х	х	х
Wār	khlon					yes/no	х	х	х	х	х
Palaungic Antisdel's Wa	moo(?)			9			х	x	х	(?)	(?)
Khmuic Khmu and Khmu Yuan	?an			2. 2.			x	x (stalk)	х	х	
Mal	то ? (?)			1.01					x	х	x
Bahnaric North Sedang	to								x	x	x
Jeh	sĭ								х	х	х
Hrê	pom	#1			х	?	?	?	х	х	х
	to	#2 plus			x	?	?	?	х	х	х
Anon's Rongao	to					х	х	x	x	x	х
East Cua	роор					T.	х	?	х	х	х

Table 7.1: Continued

		Animates								Inanimates			
		Nos. limit	adult human	insult	child	spirit	animal	plant	round	long	flat		
Central Bahnar	pom	#1					х	х	х	х	(hlak used)		
	to	#2 plus					х	х	x	х	-		
Rongao	pom (little used)	#1							х				
	to	#2 plus					x	х	x	х			
West Brao	mpââm				(? off- spring)		х	?	x	х	х		
South					_				1.7				
Stieng	mlom	#1				х	?	х	х	х			
	σε	#2 plus					?	?	х	х	х		
Proto-Mnong	*mlớm						?	?	х	х	х		
Sre	nəm		х		х	х	х	х	(pomai used)	х	х		
Chrau	lâm		х		х	x	х	х	x	х			
Katuic Brou	lam		x		x	x	x	x	х	х	х		
Pacoh	llam		x (?)	x	x	x	x	х	x	х	х		
Katu	beq		, ,						x	х	х		
Viet-Mường	•												
Vietnamese	cái								x	х	x		
Miròng	cái								x	x	x		

On the other hand, Mon and Khmer, two other subbranches which have a small number of classifiers do not have a general classifier. The classifiers that they have only count a small number of items, thus leaving many items directly countable by numbers. Whatever happened to their systems, whether they were never well developed or they lost some of the items in their systems, it appears to have happened without the influence of a general classifier.

Most Palaungic languages and the Nicobarese and Aslian subfamilies also do not seem to have anything in the way of general classifiers. Antisdel's Wa (Palaungic) has been characterised in its source (Antisdel 1911) as having a general classifier, moo. However, the cognates of this morpheme in other Palaungic languages are not cited as general classifiers. In addition, the examples cited with the form in Antisdel's Wa are not completely convincing in the sense that there are no examples in the data of items normally classified by other forms being replaced on occasion by the classifier moo, although moo is given as counting round things and there is also a classifier lon for round things. Mostly it appears that moo has not taken over the territory of other classes, so it should not be considered a general classifier. The other subfamilies without a general classifier, Nicobarese and Aslian have a much smaller set of classifiers than the Palaungic languages. Even though the Nicobarese system has only a small set of classifiers, the system is not like those in Mon and Khmer because the Nicobarese classes apply to a fair number of items. It may be that one of the classifiers in Nicobarese will become more general. Noāng for cylindrical items and animals would seem a likely candidate because it already includes animals and items that traditionally belong to both long and round classes. However, it is not presently used to replace other classifiers still in use.

General classifiers are found in the rest of the Mon-Khmer branches: Khmuic, Bahnaric, Katuic, and Viet-Mıròng. As noted above, these branches all have languages with good sets of classifiers, so they do not fit the suggestion that general classifiers are found in languages where the classification systems are losing their vitality. As a matter of fact, Bahnar (Central Bahnaric) and Vietnamese have about the largest sets of attested classifiers in the family. This fact suggests that part of the function of a general classifier is to provide a more neutral categoy.

Of the several forms that have been labeled as general classifiers here, one can see in Table 7.1 that the label really applies to forms with fairly disparate usage. As mentioned earlier, normally humans, and in particular adult humans, are not included in general classes. However, in Sre and Chrau (South Bahnaric) and in Brou and Pacoh (Katuic), this observation does not hold. These four languages all share the same general classifier *lam* (infixed in the case of Sre: *nəm*). In all these languages, children as well as adult humans can be in this general class. Only in Pacoh does there seem to be some variation in usage. As mentioned in Chapter 3, Watson (1976) claims that the usage of *llam* with adult humans is insulting, but that it is used with one's own children quite freely. However, in another source, Watson, Watson and Cubuat (1979), several nouns referring to adult humans are cited as used with this classifier. No note is made in this source that this usage is insulting. This particular *lam* form is also found in the other South Bahnaric languages of Stieng and all the Mnong dialects and languages. However, these languages follow the typical pattern of not using the general classifier for humans. In Blood (1968:57) the form is specifically labelled as a 'non-personal' classifier.

In Hrê (North Bahnaric) the general classifier can also be used with humans. However, in these languages, only examples of its application to children have been found, and it may very well be that it cannot be used with adults. Children can be viewed as a separate category from adults, as can be shown in many social and linguistic behaviours; therefore, it would not be unusual to include children in a general class, but not adults. In a couple of cases, Anonymous' Rongao (North Bahnaric) and Khasi, the general classifier applies to spirits, but not humans. Spirits can be considered an in-between category, neither human nor non-human. As a demonstration of this point in Khasi, speakers disagree on whether or not to put spirits in the human or non-human class (see Table 3.1).

Several of the classifiers are used for animals plus other items and exclude humans and spirits. This is a more typical pattern for the general classifier. As can be seen in Table 7.1 that is the use of the form in Antisdel's Wa (Palaungic) (if the form is a classifier) and also of the Bahnar (Central Bahnaric) and Stieng and Proto-Mnong (South Bahnaic) forms.¹

Another typical general classifier pattern is found in Viet-Mường and Khmuic. Here the classes include only inanimate items. Interestingly enough, this classifier in Vietnamese can be used with most objects classified by $c\hat{a}y$, the tree classifier. However, it is explicitly stated in descriptions of the $c\hat{a}i$ form that it cannot be used with plant names for living trees. Trees are considered animate in this case.

In general, it is likely that the use of the cannibalising classifier develops along an implicational scale. Once the form develops a taste for a certain kind of object, this seems to whet its appetite for another kind of object. This hierarchy is represented by the labels on Table 7.1, starting with humans and moving to the right. If a cannibal classifier consumes items of a particular type on the table, it also, in most cases, consumes all the kinds of items to the right of this category.

There may be one kind of exception to this, however: living plants. There is only one example where plants seem to be the beginning of the implication. In Khmuic, ?an is cited with stalks. However, stalks could very easily apply to cut down plants only and not to living ones. In this case this means that one has to have animals in the class first before one gets plants. The general classifier can occur with certain plant parts like fruit or leaves, but not with whole plants. We saw in Vietnamese that living trees were explicitly excluded from the domain of cái. More data on this usage would be very interesting.²

Another interesting exception to this implication is to be found in Sre (South Bahnaric). Here, while the form can even be used with adult humans and other animates it cannot be used to replace items classified by the round object classifier $p\sigma nai$. A third exception is to be found in Bahnar (Central Bahnaric). In the Bahnar dialects, the form cannot be used to replace one of the flat classifiers, hlak. Both of these exclusions are difficult to explain and certainly not the normal pattern. One possible explanation is based on the original source of the general classifier. Perhaps, if its source was for one of the other shape classifiers a contrast with another shape classifier may be maintained for a period of time. The source of the pom classifier in Central Bahnaric may be a round concept, so that it maintains a contrast with two-dimensionality. Unfortunately, the source of the Sre classifier was not given, so that this hypothesis cannot be tested further.

A final note should be made here on the fact that in a few of the Bahnaric languages the general classifier alternates for number. In all cases, there is one classifier for use with the number one and another for use with numbers two and above. As was mentioned in Chapter 1, this alternation is unusual. If a language has classes of this type, it is noted on Table 7.1 in the lefthand column.

7.2 Sources of the classifiers

It seems that the general classifiers are more likely to be shared, certainly more so than the person classifiers, for example. Many of the patterns of sharing for other classifier morphemes that have been noted above are found here also. In several cases, the different languages of the subbranch do not have the same classifier. This is true of Khasi: the standard and Wār dialects do not have the same morpheme for the general classifier. Standard Khasi has *tllii* and Wār has *khlon*. This is the same pattern that was found in Chapter 3 for the human classifier: the two dialects also have different morphemes for human classifiers.

As also has been the pattern for other classes, the Khmu languages of Khmuic have a different classifier from the Mal language in the Khmuic subbranch. The Khmu and Khmu Yuan languages both have the Tai form ?an for their general classifier. On the other hand, Mal, while seeming to have the same category, has an entirely different form, mo? It is important to note here that as with the form in Antisdel's Wa (Palaungic), the evidence is not conclusive in Mal for demonstrating that mo? is really a general classifier. It is cited in Wajanarat (1978) as meaning 'item', and a few items cited with it are not listed as also being classified by other classifiers. If they are not, then this form is not really one of the cannibalising classifiers. It might then just be a junk category. However, it may be that such junk categories eventually become cannibals.

Many of the Bahnaric languages share the same form for the general classifier. In North, East, West and Central Bahnaric, all the languages with a general classifier have pom or to except for Jeh (North Bahnaric) which uses an entirely different form si. However, not all the languages use these two forms in the same way. In Hrê (North Bahnaric) and in Central Bahnaric, pom is for number one and to for numbers two plus. On the other hand in Cua (East Bahnaric) and in West Bahnaric pom is the general classifier for all numbers. In Sedang (North Bahnaric) and Anonymous' Rongao, it appears that to is the general classifier for all objects. The pom form occurs in these two languages, but for round things or animals. The pom form is also found in Halang and Jeh (North Bahnaric) and Ôi (West Bahnaric) as a classifier for round things or animals but not as the general classifier.

The South Bahnaric languages have their own general classifier (m)lom. We have seen before, for example in Chapter 6 on two-dimensionality, that this subbranch often has separate morphemes. Stieng is the only South Bahnaric language that shows some variation in the usage of this form. In Stieng, mlom is used only for the number one and oc is for numbers two and above. The (m)lom classifier is also found in two Katuic languages, Brou and Pacoh. This sharing of classifiers between Katuic and Bahnaric is not unusual; we have seen it many times before. Also not uncommon, is the fact that Brou and Pacoh share the (m)lom classifier with each other, but not with Katu. Katu uses as its general classifier beq, which is also found in Cua (East Bahnaric) but not as a general classifier. This form is also found in Chamic languages as was pointed out in

Chapter 4. However, in Chamic languages it does not seem to be used as a general classifier. The direction of borrowing here is not certain, but it could be from Mon-Khmer to Chamic.

Lastly, the two Viet-Mường languages also use the same classifier, cái, meaning 'thing'. While its usage in the classifier system is restricted in the categories for which it can substitute, Huỳnh Sanh Thông claims (p.c. 1984) that outside the counting system, cái can substitute for almost anything. This form is not found in any other branch for this purpose.

