

The Austroasiatics in Ancient South China: Some Lexical Evidence

It is well known that ancient South China was almost exclusively populated by non-Chinese peoples whose identity and location, however, remain to be determined. The purpose of this paper is to contribute some lexical evidence towards the solution of this problem. In particular, we will try to show that the Austroasiatics inhabited the shores of the middle Yangtze and parts of the southeast coast during the first half of the first millennium B.C., and that the Chinese borrowed the name of the Yangtze from them. Other words indicating early contact between these two peoples will also be discussed.

The Austroasiatic (hereafter AA) family of languages includes the following groups: Munda in northeast India; Khasi in Assam; Palaung-Wa in Upper Burma and southern Yunnan; Mon-Khmer in Lower Burma and Cambodia, as well as in parts of Vietnam, Laos, and Thailand; and Vietnamese-Muong in Vietnam.** Here we accept Haudricourt's view that Vietnamese is a Mon-Khmer language which came under the influence of Tai and Chinese.** A recent study by Ruth Wilson shows that Muong occupies an intermediate position between Vietnamese and Mon-Khmer, thus lending support to Haudricourt's thesis.**

The present location of the AA languages is strictly to the south of China, with two possible exceptions. The Miao-Yao languages, whose tonal system is similar to that of Chinese, are usually classified as Tibeto-Burman. But according to Davies, Forrest, and Haudricourt Miao-Yao is AA.** The genetic affiliation of Tai remains a problem. Traditionally, Tai and Chinese were regarded as constituting a subfamily under Sino-Tibetan.** But Benedict proposed some thirty years ago that Thai, Kadai, and Indonesian belong together in an Austro-Thai family.** In a recent series of papers, Benedict has further suggested an AA sub-stratum in Austronesian, which he now calls Austro-Thai.** While the AS relationship to Miao-Yao and Thai are both still in dispute, there are other reasons for believing that AA once extended far into the present borders of China.

The evidence consists of loan words into Chinese. If the word in question is also a place word, then once the fact of borrowing has been established, it is possible to tell not only which two peoples were involved but also where the contact was made. Archaic loans between AA and Chinese have previously been proposed by Pulleyblank, Forrest, and Benedict.** We have in some cases incorporated their proposals and added philological and historical details. Another impetus to our endeavor is the recent publication of several studies in AA linguistics, particularly Pinnow's work on Kharia, the volume of the essays edited by Zide, and dictionaries on various modern languages.** In addition to supplying valuable information on many hitherto inaccessible AA languages, these studies also provide the means by which the time depth of an AA word may be estimated via its geographic distribution. Admittedly we are on rather shaky ground here, since we have no records of the AA languages which we believe were once spoken in South China. We must depend on modern AA evidence such as the forms contained in Pinnow and Zide, and the languages consulted are probably not the direct descendants of the source of the Chinese loans. Under these circumstances, it seems to us, we cannot expect too great a rigor in making phonetic equations; nonetheless, we have tried to avoid extravagant or totally unsupported claims. Obviously part of the difficulty is the inadequacy of the available reconstructions of Old Chinese (hereafter OC).

Before proceeding to discuss loan words, we wish to present some evidence for the fact that the Yüeh people was at least partly AA. The term Yüeh 越 has always had an intimate connection with the peoples of South China; Yeh is the name of a state that flourished during the fifth and sixth century B.C. in Chekiang and Fukien; it is also part of the name Vietnam, anciently Nan-yüeh, whose territory then extended into Kwangtung and Kwangsi and included Hainan.** During the Ch'in and Han dynasties the term Paiyeh 百越 'the hundred Yüeh' was used to refer to the various "barbarians" inhabiting South China. Earlier, in the oracle bones and bronze inscriptions, the graph was simply the pictograph of an axe.** Here we may mention the fact that the rectangular axe and the shouldered axe were respectively associated with the Austronesians and the AA's.** The supposition that the Yüeh peoples were Austronesian or AA is highly attractive, but no convincing proof has yet been offered. The only piece of linguistic evidence previously studied is the Yüeh song contained in Liu Hsiang's Shuo-yüan, which, according to Izumi Hisanosuke, is in a language resembling Cham.** But the Chinese translation accompanying the Yüeh original gives little indication as to which transliterated syllable

corresponds to which Chinese word. Consequently, Izui's claim is difficult to evaluate. On the other hand, a number of Yeh words were preserved in various ancient texts.** In what follows, we will show that two items represent the AA words for “die” and “dog.”

