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THE GENEALOGY AND THE ROLE OF THE CLASSIFIER IN SINO-TIBETAN\*

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1. Introduction

Discussions on the grammatical nature — the semantic-syntactic function — of the classifiers of natural languages have become much sophisticated since the beginning of this decade, particularly since Joseph H. Greenberg and his group started examining various linguistic aspects of the classifier as part of the problems of language universals.<sup>1</sup> In the light of their extensive examination, various arbitrary attempts at establishing semantic-syntactic features for characterizing classifiers in contrast with non-unit counters and measure words now look quite outdated, to say nothing of the 19th century view of regarding the classifier as something special and peculiar to Sino-Tibetan.<sup>2</sup> In the light of the recent typo-geographical survey of East and Southeast Asian languages,<sup>3</sup> some naive views on the "origin" and the "development" of the classifier in these languages now look quite erroneous.<sup>4</sup> Despite this sophistication in the study of the classifier, however, the grammatical nature of the classifier in Sino-Tibetan has yet to be clarified. According to Greenberg 1972, "true classifiers" must have the following five characteristics:<sup>5</sup>

- 1) They are overt expressions of unit counting.
- 2) They are used with reference to structured units which are normally counted as individuals.
- 3) They impose a semantic classification upon the head noun.
- 4) They function as individualizers of a head which is indeterminate for number.
- 5) They have no reality outside of the numeral expression.

The present paper endeavors to reexamine those characterizations, to answer the question why we have to deal with the classifier in particular to start off with, and to present the present author's view on what is characteristic of the classifier in East and Southeast Asian languages — Sino-Tibetan (including Tai) in particular.

2. Counters and classifiers

In most literature on classifiers, it is customary to discuss classifiers in connection with, or in contrast to, various non-unit counters and measure words, regardless of the type of languages in question. This may be

due to the fact that the classifier construction in most languages normally contain numerals and the classifiers themselves work like measure words. In the present author's understanding, however, this practice has obscured the true grammatical nature of classifiers in Sino-Tibetan. Insofar as human beings are not free from counting or measuring objects in their daily life perhaps since the very beginning of their appearance in this world, it is not surprising that natural languages have some linguistic means of expressing counting — non-unit counters (those which name sets that are indeterminate in number like English a bunch of bananas), quasi-unit counters (those which name countable units lacking wholeness and internal structure like English a piece of chalk, of those which name units functioning as "particles" like English a grain of sand), or measure words (like English a cup of water), though Greenberg notes that some languages like Hopi lack measure construction.

However, classifiers in Sino-Tibetan did not draw the attention of the linguists because of this counting/measuring function. If it were because of their counting/measuring function, linguists would not have regarded classifiers as something peculiar to Sino-Tibetan.<sup>6</sup> Classifiers in East and Southeast Asian Languages drew linguists' attention because of their extensive co-occurrence with nouns (and verbs), unless a given noun happens to be generic or collective. In this respect, the presence of classifiers is as conspicuous in the construction: NOUN + DEMONSTRATIVE + CLASSIFIER as in NOUN + NUMERAL + CLASSIFIER. The above refutes Greenberg's characteristic 1 of classifiers. Of course, one can interpret the following Thai phrase:

(1) hnǎngsû'      lem      ni<sup>2</sup>      'this book'  
                   book      classifier this

as consisting of:

(2) hnǎngsû'    hnǎng      lem      ni<sup>2</sup>      'this (one) book'  
                   book      one      classifier this

implying that the basic function of classifiers consists in unit counting. However, since the expression for 'large book' parallels that for 'this book', as given below:

(3) hnǎngsû'      lem      hñǎi      'large book'  
                   book      classifier large

and since in the expression for 'this(=these) ten large book(s)':

(4) hnǎngsû'      lem      hñǎi    sǐp      lem      ni<sup>2</sup>  
                   book      classifier large ten classifier this

no numeral 'ten' is implied before the first classifier lem, the internal structure of Thai does not necessarily require the underlying numeral hnũng 'one' for the expression (1). To assume the numeral hnũng 'one' in the underlying form of (1) is something like deriving English:

(5) this book

from the underlying form:

(6) {this one book}.