NOTES

- 1. The Proto-Mnong case is not clear-cut since it is described only as non-personal. There are no examples of its use with animals in the small sample. However, given the Stieng usage and the description I have inferred its use with animals.
- 2. It appears that cannibal classifiers do not realise the superior nutritional value of live plants.

Chapter 8

CONCLUSION

8.1 The nature of classification systems in the Mon-Khmer, Nicobarese and Aslian subfamilies of Austroasiatic

One striking characteristic of the Mon-Khmer, Nicobarese and Aslian classifier systems is the incredible variety of classifiers and variety of styles of classification. An example of this variety of forms is to be seen in the classifier for humans. All the languages but one have a classifier for humans. In addition, some languages share the same classifier such as *ki? in Palaungic and Mon, *ngaay in Bahnaric, or nak in Khmer, Katuic and some Bahnaric languages. However, in Palaungic, Bahnaric, Nicobarese and even Aslian, the assortment of forms used for this class within a branch is significant (see Chapter 3). This variation in the subfamilies of Austroasiatic can be attributed to several factors. One factor is the obvious influence of other languages and language families on these systems. Another factor is the age and separation of the subfamilies and branches. It is not surprising, given the island location of Nicobarese and the pocket locations of so many languages on the mainland, that they have developed differences in their systems. Another important factor in the variation is the effect of word replacement due to taboos on the use of morphemes which sound like the names of deceased or other words for taboo topics.

The variation that exists because of the influence of non-Austroasiatic languages is at least identifiable unlike that due to the other two factors. While the Tai language family seems to have exerted the largest influence over the widest area, the Austronesian languages are second and in the eastern areas have even more influence than Tai languages. Besides Tai and Austronesian, Chinese, Sanskrit/Pāli and Tibeto-Burman languages and cultures have also been important in the development of the Mon-Khmer and Aslian systems as they now exist.

The influence of Chinese is more minor than one might have expected except in the case of Vietnamese. Even here, however, it is not as extensive as Lao is on Khmu for example. In Vietnamese, Chinese classifiers are found for fruits, boards and other flat things, guns, books, and ranks of people. Some of these forms may have been borrowed along with the artifacts but more likely they were borrowed like so many Chinese forms, as substitutes for Vietnamese forms in order to elevate the register of the Vietnamese language. In addition, there are several Chinese kinship terms that also function as classifiers for humans in the Vietnamese system. However, these forms did not originally function as classifiers in the Chinese system. This is an innovation by Vietnamese.

In spite of the strong Chinese influence on Vietnamese language and culture, the Vietnamese classifier system at its base is Mon-Khmer. The classifier for humans in general (ngurời), the animal classifier (con), one fruit classifier (trai), the leaf classifier (lá), the general classifier (cái), and perhaps the board (tám) and tree classifier (cây) are all forms that have cognates throughout Mon-Khmer. In addition, while the grouping of humans and animals according to kinship is unique to Vietnamese, many of the other classes strongly resemble those in other Mon-Khmer languages.

Sanskrit/Pāli has its influence mostly limited to one language also. It is in Khmer that one finds the largest number of Sanskrit/Pāli forms. These morphemes are found throughout the Khmer system: for people of important status (?ong(R), for books and animals (kbaal), for literary images (rù:p), for books and perhaps for leaves (sonlvk). Several of these forms were borrowed along with cultural influence. However, some of the remaining classifiers are Mon-Khmer in origin. Among these are the tree-plus classifier ($t\ni m$) and one of the book classifiers. The most common Khmer classifier for humans, $ne \ni k$, is not Sanskrit/Pāli. As discussed in Chapter 3, it may be a native form or perhaps borrowed from Austronesian. A few other classifiers in Khmer are also found in Tai.

Some Sanskrit/Pāli forms are also found in Mon: for books, army units and things with literary references. In addition, in Mnong Preh (South Bahnaric) the classifier for humans, nuyh, is from Sanskrit manusa, 'man, person', a form that is widespread throughout South-East Asia. In Bahnar (Eastern dialects) there is a deprecating classifier for scars $r\sigma ka$ which may be from Sanskrit $r\bar{\sigma}ga$, 'disease'. The interesting thing about the Sanskrit forms in Mon-Khmer is that, as with the Chinese kinship terms, these morphemes were not classifiers in their native language. The Sanskrit/Pāli languages are not classifier languages. It is most likely that these forms which Khmer, Mon, Mnong Preh, and Bahnar employ in their classifier systems were not originally borrowed for that purpose, but were used more generally.

The Tibeto-Burman languages seem to have their influence limited for the most part to Palaungic. The most important influence of these languages can be seen in Gold Palaung and Drage's Wa where a change in religion and in social structure has meant the introduction of corresponding terms for humans in the classifier system. It should be noted here again that Shorto (1957) believes that these forms for counting kings, temples, monks, etc. came to Palaungic via Shan and not directly from Burmese. A few other Tibeto-Burman classifiers such as *lôun* for round objects also exist in the Palaungic languages and since they are not found in Shan, such forms were borrowed directly from a Tibeto-Burmese language.

One of the most surprising things about the influence of the Tibeto-Burmese languages on classifier systems in Mon-Khmer is the minor influence that they seem to have had on Mon. There is the one shared metaphor for classifying animals as things loaded or ridden that is from Burmese, but only a couple of actual classifiers for books are clearly Burmese. Several of the other forms in Mon, such as the general human classifier, and the trunk and the stalk classifiers are in fact Mon-Khmer cognates. Also the classifier system in Mon has remained marginal, while that in Burmese is quite extensive. One might have expected this Burmese speech style to influence the Mon one.

The influence of Tai languages is widespread. The only branches and subfamilies that do not have any or much Tai influence are Mon, Khasi, Bahnaric, and Vietnamese of the Mon Khmer subfamily, Nicobarese, and Aslian. The Vietnamese situation is surprising since the influence of Siamese in Vietnamese is well documented. There is only one form in Vietnamese that might be Tai, the classifier $c\dot{u}k$ for root vegetables. Perhaps some forms have been overlooked. With a few of the Bahnaric languages the influence of Tai is also minor, limited to the to classifier which is a general classifier in some Bahnaric languages and an animal one in others, e.g. Loven (West Bahnaric). As was suggested in Chapter 3, only one of these uses in Bahnaric, the animal one, may really be Tai. The Mon-Khmer branches with the most extensive influence from the Tai language family are Palaungic and Katuic and two Khmuic languages, Khmu and Khmu Yuan, which have classifier systems almost identical to Tai systems.

In Palaungic and Katuic many of the borrowed Tai forms are for artifacts such as tools, knives, guns, boats, woven things and houses. As suggested by Izikowitz (1951) many of these artifacts were originally borrowed from Tai cultures because their manufacture involved materials such as iron or skills such as weaving that were not part of these cultures' typical economy. It seems that the classifiers were borrowed along with the artifacts (see Adams 1986b). In a few cases the borrowed forms are for more general classes such as the sen classifier in Kuy (Katuic) for rope, possibly the string classifier in Khmer; the phein form for boards and flat objects in Brou (Katuic) and the pön classifier in Gold Palaung for flat things including woven items. Several classifiers for animates also come from various Tai languages. The form tua/to occurs in many branches of Mon-Khmer. In Khmer the category is restructured so that it is not used with animals at all (see Section 3.1.5). In other cases, forms that resemble this Tai classifier may or may not be the same. Included in the group that may not be Tai but only look alikes are several of the general classifiers in Bahnaric and the one for humans, animals and cylindrical items in Angku, which works more like the Miao system. As pointed out in Section 3.1.2.2 this to form can not always clearly be identified as Tai in origin.

The forms borrowed from Tai to count humans include two honorifics in Khmer, (which are not classifiers in Tai), and all those in Palaungic, including the ones that were originally Burmese (see Section 3.1.2). In Palaungic these borrowings most likely have Shan as the donor language.

The classifier systems of Khmu and Khmu Yuan (Khmuic) are heavily influenced by Tai languages for all categories including animates, artifacts and other categories based on dimensions. As noted in Chapters 3-7, some classifiers in these systems are not Tai and in some cases the Khmu languages have expanded or contracted the set of items that the borrowed forms can be used with. So, the systems are not identical, but the basic nature of the classes remains Tai. Most of the influence in the Khmu system and partially in the Khmu Yuan system comes from Lao of the Tai language family. However, throughout the Khmu Yuan system, forms such as *luuk* ` and *thian* come from other Tai languages, perhaps Tai Yuan, Siamese, Tai Dam or White Tai. Even in Khmu the *piang* form for flat inflexible items comes from one of these other Tai languages.

Given the incredible influence of the Tai languages on Khmu and Khmu Yuan, it is surprising that the Mal branch of Khmuic has so few Tai classifiers. Only the long classifier sen and the form for houses, hlang, are Tai or perhaps Lao. For some reason Mal seems to have escaped extensive Tai influence on the classifiers themselves. However, many of the styles of classes in Mal

resemble those in Khmu and Khmu Yuan. This could be accidental, but it is very likely that the nature of the Mal classes were influenced either by Khmu ones or by Tai ones.

From the above discussion it can be seen that Tai influence is prevalent in Mon-Khmer; it is extensive in two members of the Khmuic subbranch, so that those systems strongly resemble a Tai one in all ways. However, it is very limited in the other member of this subbranch. The Tai influence in Palaungic is due to a change in social structure, influenced by Burmese and Shan and to the borrowing of artifacts of various types. For the most part, other Tai influence in Katuic or Bahnaric is limited to either the animal classifier or classifiers for artifacts like those in Palaungic. Only a few languages except the Khmuic ones share dimensional classifiers with Tai, and if they do it is typically the one for string-like things or a flat one. Also the Tai influence is not due to just one Tai language, but to many, including Shan, Lao, Siamese, and perhaps Tai Yuan, Tai Dam or White Tai.

The Austronesian languages are the other major source of influence in the Mon-Khmer and Aslian systems. For the most part the Mon-Khmer languages influenced by Austronesian are in the very south-eastern area which includes Cambodia and Vietnam and part of Laos. In comparison to the Tai influence on Mon-Khmer, Austronesian definitely has less in terms of the number of classifiers under consideration. How extensive the Austronesian influence is depends on the correct identification of the form nak. It is found in Khmer, some Bahnaric languages and Katuic. As noted in Chapter 3, in Katuic and Bahnaric it looks like it is a version of a native Mon-Khmer infixed form chanak. In Khmer this may or may not be its source. Even if it was borrowed from Austronesian in Khmer, it is unlikely that this form was originally borrowed to function as a classifier because that is not its role in Austronesian. In addition, it also exists as a noun in Siamese. It is more likely that this noun later became incorporated into the classifier system. Most of the other classifiers in Mon-Khmer which are related to Austronesian are also classifiers in Austronesian. This excludes roka which is the deprecating classifier for wounds. It may be a noun, luka, meaning 'wound', not a classifier in Malay, or it may be a Sanskrit form roga 'disease' (found in Thai as rôog).