(1) 札**ts□t' to die'

In Cheng Hsüan's commentary on the Chou-Li, the gloss 越人谓死为札 “The Yüeh people call ‘to die’札” occurs.** Cheng Hsüan lived during the Eastern Han (127-200 A.D.) and there seem to be no grounds to doubt the authenticity of this gloss. According to Karlgren's *Grammata Serica Recensa* the OC reading of the character was *tsǎ. This is Karlgren's group II. There is good reason to believe that his reconstruction is erroneous. Tuan Yü-ts' ai assigns this character to his group twelve, which corresponds most nearly to Karlgren's group V.** Chiang Yu-kao places it in his 脂 group which also corresponds most nearly to Karlgren's group V.** How do we explain this discrepancy? There are several ways to assign a given character to an OC rhyme group. It may be assigned on the basis of its occurrence in a rhymed text, but if it does not appear as a rhyme word, then there are only two alternative methods for determining its proper membership: a few Middle Chinese (hereafter MC) rhymes all go back to a single OC category; this is the case, for example, with the MC rhyme 唐 which derives from the OC 阳 group in its entirety. For such MC rhymes, the assignment to an OC rhyme category is mechanical. Frequently, however, a given MC rhyme has more than one OC origin. This, in fact, is true of the character in question. 札 belongs to the MC 黑吉 rhyme; this rhyme derives from three different OC rhyme categories: 祭, 微, and 脂 corresponding roughly to Karlgren's II, V, and X. The only way to determine which OC rhyme category such words as this belong to is to examine their hsieh-sheng connections. In the *Shuowen*, is defined as follows: 札牒也, 从木乙声. In *GSR* 505 a reading *i□t is given for; this is Karlgren's group V. And in the *Shih-ming*, written by Liu His, a younger contemporary of Cheng Hsan, the sound gloss is 札, 木节也(木节 *ts*, OC 脂 group).** Clearly 札 should belong to the same group as 乙; the proper reconstruction is ts□t and not tsǎt as given in *GSR* 280b. Tung T'unggho does not give this character in his *Shang-ku yin-yün piao-kao*,** but it is simple enough to place it where it belongs—viz. on page 215 in Tung's 微 group; the proper form in Tung's system is *tsət.

There can be no doubt that this word represents the AA word for ‘to die’: VN chêt; Muong chít, chét; Chrau chu't, Bahnar k□cit; Katu chet; Gua test; Hre ko'chit; Bonam kachet; Brou kuchêit; Mon ch*t. More cognate forms can be found in Pinnow, p. 259, item K324f. The Proto-Mon-Khmer form has been reconstructed by Shorto as kcət,** which is extremely close to our OC form. There is even the possibility that Proto-MK* k- is reflected in the glottal initial of the phonetic 乙.

“To die” in other east and southeast Asian languages are: Chinese 死*siər; Tib. * ‘chi-ba, šhi; Lolo-Burm *šei;** Proto-Tai *tai; ** Proto-Miao *daih. ** Here Chinese goes together with Tibeto-Burman, and Proto-Tai goes together with Proto-Miao. None of these forms has any resemblance to *ts□t.

(2) ###**‘dog’

The *Shuo-wen* says 南越名犬#####“Nan-yüeh calls ‘dog’ *nôg **g.” This explanation occurs under the entry for ##, which implies that the meaning “dog” is attached to this character. The first character of the compound probably represents a pre-syllable of some kind. Tuan Yü-ts' ai mentioned in his Commentary to the *Shuo-wen* that this word was still used in Kiangsu and Chekiang, but did not give any further detail.