Incidentally, to regard the classifiers occurring together with adjectivals as "adjectival markers" again obscures the grammatical nature of classifiers. There is no a priori justification for regarding the Newari morpheme mhə in:

(7) mənuu chə mhə 'one person'  
person one classifier

as the animate classifier, and the one occurring in:

(8) wəə mhə mənuu 'the person who came'  
came classifier person

as an adjectival marker.<sup>7</sup> To interpret one as a classifier and the other an adjectival marker is merely labeling the context in which the morpheme in question occurs. On the contrary, the use of the same form for both a classifier and an "adjectival marker" is a widespread phenomenon among Southeast Asian languages, including southern Chinese dialects:

Hakka (the Shi-yen dialect)

(9) it<sup>5</sup> ke<sup>4</sup> lai<sup>4</sup>-ie<sup>3</sup> : t'ai<sup>4</sup> ke<sup>4</sup> lai<sup>4</sup>-ie<sup>3</sup>  
one classifier boy : large classifier boy

Cantonese

(10) iat<sup>7</sup> ko<sup>5</sup> sai<sup>5</sup>-lou<sup>3</sup>-ko<sup>1</sup> : ta:i<sup>6</sup> ko<sup>5</sup> sai<sup>5</sup>-lou<sup>3</sup>-ko<sup>1</sup>  
one classifier child : large classifier child

### 3. Structured units and classifiers

Another characteristic often ascribed to classifiers is that they are used with reference to a structured unit and/or an exact quantity, and involve whole physical entities. This is also highly biased by the practice of contrasting classifiers with measure words. The argument goes as follows: if you divided a herd of fifty sheep (Chinese: i<sup>4</sup> ch'un<sup>2</sup> yang<sup>2</sup> = one + herd + sheep) into two, each consisting of twenty-five sheep, then each is still a herd of sheep (Chinese: i<sup>4</sup> ch'un<sup>2</sup> yang<sup>2</sup>); but if you cut a dog (Chinese: i<sup>4</sup> t'iao<sup>2</sup> kou<sup>3</sup> = one + classifier + dog) into two pieces, then the dog is not two dogs (liang<sup>3</sup> t'iao<sup>2</sup> kou<sup>3</sup> = two + classifier + dog). However, one can

argue like this only when he uses classifiers primarily as counters. On the other hand, one can call a dog:

(11) na<sup>4</sup> t'iao<sup>2</sup> kou<sup>3</sup> 'that dog'  
that classifier dog

even though it has lost half of its body by car accident. If one still concerned with the measure, he can call it:

(12) pan<sup>4</sup> t'iao<sup>2</sup> kou<sup>3</sup> 'half a dog'  
half classifier dog

From this, one can clearly see that the fundamental function of classifiers does not consist in counting — they happen to occur in measure expressions, only because they accompany any non-generic or non-collective noun. For two houses in English, you have to say in Bê:

(13) von- mo? lan  
two classifier house

If you ascribe a counting function to the Bê mo? here, you ought to say that English has either a zero measure morpheme between two and houses, or the word houses itself is a counting word.

One might point out a phonetic tie between von- 'two' and mo? 'classifier', closer than that between mo? 'classifier' and lan 'house', in order to justify the counter function of mo?. But this is something like associating English off with it, rather than with turn, in the English phrase:

(14) turn it off

because of the relative position of these three words.

We do not recognize any attributive function in Hakka ke<sup>4</sup> of (9) t'ai<sup>4</sup> ke<sup>4</sup> lai<sup>4</sup>-ie<sup>3</sup> 'big boy'; we can equally say that ke<sup>4</sup> in it<sup>5</sup> ke<sup>4</sup> lai<sup>4</sup>-ie<sup>3</sup> 'a boy' does not have the function of a counter, either. So, when Hale 1973 says that if one cuts a thələ of the Newari phrase:

(15) thələ chə gəə  
container one classifier

into half, one does not have two containers but rather one (a broken one),<sup>8</sup> the author is talking about the function of thələ as a counter — naturally if you cut off half, there remains half a container, not one.