Katu (Katuic) and Cua (East Bahnaric) share two classifiers with Chamic, raq and beq. The raq form is borrowed from Austronesian *urat and means 'vein, artery'. The beq form is found only in Chamic. Bahnar (Central Bahnaric) also shares a metaphor with the Chamic systems. This is the use of a noun meaning 'self', 'body' or 'we inclusive' for classifying animals. This classification is also only found in Chamic and not in other subfamilies of Austronesian. In both these cases, Chamic may have borrowed the forms from Bahnaric. Moreover, Katu (Katuic) shares hla, for leaf-like things, with Chamic languages. It also is not found in other Austronesian languages. The existence of forms like this demonstrates quite clearly that there has been a long-term interaction back and forth between the Chamic and Bahnaric and Katuic systems.

The most interesting forms that are shared with Austronesian are the *plah* form for sheets of things and the *pla(?)* form for weapons. What is fascinating about these two classifiers is that not only are they found in branches that had and still have contact with Chamic (Austronesian) languages, i.e. Bahnaric and Katuic; they are also found in some Palaungic languages. This sharing could be coincidental based on a separate innovation. However, the fact that these two forms are closely related to each other phonologically and morphologically makes this unlikely.¹

The plah form is found only in Chamic. The pla(?) form is related to the classifier bilah in Malay for weapons, but it is not found in Chamic. There is a third form that is also shared between Mon-Khmer and Malay (Austronesian). This is blah in Khmu (Khmuic) and belah in Malay for body parts in pairs. These forms again all show a long-term interaction between Mon-Khmer and Austronesian languages.

As with the Tai languages, different Austronesian languages have contributed different classifiers. It appears for the most part that Malay has been the main influence in Aslian and Chamic in the Mon-Khmer branches. For example, most of the forms found in the Mon-Khmer branches of Palaugnic, Bahnaric and Katuic such as beq, raq, hla, and plah are also in Chamic. However, the pla(?) classifier for weapons which is a classifier in Malay (bilah) is not in Chamic. The Aslian subfamily employs the ekor form for classifying animals which is also in Malay, but not in Chamic. Aslian, but not Mon-Khmer, also has the fruit classifier buah. This form, however, is in both Chamic and Malay as a classifier.

In Aslian, one finds not only borrowed Malay classifiers, but also a calque. Most Aslian languages have the borrowed Malay form, *ekor*, meaning 'tail' to count animals. However, one Aslian language has a Mon-Khmer cognate meaning 'tail' instead of the Malay form. This is a clear substitute based on the Malay system.

Shared meanings of classifier morphemes such as the 'tail' one in Malay and Aslian are easy to prove. In this case the forms have identical meanings and minor or no variation in the items they apply to. In addition, the languages sharing the forms are close geographically. There are many other cases besides *ekor* 'tail' where Austroasiatic languages have classifier morphemes that are identical in meaning or extremely similar to classifier morphemes in other languages. Such cases have been discussed throughout the text. If these examples do not meet the criteria described above for the *ekor* 'tail' form, and if in addition they are found in more than one language family, then the likelihood is that these are separate developments that resemble each other not because of direct contact, but because of related cultural interpretations or more universal human experiences. One example of this kind is discussed in Section 5.1.5.2 on the use of the noun 'handle' as a classifier.

One further source of external influence on Austroasiatic systems of classification exists in the possibility of borrowing styles of classification. Of course, styles of classification are often borrowed with the classifier. But how about when there is no borrowed classifier or no classifier with an identical meaning, as with 'tail' mentioned above; only a style similarity? There were two or three cases in the data where there may have been influence of this kind. For example, in some Palaungic languages there was a classifier for all round items regardless of size, and this was true in Burmese also. In addition, in some Palaungic languages there was an all-purpose long classifier without any rigid versus flexible distinction, and this was also true of Burmese. Or at the other end of the linguistic area, we saw that Khmer, Mon and many Katuic and Bahnaric languages had classifiers for small round items. This kind of division is found in Austronesian including Chamic where there are two classifiers, one for fruits and larger items and one for smaller items around the size of grain up to fruit. Of course, for every one of these shared styles, there are also ones not shared. For example, Palaungic and Burmese have very different styles of classifying flat or two-

dimensional items. These types of similarities are hardest to prove in a definitive way, but are certainly worthy of note.

Finally, it should be pointed out here that there were mentioned in the text several examples where the Mon-Khmer systems have been the source of classifiers for other languages. However, such examples are fewer than those for the other direction.

The existence of so many borrowed classifiers is one of the reasons why it has been claimed that numeral classification is not a grammatical structure native to Austroasiatic. Even when one compares native cognates in Austroasiatic a lot of variation still remains. It is true that there are not many cognates across two branches, perhaps suggesting non-nativeness. However, much of this variation may be due to natural processes of isolation and taboo described above.

Other arguments against their nativeness are: the lack of classifiers in one branch, Pearic; the optionality of these forms in Khmer; and the small size of the classifier sets in some languages such as Khmer and Mon. However, it should be pointed out that both Mon and Khmer were strongly influenced by Sanskrit/Pāli which did not have classifiers. Pearic in turn has been influenced by Khmer: this might explain the lack of forms there. On the other hand, both Mon and Khmer have also been influenced by languages with classifiers, i.e. Burmese and Tai respectively, and perhaps the argument of the Sanskrit influence is weakened by this fact. The argument that a small classifier set means non-nativeness is not conclusive though since it is not unusual in classifier languages in other families to also have fairly small sets. In addition, it is well worth noting here that Nicobarese, an isolated branch of Austroasiatic, does have classifiers. This would be hard to explain if all classifier systems in Austroasiatic were borrowed because the Nicobarese one does not resemble any non-Austroasiatic languages, nor does it much resemble any other Austroasiatic systems.

No undisputed way exists for deciding whether numeral classifiers were a structure original to the Austroasiatic language family. However, there are certainly some aspects of the Austroasiatic systems which make them look like an institution in the family. One of these aspects is the infixing and prefixing of forms found throughout the branches. As described in Chapter 2, in Austroasiatic there exists an -n- infix which has different purposes, '...to turn verbs into nouns and mass nouns into count nouns' (Diffloth 1975:483). These infixes in classifiers are mostly found in the Katuic and Bahnaric branches of Mon-Khmer and in Aslian languages. However, occasionally infixed forms are also in the Palaungic and Khmer branches. For example, in Gold Palaung there is the classifier kan-āng for stones and carts from the word 'bone'. In addition, in Nicobarese classifiers are frequently prefixed by a mi-form meaning 'a' or 'one'. This form is related to the few Bahnaric languages where some classifiers alternate for number and some of the forms which are employed exclusively for number 'one' are also prefixed by an m-. For the most part the infix is used with nouns and not verbs in the classifier system. According to Diffloth (p.c. 1982), this use with nouns is limited to the classifier system, thus making it a special process for this grammatical class. This in turn argues for the institutional nature of this class since this process is not found in other Asian languages.

Secondly, in the Austroasiatic languages some classes are unique. For example, there is the cylindrical classifier in Nicobarese rather than the usual long versus round classes. Moreover,

both in Palaungic and Bahnaric there are classifiers for all sorts of round objects which also include animals in the class. Such classes are not found in neighbouring languages. Also in Bahnaric there are special classifiers for jars and utensils that are not found in other neighbouring non-Austroasiatic languages. The system based on kinship in Vietnamese, which is also unusual, and the specific honorifics in Bahnar are not found elsewhere. It is true that these unusual categories are not widespread in the family, perhaps suggesting non-nativeness, but if Mon-Khmer, Nicobarese and Aslian have all developed classifier systems due to borrowing they certainly have had them long enough to do fairly extensive innovating.

In addition, several of the Austroasiatic languages do share classifiers which are native Austroasiatic. It was noted several times throughout the text that different subbranches of Bahnaric and Katuic share several forms and are surely the most closely related systems. There are also several forms that are shared in several Mon-Khmer branches and even Aslian. Among these are the *tom, nkong, hla/hlak, and plē forms. *tom is in Mon, Khmer, Bahnar and Katuic. nkong is in Palaungic, Katuic, Bahnaric and Aslian. hla is in Palaungic, Khmuic, Vietnamese and Bahnaric, and plē is in Palaungic, Bahnaric and Vietnamese. What is interesting about these examples is that they are all ones for natural classes which in some of the languages have developed into classes for artifacts also. These forms also function outside the classifier system in compound forms. This may explain why these forms are so common in the different systems. In many ways, they are the anchor points of some systems, because they represent the basic shape metaphors. However, in some Bahnaric and Katuic languages they have remained pretty much just natural classes. In addition to these forms, there are also the plah and pla(?) classifiers mentioned above that are shared over a wide area, and there are some classifiers for humans that are shared by more than one branch.

Lastly it should be noted that the same branches are frequently mentioned when discussing the parallels among the various systems. These are Palaungic, Bahnaric and Katuic. The latter two branches are adjacent. However, the Palaungic branch is quite a distance north and west (see maps 2 and 3 in the Appendix). This might mean that classifier systems have existed in this subfamily for a long time, since it seems unlikely that they would have developed so many similarities accidentally.

8.2 Some general comments on the structure of semantic systems of numeral classifiers

8.2.1 Multiple classification of objects

Chapter 1 demonstrated that objects can be, and are, frequently classified by more than one classifier in a language, since any person or object has numerous characteristics that can be relevant for counting. Unfortunately, as was mentioned in Chapter 2, the data available for Austroasiatic does not lend itself well to discovering examples of multiple classification. In the few cases where there are examples of people or objects being classified with more than one form, there is normally not enough information to learn what the ensuing differences in meaning are. An example of this was the classification of monks in prerevolutionary Khmer, which could be done both by $r\hat{u}:p$, the image classifier and $?ong(\hat{k})$, the body classifier. One exception to this problem

was in the description of cái and con in Vietnamese (Section 3.1.8). Here it was possible to provide a fuller account because of the availability of several grammars, articles and native speakers. Another exception is found in Bahnar (Central Bahnaric). However, in Bahnar the explanation for this variation has to do with different speech genres. For example, in addition to the 'cliché' kind of classification, there are poetic classifiers and deprecating classifiers (see Section 3.1.6 for some examples of this). Huỳnh Sanh Thông (p.c. 1984) also notes different classifications in poetry in Vietnamese, such as 'patches' for husbands.