Karlgren gives **gas the OC value for ## (*GSR* 109 7h). At the time of the *Shuo-wen* (121 A.D.), -g had probably already disappeared; in Eastern Han poetry, MC open syllables (OC -b, -d, -g) seldom rhyme with stopped syllables (OC -p, -t, -k); in old Chinese loan words in Tai (specifically, the names for twelve earth's branches 地支 *ti-chih*), probably reflecting Han dynasty pronunciation, Proto-Tai -t corresponds to OC -d, but no trace can be found for -g. The proper value for our purpose is therefore **ô.

This is the AA word for “dog,” as the following list shows: “dog”: VN chó; Palaung sh□:; Khum, Wa so□, Riang s'ô□; Kat, Suk, Aak, Niahon, Lave có; Boloben, Sedang có; Curu, Crau □ō; Huei, Sue, Hin, Cor sor; Sakai cho; Semang cû, co; Kharia s□'l□□, ; Ju solok; Gutob, Pareng, Remo guso; Khasi ksew; Mon klüw; Old Mon clüw; Khmer chk□.

The forms after VN represent almost all the major groups spoken in the Indo-China and Malay Peninsulas, as

well as the Palaung-Wa, Khmer, and Mal groups. The proto-form for these languages appears to be so□ or co□, preceded perhaps by k-(cf. Khasi, Gutob, etc.). On the basis of Mon, Haudricourt suggested that VN ch-<kl-.** But there is another possibility, namely, VN ch-<kc-; “to die” * kcət, VN ch*t, Kuy kacet, Kaseng sit. And even if VN ch- did come from kl-, this change must have occurred quite early, since in all the AA languages except Mon, the initial is either a sibilant fricative or affricate.

“Nan-yeh” refers to North Vietnam and parts of Kwangtung and Kwangsi. With this piece of evidence, we know that the language spoken there in the second century A.D. was AA. This is also the earliest record of the language of Vietnam.

We now come to old AA loan words in Chinese.

(3) 江**krong/kang/chiang ‘Yangtze River’, ‘river’

“river” in Mon-Khmer: VN sông; Bahnar, Sedang krong; Katu karung; Bru klong; Gar, Koho rong; La□ven dakhom; Biat n’hong; Hre khroang; Old Mon krung. Cf. Tib. Klu ‘river’; Thai khl□ : ɲ ‘canal’.

Chiang has a Second Division final in MC, and according to the Yakhontov-Pulleyblank theory, this implies a model -r- or -l- in OC.** The OC reading for this word in Li Fang-kuei’s system is *krung.* * Further evidence for -r- consists of the fact that some words with as their phonetic have disyllabic doublets, whose first syllable has a velar initial and whose second syllable is lung: 空=窟窿 ‘hole, empty,’ 项=喉咙 ‘neck, throat,’ 鸿=屈龙 ‘wild goose.’** The final has been reconstructed as -ung by Karlgren and Tung T’ung-ho, -awng by Pulleyblank, and -ong by Yakhontov.** In spite of these minor differences, it is clear that the final had a rounded back vowel in OC.

It is immediately clear that the Mon-Khmer forms are related to the Chinese form. What remains to be discussed is the direction of the loan.

There are reasons for thinking that the Chinese borrowed this word from the AA’s. OC has four common words for names for rivers: 水 *shui*, 川 *ch’uan*, 江 *chiang*, 河 *ho*. The first two are general words; the last two are proper names, *chiang* ‘Yangtze River’ and *ho* ‘Yellow River.’ On the other hand, *krong* etc. is a general word for ‘river’ in AA. In borrowing, a general word for a descriptive term often becomes a proper name in the receiving language; witness *Mississippi* and *Wisconsin*, ‘big river’ and ‘big lake’ in Algonquin, which became proper names in American English.