#### 4. Noun classification and classifiers

It has been well argued that classifiers do not "classify" head nouns — particularly by linguists who worked on Tibeto-Burman languages, since most of these languages have what Robbins Burling calls "echo classifiers."

Besides Burmese, various different types of Asian languages seem to have this kind of classifiers:

(16) Dravidian (Malto)

ti:ni kari kari  
three classifier hole

ti:ni kuji kuji  
three classifier shadow

(17) Japanese (Tokyo)

shiai hito shiai  
match one classifier

ame hito ame  
rain one classifier

(18) Newari (Kathmandu)

paa chə paa  
turn one classifier

pa chə pa  
feather one classifier

(19) Nakhi (Likiang)

k'uɿ quɿ k'uɿ  
thread one classifier

ndzæɿ quɿ ndzæɿ  
bridge one classifier

It also has been well established that the "primitive classifiers" of Chinese were of this type.<sup>9</sup> In the oracle bone inscriptions of the Yin (Shang) dynasty (the 16th century - ca. 1066 B.C.), one finds numerous instances of the type:

(20) ch'iang<sup>1</sup> pai<sup>3</sup> ch'iang<sup>1</sup> jen<sup>2</sup> shih<sup>2</sup>-yu<sup>3</sup>-liu<sup>4</sup> jen<sup>2</sup>  
Kiang hundred classifier man sixteen classifier

It is only since the Han dynasty (206 B.C. - 220 A.D.) in the history of the Chinese language that we find the type of classifiers we have in modern Chinese.<sup>10</sup>

The fact that different classifiers can coöccur with the same head noun could be interpreted that it is because there are more than one way of classifying the same noun. However, it could also be interpreted that it is due to the fact that the classifiers are not "classifying" nouns at all — they are merely indicating certain semantic-syntactic features of the nouns. So, when one says in Newari:

(21) mikha chə gəə  
eye one classifier

(22) mikha chə pa  
eye one classifier

he is either treating with eyes as round objects (gəə) as part of the human body, or describing them as a paired object in the face (pa).<sup>11</sup> The contexts in which these two expressions occur are very different, or rather, the contexts one can infer from the use of such noun phrases are very different. The

semantic role of these classifiers is then not to "classify" head nouns but to specify those semantic features of the head nouns which are relevant to a given context.

### 5. Noun individualization and classifiers

Classifiers are individualizers in the sense that they specify certain semantic-syntactic features of the head nouns. A noun with such a classifier is certainly much more "individualized" than a mere noun stem, since such a "bare" stem is non-committal in regard to the attributes of the noun. However, the fact that classifiers individualize head nouns is a mere logical consequence, and to state that classifiers individualize head nouns does not mean any analysis of the function of classifiers. This is like stating that kicked is more "individualized" than to kick since the former is determinate at least for tense.

Classifiers are certainly not for individualizing head nouns which are indeterminate for number. The presence of ko in the Chinese phrases:

- (23) i<sup>2</sup> ko hshieh<sup>2</sup>-sheng<sup>1</sup> 'one student'  
           one classifier student
- (24) wu<sup>3</sup> ko hshieh<sup>2</sup>-sheng<sup>1</sup> 'five students'  
           five classifier student

has nothing directly to do with number. In modern Chinese the classifier ko has to occur between numerals and their head nouns, whatever the given numerals are. Then, suffixes like -men, -teng, etc. as in:

- (25) hshieh<sup>2</sup>-sheng<sup>1</sup>-men 'students'
- (26) chiang<sup>3</sup>-i<sup>4</sup>-teng 'lectures, etc.'

are much better individualizers for number than classifiers. Any morpheme, added to a given form to specify its attributes, is, for that matter, a better individualizer. For instance, one can observe increasing individualization from left to right in the following set of Chinese words:

- (27) p'u<sup>4</sup>-tzu : chih<sup>1</sup>-ma p'u<sup>4</sup>-tzu : chih<sup>1</sup>-ma tzu<sup>3</sup>-erh p'u<sup>4</sup>-tzu : chih<sup>1</sup>-ma  
           shop sesame shop sesame seed shop sesame  
           tzu<sup>3</sup>-erh yu<sup>2</sup> p'u<sup>4</sup>-tzu  
           seed oil shop

In other words, to define the function of classifiers as individualizers of head nouns does not add anything new to our knowledge on the function of classifiers.