Further examples of this kind of variation also are apparent when one considers the classification of the same objects by different languages. This process was described in Chapter 4 for houses and in Chapter 5 (briefly) for books. As was pointed out in both of those descriptions, some of the variations in the way houses or books are counted can be related to the material or method of construction of these particular objects. This variation could occur in the same language if the objects in question were different in their makeup. An example like this is the possible ways of counting tall, short and regular-size trees with different classifiers in Vietnamese (see Section 5.1.7).

Much more of this kind of comparison remains to be done for the classification systems in these Austroasiatic languages, and it is best done with native speakers. More genres need to be studied, in addition to individual preferences, and dialect differences need to be examined.

8.2.2 Types and numbers of dimensions

Another important fact about the nature of numeral classification is that the objects may be included in a class for a variety of reasons. That is, numeral classes should not be seen as having only one possible organising semantic principle. This consideration is related to the one described above because objects have a variety of characteristics, so they can form associations with other objects through several principles. In addition, the morphemes which are used as classifiers are frequently nouns referring to objects such as fruit, trees, leaves, whose characteristics can also provide a variety of metaphors by which to include objects in a class. This principle has also been discussed by Becker (1975) and Dixon (1968). In the preceding chapters we have seen this principle in operation numerous times. One good example is the various classifiers meaning 'leaf'. These classifiers are often used to count leaves, paper, clothing, mats, trays and fields. The association of these items can be shape (i.e. flat) and it can be material (i.e. leaves can be written on). In addition, leaves can be used as mats and trays and clothing. As mats and clothing they function as covers. Another example of this is the tong 'handle' classifier in Bahnar (Central Bahnaric). While the classifier is used for many long-handled items, it also has a 'valuable' metaphor which is attributed to some of the long-handled tools in the class. This valuable metaphor is then used to count other valuable items such as humans and granaries. This example is important because it shows that metaphoric extensions can be based not only on the classifier itself, but also on the items in a class. Since not all long-handled tools are valuable, only a subset of those items in the class served as the metaphor for people. Again, native speakers are needed to learn about these multiple principles.

8.2.3 Origin of classifiers

Throughout this work the meanings of the classifier morphemes, when known, have been used to help understand the basis for categories. They may also be used to help speculate on the origin of the classifier systems. Greenberg (1972) who is most interested in their numeral function speculated that many classifiers would be drawn from what he called quasi-units. English examples of such forms would be 'a grain of sand', 'a blade of grass', 'a sheet of paper'. Allan (1977), who is interested in what classifiers predicate, speculated that configurational categories of shape, size and consistency were originally material inanimate categories such as rope-like, stick-like, stone-like. On the other hand, T'sou claims that a major reason for the development of classifiers is to avoid homophony. Avoiding homophony can be done by choosing close synonyms or semantically related morphemes for the purpose of disambiguation. Therefore, one would expect classifiers to be synonyms for the items they classify.

The interesting thing is that one can find classifiers fitting all these descriptions. There are some 'grain' and 'seed' classifiers in Mon and Bahnaric. Some examples of such classifiers are discussed in Section 4.1.6. However, such forms do not make up the majority of cases.

There are also several classifiers that fit Allan's description. Many classes based on shape have classifiers whose origin were nouns for everyday objects: these nouns included tree, leaf, fruit, seed, board and even handle. In the text in several places the importance of the material aspect of the connection between a classifier and the items classified has been mentioned. Several of these examples include forms such as trees and boards, which are building materials, and leaves, which are usable as utensils. And as was pointed out in Chapter 4, there is a straight material classifier in the form of hlāng for bamboo objects. However, some of these nouns in question really do not have a strong material connection to the forms they classify. These include fruit and seeds. For the most part these objects cannot be employed as utensils or building materials. The only exception to this would be gourds which could be used for dishes and musical instruments for example. In the case of these two examples, the material connection is weaker and supposedly shape or perhaps function comes into play as a metaphor much more easily in these cases.

There are also what seem like a few exceptions to Allan's hypothesis that the origin of configurational classifiers is in material artifacts or natural objects out of which items can be made. A few configurational classifiers have as their meaning 'round' (i.e. *?()mvl/r and pom) and 'thin' (i.e. roh). These forms are actually adjectives. However, as was described in Chapter 4, etymologically the original meaning of the *?()mvl/r and pom forms may not have been 'round'. This argument is based on the fact that these are the two classifiers that have the widest application and whose classes include animates. If the form originally meant something like 'fruit' or 'seed' the connection between such morphemes and animates might have been so weak as to cause redefinition. This is only speculation, however, and it may indeed be that some classifiers for configurational categories are adjectives, thus countering Allan's suggestion.

The third suggestion made by T'sou (1976a) was that classifiers would be drawn from synonyms or semantically related morphemes. This particular suggestion does not rule out the origins for inanimate classifiers suggested by either Greenberg (1972) or Allan (1977). Examples of synonyms or related forms include the natural classes for plants which have as their classifier

the word for that plant or part of plant such as the 'trunk' of a tree, or the 'stalk' of a bamboo. Also T'sou's hypothesis is one of the few that takes into account classifiers for humans and non-human animates. These are very important classes in all numeral classifier languages and the treatment of Greenberg (1972) and Allan (1977) misses them, or at least in the case of Allan, underestimates them. In many cases the classifiers for humans are nouns that actually mean 'person', 'man', etc. and fit the synonym origin suggestion by T'sou.

The phrase used by T'sou, 'semantically related morpheme' can refer to a wide variety of other kinds of relationships between the morphemes and the object it counts. One frequent one is synecdoche, where the part stands for the whole. For example, for humans and animals one finds as classifiers words meaning 'head', 'body', 'pupil of eye' and 'tail'. We also saw for the classifiers for houses that many of the forms were for parts of the building such as roofs, backs and stalks. (In addition, one also found synonyms and labels for a general category of building.) The part standing for the whole is also the relationship found with many of the classifiers for artifacts such as knives and digging tools. In such cases one often gets classifiers meaning 'handle' or 'blade' or 'tin leaf'. As pointed out in Adams (1986b), parts are very informative and useful for representing concepts of shape, as well as objects themselves.

Many other kinds of semantic relationships between the classifiers and the items classified have been described in the chapters above. To some extent, the choice of organisation for this text has inadvertently emphasised the configurational classes of one-, two- and three-dimensionality for inanimates. Yet, material, size, flexibility, function, and kind are among some of the other important principles for classes.

8.2.4 Classification versus quantification

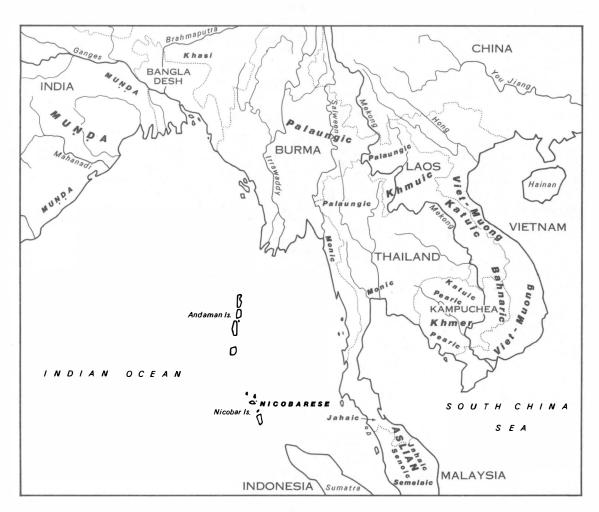
In Chapter 1, several hypotheses were reviewed that distinguished classification from other types of quantification on the nature of the object included in the class. According to several theories, classifiers were used only with individual items. However, we saw in Mon (Section 4.1.2.2) that it was possible to include in the 'ring' class not only rings which can be individual items, but round slices of fruit which are parts of whole and possibly groups of items arranged in a circle. This kind of freedom in the application of classifiers, in addition to the variation in classification described in 8.2.1, points out that while language can be described according to rules and often fits these rules, at heart it is an open system capable of play and intervention, and argues that much work remains to be done on the nature of classification both within and without Austroasiatic.

NOTES

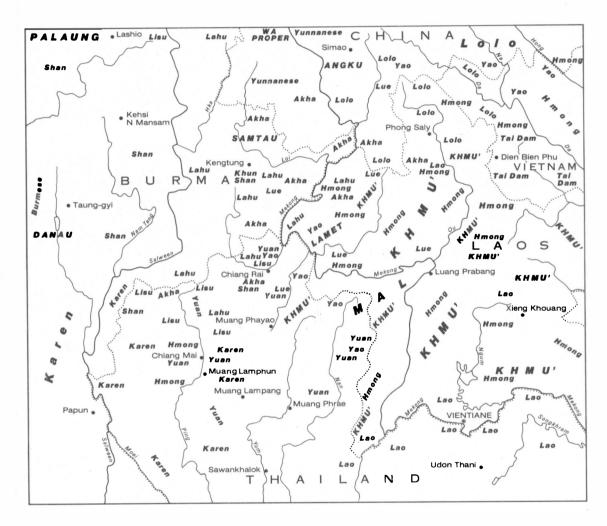
1. The sharing of the forms by such distant subbranches in Mon-Khmer makes one wonder if the two forms might not be connected somehow. The plah form in Chamic is glossed as homophonous with a verb meaning 'to split' and the pla(?) forms in Katuic and Palaungic mean a cutting edge. In Malay the classifier is just defined as 'piece' but also used with cutting edges. Cutting edges are the instruments needed to split items. In addition the

- resulting split items, e.g. flat ones and logs, are what are counted by the *plah* classifier. However, Benedict thinks that such a connection is unlikely (p.c. 1986). He thinks they are only look-alikes.
- 2. It should be noted again here that these were shared forms that were used for entirely different purposes in different languages. See the discussion on *cak* 'body' Section 3.1.7.2.