The two general words for ‘water’ and ‘river’ in OC, *shui* and *ch’uan*, occur in the oracle bones and can be traced to Sino-Tibetan: ‘water’ Tib. *ch’u*; Bara, Nago *dui*; Kuki-chin *tui*; Chinese 水* *siwər/šwi/shui*, 川* *t’iwen/tš’iwän/ch’uan*. The nasal final in *ch’uan* probably represents the vestigial form of a plural ending, and there is a phonological parallel in the sound gloss in the *Shuo-wen* 水, 淮也(淮 **n*wən); *shui* and *ch’uan* are therefore cognates. OC 河 □a/g’*earlier *g’al or *g’r, we suspect, is a borrowing from Altaic.**

Chiang is of relatively late origin. It did not occur in the oracle bones.** The bronze inscriptions contain one occurrence of this word, and the *Book of Odes*, nine occurrences, in five poems. When the word *chiang* acquired the general meaning of ‘river,’ its use as names of rivers was limited to south of the Yangtze. Both these facts again suggest that *chiang* was a borrowed word.

Other etymologies for *chiang* are less plausible. Tibetan had *klu* ‘river.’ But a Sino-Tibetan origin of *klu/krong* is ruled out because *chiang* is a late word with a restricted geographic distribution, and because MC 2nd Division generally corresponds to Tib. -r- but not to -l-. Similarly, the basic word for ‘river’ and ‘water’ in Tai is na:m; khl□:ɲ is a secondary word restricted in its meaning to ‘canal’, with limited distribution in the Tai family; it is unlikely to be the source of Chinese **krong*. The most plausible explanation is that both Tibetan and Thai also borrowed *klu** and *khl□:ɲ* from AA.

We will now try to show that the Chinese first came into contact with the Yangtze in Hupei, anciently part of the Ch’u Kingdom. This must be region where the Chinese first came into contact with AA’s and borrowed *chiang* from them.

The Han River has its source in Shensi whence it passes through Honan and joins the Yangtze in Hupei. As the Chinese came down from their homeland in the Yellow River valleys, it was natural for them to follow the course of the Han River. This general conclusion is also supported by textual evidence. The word *chiang* ‘Yangtze River’ occurs in five poems in the *Book of Odes*. In Ode 9, 204, 262, and 263, *chiang* occurs in conjunction with *han* ‘Han River,’ either in the compound *chiang-han* or in an antithetical construction with *han* in the other part. The only poem containing *chiang* but not *han* is Ode 22. But his poem belongs to the section Chao-nan 召南, and this term is also what the Chou people used for the region which formerly belonged to Ch’u.** Moreover, according to several authorities, the term 江南 (literally ‘south of the River’) as used during the Han dynasty refers to Ch’ang-sha 长沙 and Y-chang 豫章, in present Hunan and Kiangsi.** The implication is that *chiang* in *chiang-nan* refers to the middle section of the Yangtze and not the entire river.

The notion that the Chinese met the AA’s in the Middle Yangtze region of course does not exclude their presence elsewhere; it just gives a precise indication of one of their habitats. It is perhaps pertinent to mention that the Vietnamese believed that their homeland once included the region around the Tung-t’ing Lake 洞庭湖 which is in that general area.** Another Vietnamese legend states that their forefather married the daughter of the dragon king of Tung-t’ing Lake.**

Textual and epigraphic evidence indicates that the word *chiang* came into the Chinese language between 500 and 1000 B.C. Mao Heng’s Commentary to the *Odes* also assigned all poems celebrating the southern conquest to the reign of King Hsan (827-781 B.C.). The first half of the first millennium B.C. can therefore be taken as a tentative date for the AA presence in the Middle Yangtze region. Recently, however, archaeologists are increasingly inclined to the view that contact between North China and South China occurred as early as the Shang dynasty: artifacts showing strong Shang and early Chou influence have been discovered in the lower Yangtze region, and according to some scholars, also in the Han River region.** If further investigations show that pre-Chou traffic between the North and the South was extensive and bi-directional, we may have to revise the date for *chiang* upward.

