THE NOUN PHRASE IN JEH

Patrick Cohen

0. Introduction[1] From a broad notional point of view the noun
phrase (NP) in Jeh[2] may be diagrammed as a constellation of ele-
ments as follows:

Quantification   Qualification

                    Referential Core

Possession   Orientation
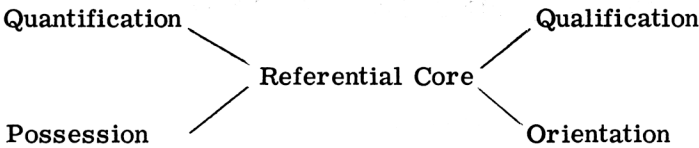
That is, semantically, the NP constitutes the expression of a refer-
ence of some type, the core of which is encoded as the noun head (NH)
or its substitute. The full-orbed characterization of such a reference
is achieved through its conventional association with four major cat-
egories of adjuncts as shown above.

    Quantification (QN) involves general quantification (GQN)
and numeral quantification (NQN). GQN may be cooccurrent with
NQN (and in that order). Furthermore, quantified references auto-
matically require the insertion of a syntactic constituent, classifier
(CL), which specifies, for example, the type of measure being applied
to the noun or the semantic/morphemic class to which the noun belongs.

    Possession (POS) associates the main references with another
referent and conveys the notion of ownership if the latter referent is
human or part-whole relation if that referent is non-human.

    Qualification (QL) amplifies a reference by associating with it
certain events or qualities other than those of the main assertion.
These backgrounded propostions are either one-termed ('adjectival')
or multi-termed ('relative clausal') and the two types may cooccur.

    Orientation (OR) or deixis locates the referent in relation to
the major participants in the speech act, i.e. the speaker and
addressee.

    The linearization (surface structuring) of the semantic mat-
erial described so far may be described in terms of the following
string:

    QN   Ref. Core POSS   QL   OR

(GQN+NQN+CL) + NH + (dã+noun) + (1-termed+multi-termed) + deictic
                       +pn

Various constraints on reorderings will be specified in the appropriate
sections below.

1.   The referential core of a noun phrase consists of a simple
noun and compound noun.

1.1 Simple Nouns. "The central constituent in the noun phrase is the noun itself, which establishes the core semantic material which may be optionally elaborated or specified by the peripheral constituents which cooccur with it" (Gregerson 1971: page 183). There are three types of single nouns in Jeh: count nouns, mass nouns, and proper nouns.

1.11 Count Nouns. There are two types of count nouns, classifiable and non-classifiable.

a. The classifiable count nouns are those nouns which take specific classifiers such as:

> mɔ̆nĕng 'cross bow' classified by sɨ̌
> mắk   'bushhook'   classified by tong
> prok   'squirrel'   classified by pom
> mɔ̆ngai 'people'   classified by 'nau
> tap   'egg'   classified by klong

(For a more complete list of nouns and their classifiers see 2.42 below.)

b. There are certain non-classifiable nouns which can be quantified without any further classification.

> mắng 'night'
> ngay 'day'
> rŭh   'time/turn'
> khei 'month'
> hnắm 'year'
> lian 'money, piastre'

> Example: ĕn chĭu bal ngay   'he went two days'
>   he go   2   day

Note that except for lian 'money, piastre' all the forms are time units. The fact that no separate measure classifiers occur with these is perhaps explained by the fact that they are themselves intrinsically measures (See 2.43).

1.12 Mass Nouns. Mass nouns take measure classifiers when numerated. In this way more or less conventionalized modes of division or apportionment are applied to material which are perceived as possessing no natural unitary shape or boundary.

> dak   'water'
> mau   'rice in the field'
> phei 'husked rice'
> pol   'cooked rice'
> nnah 'wine'
> mah   'gold'

The following mass nouns take only general modification:

kd̄yal   'wind'
prial   'hail'
mrĭah   'rain'

Example: kd̄drãm dak 'much water'
         ku   klŏk dak
         one CL/glass water
         ku 'wiă kd̄yal
         one/a little wind

1.13 **Proper Nouns.**   We will consider 3 kinds of proper nouns:

a. Place names:

     Trãp, Gou, Pĕng-Săl-Pèng, Tŭk, Jăk, Bòm, all names of
villages.   These take obligatory preceding generic nouns like dak
'village (lit. 'water') or plày 'village'
     Example: md̄ngai dak Trãp chĭu reng juai
              people village Trap go hunt deer
              'the Trãp villagers went deer hunting'

b. Ethnic names:

     Jeh, Idang, 'Sedang', Hnal 'Bahnar', Yuan, 'Vietnamese'
Pd̄hlang 'French' also take obligatory preceding generic nouns such as
md̄ngai 'people' when refering to them as people or mèng 'region'
when designating their living area.
     Example: gù md̄ngai Idang 'way pa Dak To
              PL people Sedang live at Dak To
              'The Sedang live at Dak To'

c. Personal names:

     Jeh personal names have the interesting feature of being marked
for gender. The prefix Y- marks female names as in Y-Tŏk, Y-Thuan,
Y-Yu, Y-Dri, while A- marks male names such as A-Rŏk, A-Bòu,
A-Yuan. While it is not especially common, neither is it inappropriate
to call men and women by the same basic names with the appropriate
prefix to distinguish their sex.

     "Proper names being characteristically definite and unique in
reference are not usually quantified or classified. However in the case
of an emphatic singular reference noun phrases such as the following
occur" (Gregerson 1971 page 184):

     A-Bòu ku 'nau   èih
     Bou   one CL   himself
     'Bou by himself, or all by himself'

1.2 **Noun Compounds.**   In addition to simple or single nouns, there
occur in Jeh close-knit sequences of nouns which may be described as
subordinate and coordinate compounds.

Subordinate compounds may be described by the formula:
NH=principal noun + attributive noun. Consider the following examples:

plày Bòm	'Bòm village'
dak Gou	'Gou village'
chal nhlat	'yard'
yard house	
play prìat	'banana fruit'
fruit banana	
'long prìat	'banana tree'
tree banana	

In coordinate compounds neither of the nouns can be said to be attributive to the other. The nouns refer literally to specifics but the compound as a whole makes a more general reference e. g.:

pling tơ'neh	'universe'
sky earth	
brì dak	'region'
forest water	
hmăn ao	'clothes'
pants shirt	
măt mùh	'face'
eye nose	
oh meĕ	'relative'
younger, older sibling	
uŭ baă	'parents'
mother father	
boõ yă	'grandparents'
grandfather grandmother	
tri kon	'nuclear family'
wife child	

2. Quantification. A major process in delimiting nouns involves the use of general quantifiers (GQN), numeral quantifiers (NQN), and classifiers (CL).

2.1 General Quantifiers. The general quantifiers are:

tă sľ	'a little'
tŭm	'all/complete'
nľ/nľ nayh	'all'
kơdrăm	'many, much'
'wľ'wiă	'a few'

The position of the general quantifier in the noun phrase is syntactically before the numeral quantifier (NQN) as in:

| au | wă | rùat | nľ | pei | pom | chou | 'I want to buy all three |
| I want | buy | all | 3 | CL | dog | | dogs' |

Even in the case where NQN and CL are optionally permuted to the right of noun head, GQN's maintain a phrase initial position:

au wă rŭat nĭ chou pei pom   'I want to buy all three dogs'
I want buy all dog 3 CL

Some quantative terms are conventionally applied to certain
nouns. For example: lap 'many' may occur with mŏngai 'people',
chõl 'pig', kŏnei 'rat' where 100 would be thought of as a lot. On the
other hand dŭk 'few', the counterpart of lap above, is especially
used with mŏngai, chõl, kŏnei to denote scarceness.

In describing mass measure other quantifiers such as bĭng
'full', tĭng dra 'half full', ggah/ndrah 'half', sŭk kŏdol 'less than
half' are used.

bĭng ikă mau   'full basket measure of rice'
tĭng dra ikă mau   'half basket measure of rice'
ggah klŏk dak   'half glass of water'
sŭk kŏdol klŏk dak   'less than half glass of water'

2.2 Numeral Quantification.

2.21 Cardinal Numbers.   In Jeh the cardinal numbers are:

muih	'one'		tŏdrau	'six'
bal	'two'		tŏpĕh	'seven'
pei	'three'		tŏham	'eight'
puan	'four'		tŏchĭn	'nine'
pŏdăm	'five'		jăt	'tens'

reng	'hundreds'		rŏbau	'thousands'
mŭn	'ten thousands'			