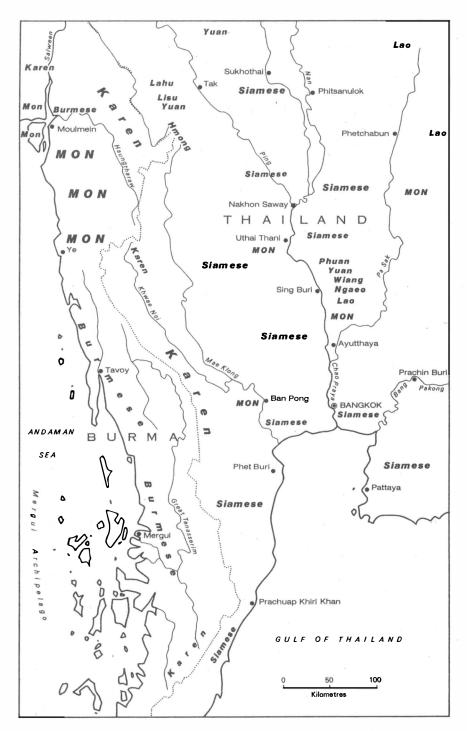
APPENDIX



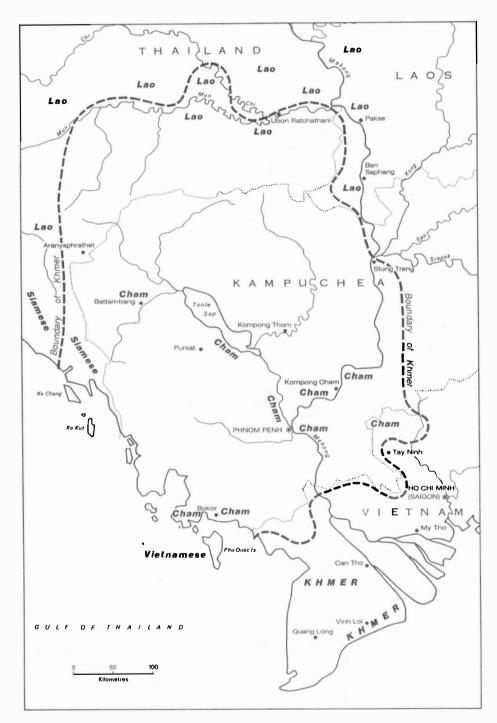
Map 1: Four subfamilies of Austroasiatic: Munda, Mon-Khmer, Aslian and Nicobarese with the branches of Mon-Khmer and Aslian



Map 2: Palaungic and Khmuic and neighbouring languages



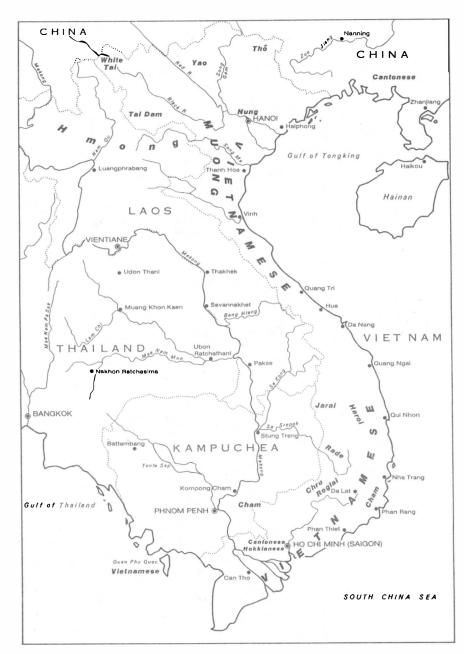
Map 3: Monic and neighbouring languages



Map 4: Khmer and neighbouring languages



Map 5: Katuic and Bahnaric and neighbouring languages



Map 6: Viet-Mường and neighbouring languages

BIBLIOGRAPHY

Abbreviations

<i>BEFEO</i>	Bulletin de l'Écôle Francaise d'Extrême-Orient
BSEI	Bulletin de la Société des Études Indochinoise
BSLP	Bulletin de la Société de Linguistique de Paris
EFEO	Écôle Française d'Extrême-Orient
<i>IJAL</i>	International Journal of American Linguistics
JAOS	Journal of the American Oriental Society
JRAS	Journal of the Royal Asiatic Society
MKS	Mon-Khmer Studies
PEFEO	Publications de l'Écôle Française d'Extrême-Orient

Adam, Tassilo and James P. Butler

1948 Grammar of the Malay language. New York: Hafner.

Adams, Karen L.

- 1986a Borrowed numeral classification in Austroasiatic. Paper presented at the Conference on Southeast Asia as a Linguistic Area. University of Chicago, April, 1986.
- 1986b Numeral classifiers in Austroasiatic. In Colette Craig, ed. *Noun classes and categorization*, 241-262. Typological Studies in Language 7. Amsterdam/ Philadelphia: John Benjamins.
- to appear A comparison of the numerical classification of humans in Mon-Khmer. In Jan-Olof Svantesson, ed. Papers from the Helsingor Symposium on Austroasiatic Linguistics and Literature.

Adams, Karen L. and Nancy F. Conklin

- 1973 Toward a theory of natural classification. Papers from Ninth Regional Meeting, Chicago Linguistics Society, 1-10.
- On the numeral classifier in Thai. Paper presented at the Seventh International Conference on Sino-Tibetan Languages and Linguistic Studies, Atlanta, Georgia.

Adams, Karen L., Alton L. Becker, and Nancy F. Conklin

1975 Savoring the differences among classifier systems. Paper presented at the Eighth International Conference on Sino-Tibetan Languages and Linguistic Studies, Berkeley, California.

Allan, Keith

1977 Classifiers. Language 53:285-311.

Anonymous

n.d. Notice sur les Khas de Cammon. EFEO, MS.

Antisdel, C.B.

1911 Elementary studies in Lahoo, Akha (Kaw) and Wa languages. *Journal of the Burma Research Society*. 1:41-64.

Asmah Haji Omar

1972 Numeral classifiers in Malay and Iban. Anthropological Linguistics 14/3:87-96.

Aubazac, Louis

1971 Dictionnaire cantonnais-français, xv-xvii. Taipei: reprinted by Ch'eng Wen Publishing Co.

Aviong, Awoi-Hathe and Vurnell Cobbey

1969 North Roglai language lessons. Trilingual Language Lessons, No.3. Manila: Summer Institute of Linguistics.

Banker, Elizabeth M.

1964 Bahnar affixation. MKS 1:99-117.

1973 Bahnar language lessons (Pleiku dialect). Trilingual Language Lessons, No.20. Manila: Summer Institute of Linguistics.

Banker, John E.

1965 Bahnar word classes. M.A. thesis, Hartford Seminary Foundation, Hartford.

Barker, Milton and Muriel Barker

1976 Muròng language lessons. Trilingual Language Lessons, No.18. Manila: Summer Institute of Linguistics.

Baron, Stephen

1973 The classifier-alone-plus-noun construction as areal feature in Southeast Asia. Paper presented at Sixth International Conference on Sino-Tibetan Languages and Linguistic Studies, San Diego, California.

Becker. Alton L.

A linguistic image of nature: the Burmese numerative classifier system. *International Journal of the Sociology of Language: Sociolinguistics in Southeast Asia* 5:109-121. The Hague: Mouton.

Benedict, Paul K.

- 1941 Kinship in southeastern Asia. Ph.D. thesis, Harvard University.
- 1972 Sino-Tibetan: a conspectus. Cambridge: University Press.
- 1975 Austro-Thai: language and culture, with a glossary of roots. New Haven, Connecticut: HRAF press.

- Benedict's Austro-Thai hypothesis: pro & con (a collection of articles by various authors). Computational Analyses of Asian and African Languages 6:51-108.
- 1986 Personal communication, May 26.

Benjamin, Geoffrey

- 1976 Austroasiatic subgroupings and prehistory in the Malay Peninsula. In P. Jenner, L.C. Thompson and S. Starosta, eds *Austroasiatic studies*, vol.1:37-128. Honolulu: University of Hawaii Press.
- 1979 Indigenous religious systems of the Malay Peninsula. In A.L. Becker and A.A. Yengoyan, eds *The imagination of reality: essays in southeast Asian coherence systems*, 9-27. Norwood, New Jersey: Ablex.

Benton, R.A.

1968 Numeral and attributive classifiers in Trukese. Oceanic Linguistics 7:104-146.

Berlin, Brent

1977 Speculations on the growth of ethnobotanical nomenclature. In Benjamin Blount and Mary Sanches, eds *Sociocultural Dimensions of Language Change*, 62-102. New York: Academic Press.

Blah, U Edingson

- 1970 *Khasi self teacher*. Second edition. Shillong, Assam: Chapala Bookstall, Booksellers and Publishers.
- 1971 Chapala's Anglo-Khasi dictionary. Second edition. Shillong, Assam: Chapala Bookstall, Booksellers and Publishers.

Blood, Evangeline

1966 Clause and sentence types in Mnong Rolom. In David D. Thomas, ed. Four papers on Vietnamese languages, 23-27. Teo Reo Reprints 2. Wellington: Linguistic Society of New Zealand.

Blood, Henry F.

1968 A reconstruction of Proto-Mnong. Grand Forks: Summer Institute of Linguistics, University of North Dakota.

Blood, Henry F. and Evangeline Blood

1966 The pronoun system of Uon Njun Mnong Rolom. MKS 2:103-111.

Bondet De La Bernardie, J.

1949 La dialecte des Kha Boloven. BSEI 24:57-78.

Borua, Golap Chandra

1920 Ahom-Assamese-English dictionary. Calcutta.

Braine, Jean Critchfield

1970 Nicobarese grammar (Car dialect). Ph.D. thesis, University of California, Berkeley.

Brengues, Jean

Note sur les populations de la région des montagnes des Cardamones. *Journal of the Siam Society* 2:19-47.

Burling, Robbins

- 1961 A Garo grammar. Poona: Deccan College.
- 1965a Hill farms and paddy fields. Englewood Cliffs, New Jersey: Prentice-Hall.
- 1965b How to choose a Burmese numeral classifier. In Melford Spiro, ed. *Context and meaning in cultural anthropology.* 243-264. Glencoe, Illinois: The Free Press.

Burton, Eva

1969 A brief sketch of Cua clause structure. MKS 3:5-8.

Burton, Eva and Jackie Maier

1976 Personal communication, July 13.

Chao, Y.R. (Yuen Ren)

1968 A grammar of spoken Chinese. Berkeley and Los Angeles: University of California Press

Chiang, Ker Chiu

n.d. Hokkien (Amoy) for beginners: Book 1. Singapore: Chin Fen Bookstore.

Cohen, Patrick

1976 The noun phrase in Jeh. MKS 5:139-152.

Collins, D.G.

1906 An English-Laos dictionary, 155-158. Chieng Mai: Mission Press.

Condominas, Georges

- 1977 We have eaten the forest: the story of a Montagnard village in the Central Highlands of Vietnam. (Translation of 1957 French version.) New York: Hill and Wang.
- 1979 Personal communication, October 12.

Cooke, Joseph R.

1968 Pronominal reference in Thai, Burmese, and Vietnamese. University of California Publications in Linguistics No.52. Berkeley and Los Angeles: University of California Press.

Cooper, James S.

1971 Halăng language lessons. Trilingual Language Lessons, No.6, part 2. Manila: Summer Institute of Linguistics.

Costello, Nancy

- 1969 The Katu noun phrase. *MKS* 3:21-36.
- 1971 Katu vocabulary. Trilingual Vocabularies, No.5. Manila: Summer Institute of Linguistics.
- 1976 Personal communication, August 16.