(1) 维虫 ‘fly’**

‘fly’ in Mon-Khmer: VN ruōi; Camb. Ruy; Lawa rue; Mon rù; Chaobon rùuy; Kuy □aruøy; Souei □ar□□y; Brurùay; Nge□, Alak, Tampuon r□□y; Loven, Brao, Stieng ruay; Chong r*□□y; Pear roy.

Cf. Proto-AA * ruwaj (Pinnow, p. 268, item 356).

The word 维虫 *wei* ‘fly, gnat’ occurs in the Ch’u-yü 楚语 section of the kuo-yü 国语: “It is as if horses and cattle were placed in extreme heat, with many gnats and flies (on them) 亡虫维虫之既多, and yet they are unable to swish their tails.” *GSR* 575 defines *wei* as ‘gnat’ and gives its OC value as *dwr. Karlgren’s definition ‘gnat’ (or our ‘fly’) fits the above passage, the locus classicus of this word. It is further substantiated by old dictionaries; the *Kwang-ya* 广雅 defines 维虫 as 虫羊, and the *Fang-yen* 方言 states that 羊(虫羊) is a dialect form of 蝇 ‘fly.’ Karlgren’s OC value, however, requires revision.

The OC value of 维虫 can be ascertained via its phonetic 维 *wei*; the form of the character indicates that it is the name of an insect pronounced like 维. The initial of *wei* in MC is 喻四, the *yü* initial. Li Fang-kuei has argued convincingly that the OC value of *yü* IV is a flapped *r*- or *l*-, somewhat like the second consonant of *ladder* in American English; he writes it as **r*-. ** 乌弋山离 ‘Alexandria,’ a Han dynasty transcription, has 弋 MC (with a *yü* IV initial) matching *-lek* (s)-. The word 酉, one of the twelve earth’s branches, has **r*- in Proto-Tai, still attested in several modern dialects. Sino-Tibetan correspondences point to the same value, for example, ‘leaf’ Chinese 叶 * *rap*/**äp*/*yeh*; Tib. *lob-ma*, *ldeb* (**dl*-).

The final of *wei* has been reconstructed as *-d* by Tung T’ung-ho and Li Fang-kuei, and as *-r* by Karlgren. These are values for the earlier stage of OC. By the time of the Kuo-yü, which is relatively late, *-d* or *-r* had probably already become *-i*.

The Mon-Khmer forms have a wide distribution. More cognate forms, including some in the Munda branch, can be found in Pinnow, p. 268, item 356. VN *rui* etc., then, is a very old word in AA: it is also the general word for ‘fly.’ The standard word for ‘fly’ in OC is 蝇 * *riəng*, which was already attested in the *Odes*. The word 维虫 *wei* ‘fly,’ on the other hand, is a hapax legomenon. Clearly, *wei* ‘fly’ was borrowed from the AA’s

into the ancient Ch'u dialect.

In Li's system, the distinction between *ho-k'our* and *k'ai-k'ou* (with or without *-u/-w-*) is non-phonemic in OC, and the OC value of 维 in his system is *rəd. In terms of our problem, there are two possibilities. Either OC had no *-w-* at all, phonemic or non-phonemic, in which case the best the Chinese could do to approximate the AA form (which has a rounded back vowel) is *rəi < *rəd; or else, OC had a non-phonemic *-w-*, in which case the OC form is *rwəi. We have chosen the latter alternative.

The two loan words, *chiang* 'Yangtze River' and *wei* 'fly', suggest the following sequence of events. The Chinese came to the middle Yangtze between 1000 and 500 B.C., and there met the AA's. Subsequently, some of the AA's migrated toward the south, and some were absorbed into the Ch'u population. That is why this word shows up in the Ch'u-yü section of the *Kuo-yü* and nowhere else.

It seems appropriate to mention in this connection that the Ch'u people clearly contained non-Chinese elements. King Wu of Ch'u acknowledged that he was a southern barbarian; the poet Ch' Yan lamented, "I was sad that the southern tribesmen could not understand me"; and the *Lü-shih ch'un-ch'iu* stated that "Ch'u was derived from the barbarians."** In view of what has just been said, we know that one of the ethnic groups constituting the Ch'u people was AA.