On the contrary, classifiers sometimes de-individualize head nouns. For instance:

(28) (Chung<sup>1</sup>-kuo<sup>2</sup> ch'u<sup>1</sup>-le) ko Mao<sup>2</sup> Tse<sup>2</sup>-tung<sup>1</sup> '(In China there  
China appeared classifier Mao Tse-tung

appeared)a man called Mao Tse-tung'

is certainly less individualized than Mao<sup>2</sup> Tse<sup>2</sup>-tung<sup>1</sup> 'Mao Tse-tung' itself, as it is used in contemporary ordinary discourse in Chinese.

### 6. The reality of classifiers

We do not have to restate that it is an error to say that classifiers do not have reality outside of the numeral expression, since we have been demonstrating in the preceding sections that classifiers have nothing directly to do with numeral expressions. Classifiers may not make too much reference to the extra-linguistic world, like any other empty or grammatical word. Contrary to Greenberg's generalization, however, there is some evidence that classifiers maintain certain elements of cognitive meaning. There is a tendency of unifying/in modern Chinese — strictly speaking, in those northern dialects whose classifiers speakers used to be Altaic peoples, particularly the Manchus.<sup>12</sup> In these dialects, a single classifier ko is substituted for a variety of classifiers. The Dungan language, a variant of northwestern Mandarin spoken in Kirghizia, Kazakhstan and Uzbekistan, has completed this "unification." Whether or not this is due to the fact that the Dungans migrated to Central Asia where they have been surrounded by speakers of Altaic languages, is not our immediate concern here. What is of paramount interest is Aleksandr A. Dragunov's observation:<sup>13</sup> in order to maintain the distinction between Chinese:

(29) i<sup>2</sup> k'uai<sup>4</sup> shou<sup>3</sup>-chin<sup>1</sup> 'a handkerchief' and i<sup>4</sup> t'iao<sup>2</sup>  
one square-piece towel one oblong-piece  
shou<sup>3</sup>-chin<sup>1</sup> 'a hand towel'  
towel

Dungan has adopted a different word formation for the head noun parts:

(30)	<u>Dungan</u>		<u>Chinese</u>	<u>meaning</u>
ji gy	şuzinzy	:	i <sup>2</sup> k'uai <sup>4</sup> shou <sup>3</sup> -chin <sup>1</sup>	'a handkerchief'
one classifier	towel		one square-piece towel	
ji gy	şuzin	:	i <sup>4</sup> t'iao <sup>2</sup> shou <sup>3</sup> -chin <sup>1</sup>	'a towel'
one classifier	towel		one oblong-piece towel	

Classifiers are not part of the linguistic mechanism to count objects with, either. If we regard the Cantonese word pu:n<sup>3</sup> in the following phrase as part of such a mechanism:

(31) ni:<sup>1</sup> pu:n<sup>3</sup> su<sup>1</sup> ta:i<sup>6</sup> pu:n<sup>3</sup> 'This book is a large book'  
this classifier book large classifier

then we have to regard pu:n<sup>3</sup> in the following phrases as an attributive and





There is one exception to this general rule of classifier formation. That is the classifier for animates. For anything that is alive and moves, the classifier me- is consistently used:

- (41) ɕi- tɕ'ɛ- me- 'this man'  
man this classifier
- (42) a- tɕ'ɛ- me- 'this chicken'  
chicken this classifier
- (43) ŋi- tɕ'ɛ- me- 'this fish'  
fish this classifier

In other words, we witness the first step of generalizing classifiers — namely use of a single, generalized classifier for animates. All of this reminds us of the Chinese classifiers of the pre-Ch'in (221-206 B.C.) period — the Yin (Shang) and Western Chou dynasties in particular.