The form ku occurs with the meaning 'one' directly preceding classi-
fiers and preceding the unit terms ten, hundred, thousand, ten thou-
sand in compound numbers. The historically more basic muih 'one'
is used in counting, ordinal constructions, and following unit terms
like ten, hundred, etc in compound numbers. For example,

ku 'nau pĭ tĭh   'one person rules'
one CL do big

ku reng   'one hundred'

ngay muih   'first day'
day   one

ku jăt muih   'eleven'
one ten one

Compound numbers are interpreted from right to left as
digits, tens, hundreds, thousands, and ten thousands.

		pŏdăm	'five'
	pŏdăm jăt	pŏdăm	'55'
pŏdăm reng	pŏdăm jăt	pŏdăm	'555'

pŏdăm rŏbau pŏdăm reng pei jằt tŏham   '5,538'
pŏdăm mŭn bal rŏbau   ku reng tŏpeh jằt muih   '52,171'

Numbers may be further modified by approximative modifiers
llau 'more than', hyàu 'about', dei wa jah 'not as many as', and the
emphatic modifier sĭ 'only/just'

au tau   llau   bal jằt   ʼnau mŏngai 'I see more than 20 people'

hyàu	about
dei wa jah	less than
sĭ	

2.22 Ordinal Numbers.   The use of ordinals is not common in Jeh.
In 150 occurrences of bal 'two' in folklore material (Cohen 1966) not
once did the ordinal use occur.   However, it can be formed for ex-
ample, with ngay 'day' in formal dating:

ngay muih khei pei	'1st day of 3rd month'
ngay ku jằt muih	'l0th day of 7th month'
ngay bal jằt muih	'2lst day'

There exists, however, a cultural system[3] of reckoning days
following one's return to the village after a period of absence.   These
expressions have an ordinal effect though they do not employ numerals
exclusively.

ngay sèm-sèm	'1st day' (beginning day)
ngay hlăng	'2nd day' (next day; taboo to work in the field).
ngay bla	'3rd day' (middle day)
ngay tŏpuan	'4th day' (taboo to work in the field).
ngay jằt	'l0th day' (taboo to work in the field).

It should be noted that the ordinal form for 'four' is tŏpuan[4] whereas
the cardinal form is puan.   Also jằt 'ten' occurs without a preceding
ku 'one' only in this ordinal expression.

Kon 'child' occurs in still another type of ordinal expression.
In enumerating children's place in the family one gets:

kon sèm-sèm	'1st child'
kon bal-bal	'2nd child'
kon pei-pei	'3rd child'
kon sŭt-sŭt	'last child'
kon bla nay	'middle child' (of three).

Rŭh 'time/occurrence' presents still another variety of or-
dinal reckoning such as:

rùh rol-rol	'1st time/time before'

rùh bal   '2nd time'
rùh pei   '3rd time'
rùh jùai   'time following'

2.3 <u>Classifiers</u>. In common with other Southeast Asian languages,
Jeh has an abundance of forms that characteristically occur with num-
erated nouns, for example:

ĕn tau bal pom ial   'he sees two chickens'
he see two CL chicken

That is, the occurrence of <u>bal</u> 'two' with <u>ial</u> 'chicken' requires an
automatic insertion of a classifier (CL), which for an animal is neces-
sarily <u>pom</u>. As for constituent ordering, numeral and CL may be
optionally permuted to follow rather than precede the noun head:

ĕn tau ial bal pom   'he sees two chickens'
he see chicken 2 CL

When a reference has been established in a discourse or situation the
noun head may be deleted leaving behind only its CL:

ĕn tau bal pom   'he sees two animals (=chickens)'
he see two CL

We may distinguish three types of classifiers as:

GENERAL CLASSIFIERS; SPECIFIC CLASSIFIERS; and
MEASURE CLASSIFIERS.

2.41 <u>General Classifier</u>. There is one general classifier <u>sĭ</u> which is
special in that the items it classifies have no unity or shape similar-
ity other than that they are all inanimate objects. <u>SĬ</u> occurs with
nouns such as:

mơnĕng	'crossbow'	dĭng	'bamboo container'
koih	'chair'	hĭp	'suitcase'
ao	'shirt'	jŏ	'arrow quiver'
jŏ	'watch/clock'	chùang	'axe'

2.42 Specific classifiers in contrast to the general classifier <u>sĭ</u> are
typically associated with a set of nouns which reflect some common
feature of shape or intrinsic nature.