Coyaud, Maurice

- 1967 Classification nominal en Chinois: les 'particules numérales'. MS.
- 1978 Grammaire lolo: dialecte de xide. Linguistics of the Tibeto-Burman Area 4/1:75-77.

Cubuat and Richard Watson

1976 Pacoh language lessons. Trilingual Language Lessons, No.25, part 2. Manila: Summer Institute of Linguistics.

Cuisinier, Jeanne

1951 Prières accompagnant les rites agraires chez les Mường de Mân Đức. PEFEO 33.

Cushing, Josiah N.

- 1907 Elementary handbook of the Shan language. Revised edition. Rangoon: American Baptist Mission Press.
- 1914 A Shan and English dictionary, 2nd edition. Rangoon: American Baptist Mission Press.

Dajao Jaken (Thời) and David Thomas

1974 Chrau conversation lessons. Trilingual Language Lessons, No.1, part 2. Manila: Summer Institute of Linguistics.

Davias-Baudrit, Le Père J., M.E.P.

1966 Dictionnaire rhade-français. Dalat: Mission Catholique de Banmêthuôt.

Davies, H.R.

1909 Yiin-nan: the link between India and the Yangtze. Cambridge: University Press.

Delancey, S.

Toward a history of Tai classifier systems. In Colette Craig, ed. *Noun classes and Categorization*, 437-452. Typological Studies in Language 7. Amsterdam/ Philadelphia: John Benjamins.

Delcros. H.

1966 Petit dictionnaire du langage des KMHMU'. Vientiane, Laos: Mission Catholique.

Deloustal, R.

1914 Des déterminatifs en annamite. *BEFEO* 14/5:29-40.

Denny, J. Peter

- 1973 Comments to K.L. Adams and N.F. Conklin on their paper 'Toward a theory of natural classification'. MS.
- 1976a The 'extendedness' variable in classifier semantics: universal features and cultural variations. Research Bulletin No.354, Department of Psychology. London: University of Western Ontario. Also in M. Mathiot, ed. 1979. *Ethnolinguistics: Boas, Sapir, Whorf revisited*, 97-119. Contributions to the Sociology of Language 27. The Hague: Mouton.
- 1976b What are noun classifiers good for? Papers from Twelfth Regional Meeting, Chicago Linguistic Society, 122-131.

Denny, J.P. and C.A. Creider

The semantics of noun classes in Proto-Bantu. Patterns in language, culture, and society: sub-Saharan Africa. *Ohio State University Working Papers in Linguistics* 19:142-163. Columbus: Ohio State University. Also in *Studies in African Linguistics* 7:1-30, 1976.

Denny, J. Peter and Lorraine Odjig

1973 The meaning of *ninkotw* one and *pēšikw* one in Ojibway. *IJAL* 39:95-97.

Diffloth, Gérard

- 1968 Proto-Semai phonology. Federation Museums Journal 13:65-74. Kuala Lumpur.
- 1975 Austro-Asiatic languages. *The new Encyclopaedia Britannica: Macropaedia; knowledge in depth*, 15th edn, vol.2:480-484. Chicago, London, Toronto, Geneva: Encyclopaedia Britannica Inc.
- 1976a An appraisal of Benedict's views on Austro-asiatic and Austro-Thai relations.

 Discussion Paper No.82. Kyoto: Center for Southeast Asian Studies, Kyoto University.
- 1976b *Proto-Mon-Khmer final spirants*. Center for Southeast Asian Studies. Discussion paper No.88. Kyoto: Kyoto University.
- 1977 Proto-Waic and the effects of register on vowel gliding. Paper presented at Tenth International Conference on Sino-Tibetan Languages and Linguistics, Washington, D.C.

Diguet, E. (Colonel)

1910 Étude de la langue thô. Paris: Augustin Challamel, Éditeur, Librairie Maritime et Coloniale.

Dixon, R.M.W.

1968 Noun classes. Lingua 21:104-125.

Đinh Đô, Đinh Mốc, and Jacqueline Maier

1974 Cua language lessons. Trilingual Language Lessons, No.10. Manila: Summer Institute of Linguistics.

Dournes, Jacques [Dam Bo]

1950 Les populations montagnardes du sud-Indo-chinois (Pemsiens). *France-Asie* 5:49-50; 931-1208.

Drage, Godfrey

1907 A few notes on Wa. Rangoon, Burma: Superintendent, Government Printing.

Drouin, S.

n.d. Dictionnaire français-montagnard (Kóho) (on Sre). Mimeo. (Wason Film 2359, Cornell University. Wason Collection.)

Ehrman, Madeline E.

1972 Contemporary Cambodian: grammatical sketch. Washington, D.C.: Foreign Service Institute, Department of State.

Emeneau, Murray B.

- 1951 Studies in Vietnamese (Annamese) grammar. University of California Publication in Linguistics, Vol.8. Berkeley and Los Angeles: University of California Press.
- 1956 India as a linguistic area. Language 32:3-16.

Ferlus, Michel

1974 Problèmes de mutations consonantiques en Thavung. BSLP 69:311-323.

Filbeck, David

- 1972 Tone in a dialect of Tin. Anthropological Linguistics 14/4:111-118.
- 1973 T'in culture: an ethnography of the T'in tribe of northern Thailand. Chiang Mai, Thailand: Department of Sociology and Anthropology, Faculty of Social Science, Chiang Mai University.
- 1976a Toward a grammar of relative clauses in Tin. In P.N. Jenner, L.C. Thompson, and S. Starosta, eds *Austroasiatic studies*, vol.1:285-308. Honolulu: University of Hawaii Press.
- 1976b Mal (Thin). In William A. Smalley, ed. Phonemes and orthography: language planning in tenminority languages of Thailand. PL, C-43: 239-257.
- 1978 T'in: a historical study. PL, B-49.

Fippinger, Dorothy

1975 English-Black Tai dictionary file. MS (August).

Fraser, James O.

1922 Handbook of the Lisu (Yawyin) language. Rangoon.

Friedrich, Paul

1970 Shape of grammar. Language 46:370-407.

Fuller, Eugene, Ja Wi and Ja Ngai

1974 Chru language lessons. Trilingual Language Lessons, No.16. Manila: Summer Institute of Linguistics.

Gage, William W.

- 1977 Towards delimiting the Tai element in Vietnamese. Paper presented at Tenth International Conference on Sino-Tibetan Languages and Linguistic Studies.
- 1978 Puzzling variations among Chinese loans in Vietnamese. Paper presented at the Eleventh International Conference on Sino-Tibetan Languages and Linguistic Studies.
- 1979 Infiltration of grammatical morphemes into Vietnamese from Chinese. Paper presented at the Twelfth International Conference on Sino-Tibetan Languages and Linguistic Studies.

Gedney, William J.

1986 Personal communciation, April 21.

Geertz, Clifford

1973 The interpretation of cultures. New York: Basic Books.

Goral, Donald R.

1978 Numerical classifier systems: a southeast Asian cross-linguistic analysis. *Linguistics of the Tibeto-Burman Area* 4/1:1-73.

Gorgoniyev, Y.A.

1966 The Khmer language. Moscow: Nauka Publishing House.

Greenberg, Joseph H.

- Some universals of grammar with particular reference to the order of meaningful elements. In J.H. Greenberg, ed. *Universals of language*, second edition, 73-113. Cambridge: MIT Press.
- 1972 Numeral classifiers and substantive number: problems in the genesis of a linguistic type. Working Papers on Language Universals 9:1-39. Stanford: Language Universals Project, Stanford University.
- 1974 Studies in numerical systems, 1: Double numeral system. Working Papers on Language Universals 14:75-89. Stanford: Language Universals Project, Stanford University, California.
- 1975 Dynamic aspects of word order in the numeral classifier. In C.N. Li, ed. Word order and word order change, 27-46. Austin and London: University of Texas Press.

Gregerson, Kenneth, Kenneth Smith, and David Thomas

The place of Bahnar within Bahnaric. In P. Jenner, L.C. Thompson, and S. Starosta, eds *Austroasiatic studies*, vol.1:371-406. Honolulu: University of Hawaii Press.

Grierson, George Abraham

1904 The linguistic survey of India, vol.2. Calcutta.

Guilleminet, Paul

1960 Langages spéciaux utilisés dans la tribu Bahnar du Kontom (sud Viêt-nam, Indochine). BEFEO 50/1:117-132.

Guilleminet, Paul and Jules Alberty

1959, Dictionnaire bahnar-français. 2 volumes. PEFEO. 1963

Halliday, R.

1922 A Mon-English dictionary. Bangkok: Siam Society.

Hanson, Rev. Ola

- 1896 A grammar of the Kachin language. Rangoon: American Baptist Mission Press.
- 1906 A dictionary of the Kachin language. Rangoon. (Reprinted 1954, Rangoon: Baptist Board of Publications.)

Hashimoto, Mantaro J.

1976 Language diffusion on the Asian continent: problems of typological diversity in Sino-Tibetan. Computational Analyses of Asian and African Languages 3:49-65. The genealogy and role of the classifier in Sino-Tibetan. Paper presented at the Ninth International Conference on Sino-Tibetan Languages and Linguistic Studies. Copenhagen, Denmark. Also in Computational Analyses of Asian and African Languages 7:69-78.

Haswell, James M.

1901 Grammatical notes and vocabulary of the Peguan (Mon) language. Second edition. Rangoon: American Baptist Mission Press.

Haudricourt, A.G.

- 1953 La place du Vietnamien dans les langues Austroasiatiques. BSLP 49/1:122-128.
- 1954 De l'origine des tons en Vietnamien. *Journal Asiatique* 242:69-82.

Headley, Robert K., Jr

- 1976 Some considerations on the classification of Khmer. In P. Jenner, L.C. Thompson and S. Starosta, eds *Austroasiatic studies*, vol.1:431-452. Honolulu: University of Hawaii Press.
- 1978 Personal communication, September 1.

Headley, Robert K., Jr, K. Chhor, L.K. Lim, L.H. Kheang, and C. Chun

1977 Cambodian-English dictionary. 2 vols. Washington, D.C.: Catholic University of America Press.

Heimbach, Ernest E., compiler

1969 White-Meo-English dictionary. Linguistics Series IV: Data Paper: No.75. Southeast Asia Program, Department of Asian Studies, Cornell University. Ithaca, New York.

Hertz, Henry Felix

1935 A practical handbook of the Kachin or Chingpaw language. (Revised and enlarged edition.) Reprint. Rangoon.

Hla Pe

1965 A re-examination of Burmese classifiers. *Lingua* 15:163-186.

Hospitalier, Julien Joseph

1937 Grammaire laotienne. Paris.

Huang, Zaijun

A study of the origin and development of classifiers in Chinese, beginning with their use in the Oracle Bone inscriptions and Jinwen (in Chinese). *Zhongguo Yuwen* 6:432-441.