There is one significant difference between the Yin-Chou Chinese and the modern Nakhi classifiers. That is, the "echo" classifiers are not exact reduplications of the head nouns in Nakhi. Whenever the head noun happens to be a disyllabic word, compound or phrase, only the categorial noun-stem is "reduplicated" in the classifier's position:

- (44) tsæ- tsɛ- tɕ'ɛ- tsæ- 'this table'  
table this table
- (45) zər- ndzər- tɕ'ɛ- ndzər- 'this tree'  
willow tree this tree
- (46) gi- k'ə- tɕ'ɛ- k'ə- 'this river'  
small river this river

We understand that this is the second step toward greater generalization or unification of "reduplicated" classifiers. The same type of "generalization" can be found in other Asian languages:

- (47) Newari (Kathmandu)
- sələ -khwə chə khwə 'one horse-hoof'  
horse hoof one hoof
- pali-khwə chə khwə 'one foot-print'  
foot print one print
- (48) Japanese (Tokyo)
- ori - zume hito ori 'one packed lunch'  
fold stuff one fold
- kai - dan ichi dan 'one step'  
stair step one step

Now, if Chinese presents an instance of the latitudinal development of the classifier construction and Nakhi that of a longitudinal one, the classifiers can be understood as linguistic elements which find their fundamental

role in duplicating the major, if not all, part of the head nouns, thereby enriching the shorn morphology of largely monosyllabic nouns. Since these reduplicated noun stems have been unified or generalized in the course of development, classifiers give the impression that they "classify" nouns. But this is apparently not exactly/<sup>what is</sup> meant by those duplicated noun stems; various roles and functions formerly ascribed to classifiers are at best subsidiary ones attributed to classifiers by linguists. The typo-geographical observation the present author/<sup>has</sup> made (namely the tendency that the more monosyllabic a language is in China a greater variety of classifiers one can find in the language, and the more polysyllabic a dialect becomes, the less variety one can find)<sup>15</sup> seems to strongly support this interpretation on the role of the classifier. Then it is obvious that they are primarily there for avoiding the ambiguity of monosyllabic nouns.<sup>16</sup> We thus find ourselves pretty close to Hale's remark that a classifier "also serves as a semantic disambiguation."<sup>17</sup>

### 8. Epilog

There remain two problems unanswered. One is that the so-called echo classifiers so far have not come to our attention in languages where demonstratives/numerals and classifiers precede the head noun. In that kind of word order, is it that we do not need any disambiguation? Or does it simply happen that we do not have enough historical documents to trace the genealogy and development of the classifier for Asian languages having such word order?

The other is that Archaic Chinese of the pre-Ch'in period does not seem to have demonstratives occurring between the head noun and the "reduplicated" classifiers; the clearest instance of coöccurrence of demonstratives with classifiers appears in the historical documents of Chinese after the Chinese language has experienced drastic change in syntax as well as phonology during the T'ang (618-907 A.D.)-Sung (960-1279 A.D.) period and after the word order NOUN + NUMERAL + CLASSIFIER has changed into the NUMERAL + CLASSIFIER + NOUN order. Does this mean that the use of classifiers together with demonstratives is a phenomenon developed in the Chinese language in its later history?

One thing very interesting about Dungan in this connection is the use of a different demonstrative for classifiers and measure words. Although classifiers were unified into one in Dungan, the language has a variety of measure words which occur in the same position as classifiers. There is, however, a very clear difference between this type of measure expression and the classifier construction. A noun phrase in Dungan can be rewritten as follows:

(49) NP → (DEM ∅ NUM)(CL) N

where DEM stands for demonstratives, NUM for numerals, CL for classifiers and

N for nouns; overlapping parentheses means that between the symbols that precede and follow, at least one has to be chosen.<sup>18</sup> Thus a Dungan NP can be expanded as follows:

- (50)
 

			fw	'tree'
			tree	
	ji	gy	fw	'one (classifier) tree'
	one	classifier	tree	
zi		gy	fw	'this (classifier) tree'
this		classifier	tree	
zi	ji	gy	fw	'this one (classifier) tree'
this	one	classifier	tree	

However, with the measure word for tree, ky, only the second and the fourth expressions are grammatical but not the third:<sup>19</sup>

- (51)
 

	ji	ky	fw	'one pole(?) of tree'
	one	measure-word	tree	
zi	ji	ky	fw	'this one-pole(?) of tree'
this	one	measure-word	tree	

but not:

- (52)\*zi
 

		ky	fw	'this pole(?) of tree'
this		measure-word	tree	

So, if one wants to express the shape of the object designated by a noun, he can do so by constructing a measure expression. For instance, for 'this (one) piece of paper' one can say:<sup>20</sup>

- (53) zi ji zon zy
 

this	one	flat-piece	paper
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We can immediately point out in this connection that those languages which borrowed classifiers curiously do not have demonstratives occurring in the classifier construction. This is why among examples listed above, instances from Japanese,<sup>21</sup> Malto, Newari, etc. are never given with demonstratives. Some linguists maintain that classifiers in languages like Korean and Japanese are loans from Chinese, and it may be very true, though, contrary to their observation, we find numerous classifiers of native morphemes in both Korean and Japanese:<sup>22</sup>

(54) Korean

- |                                    |                     |                      |
|------------------------------------|---------------------|----------------------|
| geu-ru (for trees)                 | ma-ri (for animals) | sang-i (for flowers) |
| sa-ru (for anything with a handle) |                     | beol (for clothes)   |

Among the 600 odd Japanese classifiers, listed in the Meikai Kokugo Jiten, nearly forty per cent are of native morphemes. They may, however, very well

be a secondary development after the Japanese language accepted Chinese classifiers. It is after all not surprising that these languages developed secondary classifiers, if it is true that any language could have some kind of linguistic means of expressing counters and measure words.

#### NOTES

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- 1) I have in mind works like Friedrich 1970, Greenberg 1972, Sanches 1973, etc.
- 2) Such views still exist in contemporary literature of linguistics. See for instance Wang 1958, p. 234.
- 3) Works on the line of Emeneau 1956.
- 4) Works like Wang 1958, Huang 1964, etc. The change of word order from NOUN + NUMERAL + CLASSIFIER to NUMERAL + CLASSIFIER + NOUN in Chinese, which is regarded as a purely internal, latitudinal development of the Chinese language, turned out to be the transition from the Tibeto-Burman or Tai type to the Altaic type. See Hashimoto 1976.
- 5) As summarized in Hale 1973.
- 6) Incidentally, the distinction between the measure unit counters and the rest is not well motivated, grammatically or semantically. If we say that the measure unit counters themselves do not have reality (hence when we say five cups of flour, we refer to an amount of flour, not to five individual cups), we can say that quasi-unit counters equally lack reality. The word cup above looks very much lacking reality, in contrast to words like piece, bunch, etc., mainly because we are measuring flour. When we have to buy five bunches of firewood (particularly if the size of a bunch is regulated as in some countries) we are concerned more with the amount of firewood, rather than the individual bunches. When we have to eat five cups of congealed jello, we are as much concerned with five individual cups as with the entire amount of jello.
- 7) Hale 1973, p. 12.
- 8) Hale 1973, p. 6.
- 9) Wang 1958 and Huang 1964. This reminds us of the Tibeto-Burman origin of