'nau: 'person' occurs with <u>mơngai</u> 'people', <u>yang</u> 'spirit',
        <u>kơnăm</u> 'ghost', <u>kon</u> 'child', <u>dri-dri</u> 'female',
        <u>lou-lou</u> 'male'.
pom: 'animal' occurs with <u>rŏk</u> 'cattle', <u>ial</u> 'chicken',
        <u>ka</u> 'fish', <u>kơplu</u> 'water-buffalo', <u>bubei</u> 'goat',
        <u>se</u> 'vehicle'.
tong: 'instrument' occurs with se <u>may</u> 'bicycle', <u>phao</u> 'rifle',
        <u>chăng</u> 'knife', <u>măk</u> 'bushhook', maỹ 'radio',
klong/<u>hlong</u>: 'round things' occurs with <u>gèt</u> 'gourd', anờm

'back basket', jep 'shoulder bag', tap 'egg', tómou
'stone', pung 'cucumber', play 'fruit', priat 'banana',
sèm 'wine jar'.

sigu/tru: 'string' occurs with sei 'thread' (made from tree
bark), kósei 'string, rope, wire', la 'leaf'.

nhăl: 'long lengths of wood' occurs with 'long 'wood, tree'.

ăl: 'short pieces of wood' occurs with 'long 'wood, tree'.

ddah/kódah: 'sheets' occurs with lăm-al 'paper, book', tŏl
'metal roofing', gong 'gong'.

blah: 'flat flexible things' occurs with mok 'blanket', drong
'sleeping mats'.

pŏm: 'cob' occurs with blì 'corn'.

buam: 'tuber' occurs with lou 'sweet potato', găn 'taro
root'.

hla: classifies jìak 'field'.

chau: 'bunch' occurs with mèih 'vegetables', 'ya 'tobacco'.

hnu: classifies tù 'pile'.

nah: 'side' occurs with paired body parts such as tì 'hand',
jòng 'foot', păt 'ear', peng 'shoulder', tai 'buttocks',
măt 'eye'. Not suprisingly numeration is limited in this
case to the number 'two'.

2.43 **Measure Classifier.** T'sou (1973:25) states that "units of mea-
sure such as those of weight and volume are not used with classifiers
because they themselves are "classifiers..." Mass nouns do not take
specific classifiers. Rather these nouns take measure classifiers.
Mass nouns are such as dak 'water', mau 'field rice', nnah 'wine'.
(For a more complete list of mass nouns see 1.12 above.) These mass
nouns can be quantified by general quantifiers such as kódrăm 'much',
'wì'wìa 'few', tă sì 'a little' in which case a measure classifier is
optional. Nearly all of these mass nouns can, however, be further mea-
sured (kóyal 'wind', prial 'hail', mrìah 'rain' excepted) by numerals
plus measure forms such as klŏk 'glass' or ikă 'basket(ful)'.

kódrăm dak	'a lot of water'
pei klŏk dak	'three glasses of water'
tă sì mau	'a little rice'
bal ikă mau	'two baskets(ful) of rice'

Jeh basket measures provide an illustration of the extent of
standardization based on culturally familiar artifacts:

ikă	'approximately	2	bushel size basket'		
ikă tĕl	"	1	"	"	"
ntroh	"	1	"	"	"
jŏng	"	3	"	"	"
rĕo	"	1 1/2	"	"	"
sang	"	3/4	"	"	"
ideng	'2 meter wide flat drying basket'				
idong	' 1 meter wide flat drying basket'				

bĕh   '3 quart dry measure size basket' (used in harvesting
         rice).
chŭng bŭng '4 quart dry measure size basket' (used for plant-
         ing rice).
trop 'large 10 bushel rice storage basket'
'mang/hmang 'cooked rice measure' (a meal's worth)

Other types of containers which function as measures but which
have no exact size are:

khang 'one drink's worth from the wine jar'
klŏk 'glass'
dŭi   'bowl'

Some borrowed terms for exact measure are:

kĭ 'kilogram' (VN kí, French kilogramme)
kɗsăk '100 kilogram sack' (French sac)
thuk 'meter' (VN thúoc)
kɗsŭ 'kilometer' (VN cây số)

Time measure terms take no further classification when quan-
tified. As pointed out by T'sou 1973, they are themselves inherently
classifiers, or put another way, they represent a conflation of noun
and measure in one form.