(2) 虎 'tiger' ** *k'la(g)/χuo/hu*

'tiger' in AA: *kala□; Munda ki'r□, kul, kula, kilo, etc.; Old Mon kla; Mon kla; Bahnar, Sedang kla; Sue kala; Brou klo; Old Khmer, kl*; Khmer khla 'felines'; Khasi khla; VN kh*i; Muong k'al, k'lal, kanh, etc.

Pinnow reconstructs the Proto-Munda form as *kala (Pinnow, p. 142, item 281), and we propose an alternate Proto-AA form, *kala□. Let us now turn to the Chinese side.

虎 hu belongs to the OC 鱼 yü group. According to Yakhontov, Pulleyblank, and Li, this group had *-a* as its main vowel. It may or may not have had a final voiced consonant of some sort in OC; Yakhontov has none, and Li would have *-g*. In Li's system 虎 MC χuo would derive from an OC **χag. Now, 虎 serves as the phonetic in some words with MC *l*-initial: 卢 MC luo, 虑 MC liwo, etc.** Therefore, in Li's system, *hu* 'tiger' could be reconstructed as *χlag, since his OC medial *-l* simply drops in MC; *-r-* on the other hand yields the second Division vowels. Further, certain Western Min dialects have an initial aspirated *k'* in the word for tiger: Kienyang *k'o*, Shaowu *k'u*. This is not an isolated phenomenon in Min; for example, 许 Amoy k'□, but MC x*wo; 火 Kienyang k'ui, MC χu*; ## Foochow k'au□, MC χu*t. From this we can see that MC *x-* (in some cases) may go back to a stop *k'-. Since 虎 is one of the words involved in this change, we are justified in reconstructing it as **k'la(g). This form is very close to Pinnow's Proto-Munda reconstruction *kala.

Our reconstruction of the Proto-AA form as *kala□ is motivated by the fact that *-* is present in the word for tiger in several Munda languages. The Chinese word hu 'tiger' is in the rising tone, and one of the present authors has argued elsewhere that the MC rising tone derives from a final glottal stop.** If so, the correspondence between Proto-AA *kala and OC **k'la is even closer.

Two other considerations may be offered. There is no plausible Tibeto-Burman etymology for 虎 hu 'tiger'; Tib. has stag 'tiger,' a totally unrelated word; Old Burmese has kla, but in all probability it was a loan from Mon. The present habitats of the tiger (*Panthera tigris*) in China are the Southwest, the Southeastern coastal area, the Yangtze valleys, and Manchuria, with South China as the area of highest concentration.** Appearances of the tiger in historical records coincide with the above, but also include northern Hopei and Shansi. Skeletal remains of the tiger were also found at the site of An-yang, in Honan.** The distribution of the tiger is noteworthy in two respects: the heaviest concentration is in South China, presumably the habitats of the AA's, and the area of total absence includes the steppes and loessland of northwest China, the probably homeland of the Sino-Tibetan ancestors of the Chinese. From this perspective, it is easy to see why there is no word for tiger in Sino-Tibetan, or in the oldest stage of Chinese. To be sure, the word was attested as a pictograph in the oracle bones. What this means is that small bands of AA's occupied parts of the Yellow River basin before the arrival of the Chinese. The AA's had the word for tiger in their language and transmitted it to the Chinese.

It is possible that 虎 had a disyllabic doublet, derived from the same AA source. The *Tso-chuan* says 楚人谓乳谷, 谓虎于## “The Ch’u people call ‘to nurse’谷, and ‘tiger’于##”. The initial of 于 has the value – in MC, but here is some reason to believe that its OC value is k- or k’-. 于 is a variant of 于, and the latter was used to transcribe “khotan” in the *Shih-chi*: 于阆, 于## also has a variant 狗窠; Kuo P’u’s 郭璞 commentary to the *Fang-yen* states under 于虎兔 ‘tiger’: 今江南山夷呼虎为虎兔, 音狗窠, “Nowadays the hill tribes in the south of the Yangtze call ‘tiger’虎兔, pronounced as 狗窠 (MC kəu-təu).” The OC form of the Ch’u word for ‘tiger’ was therefore something like ** *kat’a*.