Huffman, Franklin E.

- 1970 Modern spoken Cambodian. New Haven and London: Yale University Press.
- 1973 Thai and Cambodian: a case of syntactic borrowing? *JAOS* 93/4:488-509.

Huỳnh Sanh Thông

1984 Personal communication, July 15.

Izikowitz, K.G.

1951 Lamet, hill peasants of French Indochina. Etnologiska Studier, 17. Göteborg.

Jacob, Judith M.

- 1963 Prefixation and infixation in Old Mon, Old Khmer, and Modern Khmer. In H.L. Shorto, ed. *Linguistic comparison in Southeast Asia and the Pacific*, 62-70. London: Luzac.
- Notes on the numerals and numeral coefficients in Old, Middle, and Modern Khmer. Lingua 15:143-162.
- 1968 Introduction to Cambodian. London: Oxford University Press.

Jenner, Phillip N. and Saveros Pou

1981 A lexicon of Khmer morphology. MKS 9-10. Honolulu: University of Hawaii Press.

Johnston, Beulah M.

1976 Kuy. In William A. Smalley, ed. *Phonemes and orthography: language planning in ten minority languages of Thailand. PL*, C-43:259-272.

Jones, Robert B., Jr

- 1961 Karen linguistic studies: description, comparison and texts. University of California Publications in Linguistics, vol.25. Berkeley and Los Angeles: University of California Press.
- 1970 Classifier constructions in Southeast Asia. JAOS 90/1:1-12.

Kay, Paul

1976 Personal communication, November 15.

Keller, Charles E.

1976 A grammatical sketch of Brao: a Mon-Khmer language. Workpapers of the Summer Institute of Linguistics; University of North Dakota Session, vol.20, supplement 1.

Kerr, Allen D. (et al.)

1972 Lao-English dictionary, vol.1, xxi-xxiii. Washington, D.C.: Consortium Press, The Catholic University of America Press.

Khanittanan, Wilaiwan Wichienrot

1973 The influence of Thai on five Lao dialects. Ph.D. thesis, University of Michigan.

Klein, H.E.M.

1975 Noun classifiers in Toba. MS. New Jersey: Montclair State College.

Kvoeu-Hor and Timothy Friberg

1976 Western Cham language lessons. Trilingual Language Lessons, No.21. Manila: Summer Institute of Linguistics.

Leach, Edmund

Anthropological aspects of language: animal categories and verbal abuse. In E. Lenneberg, ed. *New directions in the study of language*, 23-64. Cambridge: MIT Press.

Lebar, Frank M., Gerald C. Hickey, and John K. Musgrave

1964 Ethnic groups of mainland Southeast Asia. New Haven, Connecticut: Human Relations Area Files Press.

Lewis, Paul

1968 Akha-English dictionary. Data paper No.70. Southeast Asian Program, Department of Asian Studies, Cornell University. Ithaca, New York.

Levy, Paul

1943 Recherches prehistoriques dans la région de Mlu Prei. PEFEO 30:112-117.

Li, Fang Kuei

1977 A handbook of comparative Thai. Oceanic Linguistics Special Publication No.15. Honolulu: University of Hawaii Press.

Liétard, Alfred

- 1912 Au Yun-nan, Min-kia et La-ma Jen. Anthropos 7:677-705.
- 1913 Au Yun-nan les Lo-lo p'o: une tribu des Aborigènes de la Chine meridionale. Anthropos-Bibliothek 1/5:1-272.

Lindell, Kristina, Jan-Olof Svantesson, and Damrong Tayanin

n.d. Kammu Yuan-English dictionary. MS. Lund, Sweden: University of Lund.

Locke, J.

1689 Essay concerning human understanding. London.

Lombard, Sylvia J., compiler; H.C. Purnell, Jr, editor

1968 Yao-English dictionary: Appendix E. Data Paper No.69. Southeast Asia Program, Department of Asian Studies, Cornell University. Ithaca, New York.

Lorrain, Reginald Arthur

1951 Grammar of the Lakher or Mara language of Assam. Gauhati, Assam: Government of Assam.

Low. James

1837 History of Tenasserim: Chapter 9: Languages. JRAS, lst Ser, 4:42-47.

Luce, G.H.

- 1965 Danau, a dying Austroasiatic language. *Lingua* 14:98-129.
- n.d. Vocabulaire Riang. MS.

Lyons, John

1977 Semantics; volumes 1 and 2, chapters 8, 11, 15. Cambridge: Cambridge University Press.

Man, Edward Horace

1889 A dictionary of the Central Nicobarese language. London. (Reprinted Delhi, India: K.M. Mittal, Sanskaran Prakashak, 1975.)

Manley, Timothy M.

1972 Outline of Sre structure. Oceanic Linguistics Special Publication No.12. Honolulu: University of Hawaii Press.

Manoch, Theerada

1976 Thai classifiers. Paper for Course; MS. Chiang Mai, Thailand. July 27.

Manomaivibool, Prapin

1976 Layers of Chinese loanwords in Thai. In T.W. Gething, J.G. Harris and P. Kullavaijaya, eds *Tai linguistics in honor of Fang-Kuei Li*, 179-184. Bangkok, Thailand.

Mason, Francis

1854 The Talaeng language. JAOS 4:277-288.

Maspéro, G.

1915 Grammaire de la langue khmère (cambodgien). Paris.

Maspéro, Henri

- 1952a L'annamite. In A. Meillet et M. Cohen, eds *Les langues du monde*, 581-587. Paris: H. Champion.
- 1952b Les langues mon-khmères. In A. Meillet et M. Cohen, eds Les langues du monde, 609-622. Paris: H. Champion.
- 1952c Les langues thai. In A. Meillet et M. Cohen, eds *Les langues du monde*, 571-577. Paris: H. Champion.
- 1952d Les langues tibéto-birmanes. In A. Meillet et M. Cohen, eds *Les langues du monde*, 529-570. Paris: H. Champion.
- 1955 Matériaux pour l'étude de la langue t'èng. *BEFEO* 47:457-507.

Matisoff, James

1973 The grammar of Lahu. University of California Publications in Linguistics, No.75. Berkeley, Los Angeles: University of California Press.

Matras, Jacqueline and Michel Ferlus

1971 Les langues austroasiatiques: où en est l'atlas ethno-linguistique? (Fascicule 1) Asie du Sud-Est et Monde Insulindien: Bulletin du Centre de Documentation et de Recherche. 2/4:53-93. Paris, France: Écôle Pratique des Hautes Études (VIe section) et Centre National de la Recherche Scientifique.

McFarland, George Bradley

1944 Thai-English dictionary. Stanford, California: Stanford University Press.

Miao Language Team (The)

1972 A brief description of the Miao language. In H.C. Purnell, ed. *Miao and Yao linguistic studies*, 1-25. Linguistic series V. Data paper, No.88. Southeast Asia Program, Department of Asian Studies, Cornell University. Ithaca, New York.

Miller, Carolyn

- 1964 The substantive phrase in Brou. MKS 1:63-80.
- 1976 Personal communication, September 13.

Miller, Carolyn and Nűan

1974 Bru language lessons. Trilingual Language Lessons, No.13, part 2. Manila Summer Institute of Linguistics.

Miller, John

1964 Word classes in Brôu. *MKS* 1:41-62.

Miller, Vera Grace

1976 An overview of Stieng grammar. M.A. thesis, University of North Dakota: Grand Forks, N. Dakota.

Milne, Mary Lewis (Mrs Leslie)

- 1921 An elementary Palaung grammar. Oxford: Clarendon Press.
- 1924 The home of an eastern clan: a study of the Palaungs of the Shan state. Oxford: Clarendon Press.

Minot, Georges

- 1940 Dictionnaire tay blanc-français. BEFEO 40/1:1-237.
- 1949 Vocabulaire français Thay Blanc, et éléments de grammaire. PEFEO 1:93-94.

Mitani, Yasuyuki

- Descriptive study of the Lawa language (Bo Luang dialect). South East Asian Studies 4:40-62. Kyoto: Kyoto University.
- 1972 A short vocabulary of Lawa. South East Asian Studies 10:131-168. Kyoto: Kyoto University.

Mole, Robert L.

1970 The Montagnards of south Vietnam: a study of nine tribes. Rutland, Vermont and Tokyo, Japan: Charles E. Tuttle.

Morizon, René

1936 Essai sur la dialecte des populations pears des Cardamones. Paris: Les Éditions Internationales.

Moussaq, Gérard et al.

1971 Dictionnaire căm-vietnamien-français. Centre Culturel Căm, Phanrang.

Neo, Paul and Marilyn Gregerson

1974 Rongao language lessons. Trilingual Language Lessons, No.19. Manila: Summer Institute of Linguistics.

Nguyễn Dình Hòa

- 1957 Classifiers in Vietnamese. Word 13/1:124-152.
- 1966 Vietnamese-English dictionary. Rutland, Vermont and Tokyo, Japan: Charles E. Tuttle.

1975 The language of Nguyen Trai: a sampling of fifteenth century Vietnamese. Paper presented at the Eighth International Conference on Sino-Tibetan Language and Linguistic Studies, Berkeley, California.

Nguyễn phú Phong

1975 Le problème des classificateurs en Vietnamien. Paper presented at the Eighth International Conference on Sino-Tibetan Languages and Linguistic Studies, Berkeley, California.

Phillips, Richard L. and Y-Kem Kpor

1974 Mnong language lessons (Preh dialect). Trilingual Language Lessons, No.11. Manila: Summer Institute of Linguistics.

Piat, Martine

1962 Quelques correspondances entre le Khmer et le Bru, langue montagnard du Centre Vietnam. *BSEI* 37:311-323.

Pinnow, Heinz-Jürgen

- 1959 Versuch einer historischen Lautlehre der Kharia-Sprache. Wiesbaden: Otto Harrassowitz.
- The position of the Munda languages within the Austroasiatic Language Family. In H.L. Shorto, ed. *Linguistic comparison in Southeast Asia and the Pacific*, 140-152. London: Luzac.

Pittman, Richard S.

Jarai as a member of the Malayo-Polynesian family of languages. *Asian Culture* 1/4:59-67.

Playfair, Alan

1909 The Garos, (Section VII, 150-154). London: D. Nutt.

Portman, Maurice Vidal

1898 Notes on the languages of the South Andaman group of tribes. Calcutta, India: Office of the Superintendant of Government Printing.

Purnell, Herbert

1970 Toward a reconstruction of Proto-Miao-Yao. Ph.D. thesis, Cornell University.

Rabel, Lili

1961 Khasi, a language of Assam. Baton Rouge: Louisiana State University Press.

Rabel-Heymann, Lili

- Analysis of loanwords in Khasi. In P.N. Jenner, L.C. Thompson, and S. Starosta, eds *Austroasiatic studies*, vol.2:971-1034. Honolulu: University of Hawaii Press.
- 1977 Gender in Khasi nouns. *MKS* 6:247-272.