măng 'night'   rŭh 'time/occurrence'
ngay 'day'   khei 'month'
jɔ   'hour'   hnăm 'year'

3. Possession. The association of the noun head (NH) of the NP with
another noun or pronoun expresses the familiar notion of possession
(POSS). The construction may be summarized as:

                NH (dă) noun/pronoun

The possessive marker dă may be deleted if the NH is realized in sur-
face structure, but must be present if the NH itself is absent and only
the classifier is expressed. (cf. c and d).
Examples are:

    a) kon eih 'his child'
        child he
    b) mɗnĕng dă au   'my own crossbow'
        bow   POS I
    c) bal pom ka boõ Rɗgap   'Grandpa Rɗgap's two fish'
        2   CL fish grandpa R
    d) bal pom dă boõ Rɗgap 'Grandpa Rɗgap's two (fish)'
        2 CL POS grandpa R
    e) jong chau ĕn   'her grandchild's leg'
        leg grandchild her

Notice that the last example above (e) reflects the possibility of suc-

cessively embedding possessive nouns or pronouns.

POSS may occur directly following NH, but it may also be separated from NH by qualification constituents:

<p style="text-align:center">NH   (QL)   POSS   (QL)</p>

See section 4.1 below for effects of QL depending on whether it is positioned preceding or following POSS.

4. Qualification.   Qualification (QL) refers to the encoding of back-grounded or non-focal predications as material subordinated to the noun head.   Unlike the other major noun phrase constituents, QL introduces verb-centered modification of the noun and may be described in terms of one-termed and multi-termed subordinate structures.

4.1 One-termed Qualification.   Jeh noun phrases may be qualified by "adjective-like" modifiers.   These are considered cases of subordination of one-termed proposition containing a term which is coreferential with the head noun of the main phrase to which it is attached. Thus for example:

a) au tau bal pom kɗpìu tòbok
   I see two CL buffalo white
   'I see two white water-buffaloes'

b) chõl tìh bloh jĭ
   pig big complete sick
   'the big pig is already sick'

c) bal pom chõl dă A-Bòu tìh-tìh i bloh jĭ
   two CL pig POS Bou big those complete sick
   'those two big pigs of Bou's are sick'

d) bal pom chõl tìh dă A-Bòu bloh jĭ
   two CL pig big POS Bou complete sick
   'the two big pigs of Bou's are sick'

Sentence a) reflects the fact that the qualifiers follow rather than precede the main head.

Sentence b) expresses a main assertion chõl bloh jĭ 'pig is sick' and a backgrounded proposition chõl tìh 'the pig is large'. We may diagram the relationship as:

<p>chõl   bloh jĭ
pig   complete sick
  (chõl) tìh
  pig big</p>

where chõl of the upper (matrix) clause is coreferential with chõl of the lower (imbedded) clause.   Following the universal tendency to reduce overt repetitions of identical reference, only one occurrence of chõl appears in surface structure and sentence b) results.   There is no relative pronoun like 'which', or 'that' to signal the subordinate

structure. Notice that in sentence c) a reduplicated one-termed qualifier tìh-tìh 'big' occurs following POSS, while a non-reduplicated tìh occurs preceding POSS as in sentence d).

4.2 Multi-termed Qualification. Propositions with more than one term may also be subordinated to the noun in a main assertion. That is, Jeh has relative clauses in the traditional sense. Parallel to one-termed qualification they are simply juxtaposed following the noun head with no relative pronoun to signal the relationship. Consider the following example:

> chõl   au   pĕng   bloh   kɗchìat   'the pig (which) I shot died'
> pig   I   shot   complete   die

Here the verb pĕng 'shoot' functions as a two-termed predicate; that is, it requires two referential constituents (nouns). Thus the subordinate clause has the logical structure:

> au   pĕng   chõl
> I   shoot   pig

This in turn is imbedded into the matrix clause chõl   bloh   kɗchìat.
                                                                      pig complete   die
Again the relationship may be diagrammed as:

> chõl   bloh   kɗchìat
> pig   complete   die
>   au   pĕng   (chõl)
>   I   shoot   (pig)

Although both the main verb kɗchìat 'die' and the subordinate verb pĕng 'shoot' logically requires chõl 'pig' as a term in their role structure, they do not both receive a separate syntactic realization of that shared reference. Suppression of the identical chõl in the subordinate clause yields the grammatical surface forms of the original sentence. Thus, one-termed and multi-termed qualification are a much more uniform process than say in English.