- appear in La R. Maran (ed.) *Current Trends in Sino-Tibetan Linguistics*.  
\_\_\_\_\_ 1976. *Language diffusion on the Asian continent: problems of typological diversity in Sino-Tibetan. Computational Analyses of Asian & African Languages* 3. 49-65.
- Hashimoto, Oi-kan Y. 1972. *Studies in Yüe Dialects, I: Phonology of Cantonese*. London & New York: Cambridge University Press.
- Huang, Tsai-chün 1964. *Ts'ung chia-wen chin-wen liang-tz'u te ying-yung k'ao-ch'a han-yü liang-tz'u te ch'i-yüan yü fa-chan* (To study the origin and development of Chinese classifiers, judging from their use in the oracle bone inscriptions and metal-letters). *Chung-kuo Yü-wen* (Chinese Language and Writing) 133. 432-441.
- Kalimov, Abduraxman A. 1955. *Grammaticheskie osobennosti schetnyx slov, schetnyx suffiksov i edinic izmerenija v sovremennom dunganskom jazyke*. *Kratkie Soobshchenija Instituta Vostokovedenija* (Jazykoznanie) 12. 77-81.
- Kindaichi, Kyoosuke 1952. *Meikai Kokugo Jiten* (A Comprehensive Dictionary of the National Language). Tokyo: Sanseidoo Shoten.
- Liu, Shih-ju 1965. *Wei-chin-nan-pei-ch'ao Liang-tz'u Yen-chiu* (A Study of Classifiers of the Wei, Chin and South-North Dynasties). Peking: Chung-hua Shu.
- Mahapatra, Bijaya P. 1976. *The Phonology and Morphology of Malto* (with Ethno-semantic Notes). University of Calcutta Ph.D. Dissertation.
- Masica, Colin P. 1971. *A Study of the Distribution of Certain Syntactic and Semantic Features in Relation to the Definability of an Indian Linguistic Area*. University of Chicago Ph. D. Dissertation.
- Nishida, Tatsuo 1975. *Kanji o megutte* (Around the Chinese characters). *Gengo* (Language) 4:8. 709-717.
- \_\_\_\_\_ 1976. *Nihongo no keitoo o motomete: Nihongo to chibetto-birumago* (In search of the genetic relationship of Japanese: Japanese and Tibeto-Burman). *Gengo* (Language) 5:6. 74-86, 5:7. 64-76 & 5:8. 74-83.
- Ohta, Tatsuo 1958. *Chuugokugo Rekishi Bumpoo* (A Historical Grammar of Modern Chinese). Tokyo: Koonan Shoin.
- Sanches, Mary 1973. *Numeral classifiers and plural marking: an implicational universal*. *Working Papers on Language Universals* 11. 1-22.
- T'sou, Benjamin K. to appear. *The structure of nominal classifier systems*. Laurence C. Thompson & Philip Jenner (eds). *Proceedings of the First International Conference on Austroasiatic Linguistics*.
- Wang, Li 1958. *Han-yü Shih-kao* (A Manuscript of the History of Chinese). Peking: K'o-hsüeh Ch'u-pan-she.

Chou Chinese, assumed by Nishida 1975.

- 10) Wang 1958, p. 237.
- 11) Hale 1973, pp. 7-8 gives a dozen odd such pairs.
- 12) Hashimoto 1976, pp. 52-54.
- 13) Dragunov 1952, p. 50 and Hashimoto 1974, p. 15.
- 14) Wang 1958 and Huang 1964.
- 15) Hashimoto 1976, pp. 52-54.
- 16) James A. Matisoff holds that the Sino-Tibetan classifiers are primarily to give redundancy to monosyllabic nouns. See M. J. Hashimoto, 1976, p. 54.
- 17) Hale 1973, p. 6.
- 18) For convenience of presentation, we exclude here all the embedding elements which constitute what is normally called a noun modifying clause.
- 19) Dragunov 1952, p. 57.
- 20) Kalimov 1955, p. 79.
- 21) This reminds us of the structural similarities between Tibeto-Burman and Japanese. See Nishida 1976.
- 22) Those Korean examples were provided by S. Robert Ramsey.

#### BIBLIOGRAPHY

- Dragunov, Aleksandr A. 1952. *Issledovanija po Grammatike Sovremennogo Kitajskogo Jazyka, I: Chasti Rechi*. Moskva-Leningrad: Izdatel'stvo Akademii Nauk SSSR.
- Emeneau, Murray B. 1956. India as a linguistic area. *Language* 32. 3-16.
- \_\_\_\_\_ 1965. *India and Historical Grammar*. Annamalainagar: Annamali University.
- Friedrich, Paul 1970. Shape in grammar. *Language* 46. 379-407.
- Greenberg, Joseph H. 1972. Numeral classifiers and substantival number: problems in the genesis of a linguistic type. Preprints of the XIth International Congress of Linguists, Bologna.
- Hale, E. Austin 1973. Is Newari a classifier language? *Contributions to Nepalese Studies* 1:1. 1-21.
- Haas, Mary R. 1942. The use of numeral classifiers in Thai. *Language* 18. 201-206.
- Hashimoto, Mantaro J. 1972-1973. *Hakkago Kisogoi Shuu (A Collection of Hakka Basic Vocabulary)*. Tokyo: National Inter-University Research Institute of Asian & African Languages & Cultures.
- \_\_\_\_\_ 1974. Current developments in Zhunyanese (Soviet Dunganese) studies. To