Ratanakul, Suriya

1975 A study of the Thin: a Mon-Khmer linguistic community in Thailand. Paper presented at the Eighth International Conference on Sino-Tibetan Languages and Linguistic Studies, Berkeley, California.

Ra'ttana'prasit, Mêet

2508 *Phôtcànaanúkrom Thay Yuan-Thay-?aykrit* [Thai Yuan-Thai-English Dictionary] (no (1965) publisher given).

Roop, D. Haigh

1970 A grammar of the Lisu language. Ph.D. thesis, Yale University.

Sanches, Mary

1977 Language acquisition and language change: Japanese numeral classifiers. In B. Blount and M. Sanches, eds *Sociocultural dimensions of language change*, 51-64. New York: Academic Press.

Saul, Janice

1965 Classifiers in Nung. Lingua 13:278-290.

Savina, F.M.

1926 Dictionnaire français-man. BEFEO 26.

Schmidt, Pater Wilhelm

- 1905 Grundzüge einer Lautlehre der Mon-Khmer-Sprachen. Denkschriften der Kaiserlichen Akademie der Wissenschaften, Wien (Phil-hist. kl.) 51/3:1-233.
- 1907, Les peuples mon-khmers. BEFEO 7:213-263; 8:1-35. (French trans. of 1906:
- 1908 Die Mon-Khmer-Völker: ein Bindeglied zwischen Völkern zentralasiens und Austronesiens. Archiv für Anthropologie 33:59-109.)

Scott, James George and J.P. Hardiman

1900 Gazetteer of Upper Burma and the Shan states. Part 1, vol.1. Rangoon, Burma: Superintendent, Government Printing.

Sebeok, Thomas A.

1942 An examination of the Austro-asiatic Language Family. *Language* 18:206-217.

Schafer, Edward H., Jr

1948 Noun classifiers in classical Chinese. *Language* 24:408-413.

Shafer, Nhuquynh

n.d. ...chuyện sự tích trâŭ cau. Story of the origin of the betel leaf and areca. (Collected by John Grima.) MS.

Shafer, Robert

1952 Études sur L'Austroasien. BSLP 48:111-158.

Shafer, Robert, ed.

1957 Bibliography of Sino-Tibetan languages. 2 vols. Wiesbaden: Otto Harrassowitz.

1963

Shawcross, William

1979 Sideshow: Kissinger, Nixon and the destruction of Cambodia. New York: Simon and Schuster.

Shorto, H.L.

- 1957 Palaung word list. (Based on material collected from Pawashwe Kya, Namhsan.) MS. September-October.
- 1962 A dictionary of Modern Spoken Mon. London: Oxford University Press.
- The structural pattern of northern Mon-Khmer languages. In H.L. Shorto, ed. Linguistic comparison in South East Asia and the Pacific, 45-61. London: Luzac.
- 1971 A dictionary of the Mon inscriptions from the Sixth to the Sixteenth Centuries. London Oriental Series, 24. London: Oxford University Press.

Shorto, H.L., Judith M. Jacob, and E.H.S. Simmonds

1963 Bibliographies of Mon-Khmer and Tai linguistics. London: Oxford University Press.

Silverman, Martin G.

1962 Classifiers in the Gilbertese language. Anthropology Tomorrow 8:41-56.

Siu Ha Đieu

1976 Jarai language lessons. Trilingual Language Lessons, No.22. Manila: Summer Institute of Linguistics.

Skeat, Walter W. and Charles Otto Blagden

1906 Pagan races of the Malay Peninsula. 2 vols. London: Macmillan.

Smalley, W.A.

1961 Outline of Khmu? structure. American Oriental Series. Essay 2. New Haven: American Oriental Society.

Smith, Kenneth D.

- 1967a Sedang language lessons. Trilingual Language Lessons, No.2, part 2. Manila: Summer Institute of Linguistics.
- 1967b *Sedang vocabulary*. Trilingual Vocabularies, No.2, part 1. Manila: Summer Institute of Linguistics.
- 1969 Sedang affixation. *MKS* 3:108-129.
- 1972 A phonological reconstruction of Proto-North-Bahnaric. Language Data Microfiche AP3 (VP20-62). Dallas, Texas: Summer Institute of Linguistics.
- 1975a Phonology and syntax of Sedang: a Vietnam Mon-Khmer language. Ph.D. dissertation, University of Pennsylvania.
- 1975b The velar animal prefix relic in Vietnam languages. *Linguistics of the Tibeto-Burman Area* 2/1:1-18.

Sriwises, Prasert

1978 Kui (Suai)-Thai-English dictionary. (Edited by Theraphan L. Thongkum and Jerry W. Gainey.) Indigenous Languages of Thailand Research Project, Chulalongkorn University Language Institute.

Strecker, David

1979 A comparison of Thai Yuan classifiers from three sources: Collins, Ra'ttàna'prasit and Purnell. MS.

Svantesson, Jan-Olaf

1983 Personal communication on *U*, October 31.

Summer Institute of Linguistics

1974 Map of the ethnic minorities of South Vietnam. Dallas, Texas.

Tharp, James A. and Y Bham Đuôn-ya

1980 A Rhade-English dictionary, with English-Rhade finderlist. PL, C-58.

Thien Sanh Canh, Thanh Pho Quyen and Doris Blood

1976 Eastern Cham language lessons. Trilingual Language Lessons, No.17. Manila: Summer Institute of Linguistics.

Thomas, David D.

- 1964 A survey of Austro-asiatic and Mon-Khmer comparative studies. MKS 1:49-163.
- 1971 Chrau grammar. Oceanic Linguistics Special Publication 7. Honolulu: University of Hawaii Press.
- 1976a Personal communication, June 11.
- 1976b South Bahnaric and other Mon-Khmer numeral systems. Linguistics 174:5-80.

Thomas, David D. and Robert Headley

1970 More on Mon-Khmer subgroupings. *Lingua* 25:98-418.

Thomas, David and Marilyn Smith

1967 Proto-Jeh-Halang. Zeitschrift für Phonetik Sprachwissenschaft und Kommunikations 20:157-175. Berlin.

Thomas, David D. và (and) Thổ Sảng Luc

1966 *Chrau vocabulary*. Trilingual Vocabularies. No.1. Manila: Summer Institute of Linguistics.

Thomas, Dorothy M.

- 1966 Chrau zoology: an ethnolinguistic study. In David D. Thomas, ed. *Papers on four Vietnamese languages*, 1-14. *Te Reo* Reprints No.2. Wellington: Linguistic Society of New Zealand.
- 1967 A phonological reconstruction of Proto-East-Katuic. (M.A. thesis, University of North Dakota.) Work Papers vol.XX, Supplement 4, 1976, Summer Institute of Linguistics, University of North Dakota Session.
- 1969 Chrau affixes in prefixes and nouns. MKS 3:90-107.

Thompson, Laurence C.

1965 A Vietnamese grammar. Seattle: University of Washington Press.

Thung, Patrick Cohen and Dwight Gradin

1976 *Jeh language lessons*. Trilingual Language Lessons, No.15, part 2. Manila: Summer Institute of Linguistics.

Trebilco, Oliver, Joyce Trebilco, and Đinh Nghĩa

1974 Hrey language lessons. Trilingual Language Lessons, No.12, part 2. Manila: Summer Institute of Linguistics.

T'Sou, Benjamin K.

- 1976a Homophony and internal change in Chinese. Computational Analysis of Asian and African Languages 3:66-86.
- 1976b The structure of numeral classifier systems. In P.N. Jenner, L.C. Thompson, and S. Starosta, eds *Austroasiatic studies*, vol.2, 1215-1247. Honolulu: University of Hawaii Press.

Voegelin, C.F. and F.M. Voegelin

- 1966a (Data from Phillip Jenner) Languages of the World: Indo-Pacific fascicle seven: Section 7.2: Khmer. Anthropological Linguistics 8/3:21-25.
- 1966b (Data from Henry F. Blood) Languages of the World: Indo-Pacific fascicle seven: Section 7.1: Mnong (Lam). Anthropological Linguistics 8/3:6-20.

Wajanarat, Sujaritlak

1978 Classifiers in Mal (Thin). Paper presented at Mahidol University Annual Conference on 'The studies and researches on languages in Thailand', February 23-24, Bangkok, Thailand. Also in MKS 8:295-303.

Wallace, Judith M.

1969 Katu phonemes. *MKS* 3:64-73.

Ware, Norma

1973 Numeral classifiers in Minang-Kabau. Department of Linguistics, University of Michigan, June 22. MS.

Watkins, Laurel J.

1976 Shape vs. position: classificatory verbs in North America. Paper presented at the 1976 LSA Annual meeting, Philadelphia, Pennsylvania.

Watson, Richard

1966 Clause to sentence gradations in Pacoh. *Lingua* 16:166-189.

Watson, Richard and Saundra K. Watson

- 1976a Pacoh ethnographic texts. Microfiche, VD43-72. Dallas, Texas: Summer Institute of Linguistics.
- 1976b Personal communications, April 17 and December 17.

Watson, Richard, Saundra K. Watson and Cubuat

1979 Pacoh dictionary: Pacoh-Vietnamese-English. Trilingual Language Lessons, No.25, part 1. Manila: Summer Institute of Linguistics.

Watson, Saundra K.

- 1964 Personal pronouns in Pacoh. MKS 1:81-98.
- 1976 The Pacoh noun phrase. *MKS* 5:220-231.

Weidert, Alfons

- 1975 I Tkong Amwi: Deskriptive Analyse eines Wardialekts des Khasi. Wiesbaden: Otto Harrassowitz.
- 1977 Tai-Khamti phonology and vocabulary. Wiesbaden: Franz Steiner.

Windstedt, Sir Richard Olof

1965 An unabridged Malay-English dictionary. 6th edition. Kuala Lumpur: Marican.

Witherspoon, Gary

1977 Language and art in the Navajo universe. Ann Arbor, Michigan: University of Michigan Press.

Y-Chang Nie Sieng

1974 Rade language lessons. Trilingual Language Lessons, No.7, part 2. Manila: Summer Institute of Linguistics.

Y-Lach and Alice Mundhenk

1976 Haroi language lessons. Trilingual Language Lessons, No.8. Manila: Summer Institute of Linguistics.

Young, M.V.

- 1934 Lai Yohan, Gospel of John in Wa. Rangoon: American Baptist Mission Press.
- 1935 Lai Mahteh, Gospel of Matthew in Wa. Rangoon: American Baptist Mission Press.