5. Orientation. Orientational material characteristically marks the outermost limits of the surface structure NP margin. Semantically, NP orientation functions to locate the noun's referent in relation to the participants in the speech act (speaker and addressee) or some other (usually) spatial reference point.

5.1 Deictic Orientation. Deictic or demonstrative forms serve specifically to make clear to the addressee in the speech act where a speaker's intended referent is in relation to the two of them. In Jeh the following morphemes fulfill this function:

> mou   'this/here'   (near the speaker)
> kì   'that/there'   (away from the speaker)
> i   'that/there'   (farther than kì)
> hau   'that/there'   (farther than i)

tìah   'down there'
lŏng   'up there'

The following NP's illustrate some of them:

chal nhìah au mou   'this yard of mine'
yard house I here
pei pom se hau   'those three vehicles'
3   CL vehicle there
chŏl tìh kì bloh jĩ   'that big pig was sick'
pig big that complete sick
chŏl au pĕng i bloh kɗchìat   'that pig I shot died'
pig I shoot that complete die

5.2 Locative Orientation. In addition to speech act connected orien-
tation, other location nouns may be linked to the NH by relaters such
as pa 'at', mìh 'where, at', for example:

nhìah tìh dă au pa Dak Pek liam   'my big house at Dak Pek
house big POS I at Dak Pek pretty   is nice'

FOOTNOTES

1. I wish to acknowledge the collaboration of Mret and Thong who
    have taught me so much about the Jeh language. I also want to
    thank Kenneth Gregerson for suggestions on theory and data
    throughout this study.
2. The Jeh are a Mon-Khmer tribe of the North Bahnaric sub-group
    numbering about 10,000 speakers. They live on the border be-
    tween Vietnam and Laos in northern Kontum province.
    Research on the Jeh language was carried out under the
    auspices of The Summer Institute of Linguistics from 1963 to 1973.
3. In Jeh lot casting (jùh mau 'count rice') is done as follows: the
    person being chosen selects one of three "numbers" i.e. lei
    'one', hoh 'two', sidăl 'three'. Then another person picks up
    a handful of rice grains (twenty or so) and disposes of them three
    at a time until there remains one, two, or three grains. If the
    number of grains remaining coincide with the number selected
    then the person is chosen by lot. This highly restricted set of
    forms is difficult to relate to the cardinal-ordinal distinction.
    It rather simply designates a chance outcome such as "heads"
    or "tails" does in English, only there is a three-way possibility.
4. There are other numeral based forms with a tɗ- prefix which
    appear as conventional size measures such as:

    tɗ'noi 'one finger's width' (cf. kɗ'noi 'finger')

tŏmal   'two fingers' width'   (cf. bal 'two')
tŏpei   'three fingers' width'
tŏpuan 'four fingers' width'

For example:

chõl ku pom yàu tŏpuan   'pig about 4 fingers' width size'
pig one CL about 4 fingers' width

Other size measure conventions used among the Jeh are:

ku hnăm   'five fingers' width' (one hand)(cf. pŏdăm 'five')
tŏping tĩ   'two hands' width'
ipol   'fist with extended thumb'
ibu/pru   'thumb tip to index finger tip'
ida/ku dda   'thumb tip to middle finger tip'
kăt   'inner elbow bone to tip of middle finger'
plăyh blĭ   'elbow to tip of ring finger'
plăyh tĩt chou   'elbow to knuckle of little finger'
plăyh kŏng   'elbow to wrist joint'
sra   'arm pit to finger tip'
lang dda   'half armspan' (mid-chest to finger tips)
plaih   'full armspan'

REFERENCES

Cohen, Patrick. 1966. Jeh Computer Concordance. Produced under
    the auspices of the Summer Institute of Linguistics through the
    University of Oklahoma under National Science foundation grant
    No. RS 00307.
Gregerson, Kenneth. 1971. Predicate and Argument in Rengao Gram-
    mar. Unpublished Ph.D. dissertation, University of Washington.
T'sou, Benjamin. 1973. The Structure of Nominal Classifier Systems.
    Paper presented at the First International Conference on Austro-
    asiatic Linguistics Honolulu.