The only difference between AA *kala□ and Chinese is –l- versus –t’- or –t-, which may conceivably be explained as follows. Some AA forms have a dental stop: Pinnow regards Khmer khla ‘felines’ as a cognate of dho (thom) ‘tiger royal,’ and according to Kuhn, Karia ki*□ □<*kil-d□□ (Pinnow, p. 142). Kuiper has noted that there is a variation among Munda d, t, and l in initial position.** It may be that AA *kala had a dialect form kata, and the latter was represented by the Ch’u word for ‘tiger.’ The above two paragraphs were offered merely as a speculative conjecture, since much remains uncertain on both the Chinese and the AA side.

(1) 牙** ngra/nga/ya ‘tooth, tusk, ivory’

AA: VN ng ‘ivory’; Proto-Mnong (Bahnar) * ngo’la ‘tusk’;** Proto-Tai * nga.

Chinese ya has a 2nd Division final in MC, which, according to the Yakhontov-Pulleyblank theory, calls for a medial –r- in OC. And it is our belief that OC *ngra was derived from an AA form similar to Proto-Mnong * ngo’la.

Our theory that Chinese ya was a loan is based upon the following considerations. (1) The oldest Chinese word for ‘tooth’ is ch’ih, which once had an unrestricted range of application, including ‘molar,’ ‘tusk,’ and ‘ivory.’ (2) Ya is of relatively late origin. When it first appeared, it was only used for ‘animal tooth’ and ‘tusk,’ which was and still is the meaning in AA. (3) While North China once had elephants, they became quite rare during the Shang and Chou dynasties, and ivory had to be imported from the middle and lower Yangtze region. Imported items not infrequently bear their original names, and by our previous argument, the Yangtze valley was inhabited by the AA’s during the first millennium B.C.

Ch’ih 𪗇 consists of a phonetic 止 and the remaining part as a signific. The latter is a pictograph showing the teeth in an open mouth. Ancestral forms of the pictograph occurred frequently in the oracle bones. Since adding a phonetic is a standard method for creating new graphs for old words, we can be reasonably certain the oracle bone forms cited represented ch’ih. The graph of ya, however, has no identifiable occurrence in the oracle bones and only one probable occurrence in the bronze inscriptions. This statement is based upon the fact that ya is listed neither in Li Hsiao-ting’s compendium of oracle bone graphs nor in Yung Keng’s dictionary of bronze graphs.** Karlgren cited a bronze form for ya in GSR (37b). But Kuo Muo-jo marked this occurrence of ya as a proper name, which makes it impossible to ascertain the meaning further.**

There are reasons to believe that the absence of ya from early epigraphic records was not merely accidental. The oracle bones contained many records of prognosis concerning illness, and among them tooth-ache.** The graphs used were always ancestral forms of ch’ih. The oracle bones also contained a representative list of terms for parts of the body, including head, ear, eye, mouth, tongue, foot, and probably also elbow, heel, buttock, shank**. The absence of ya under such circumstances is quite conspicuous.

A graph must first exist before it can become a part of another graph, and the older a graph, the more chances it has to serve as part of other graphs. By this criterion, ch’ih is much older than ya. In the oracle bones, ch’ih occurs as the signific of three graphs. In the Shuo-wen, ch’ih occurs as the signific of forty-one graphs, all having something to do with tooth; ya, only two graphs, one of which has a variant form with ch’ih as the signific. The Shuo-wen also tells us that ya has a ku-wen form in which the graph for ch’ih appeared under the graph for ya. What this seems to indicate is that when 牙 first appeared, it was so unfamiliar that some scribes found it necessary to add the graph for ch’ih in order to remind themselves what ya was supposed to mean. 牙 also occurs as the phonetic of eight graphs (six according to Karlgren). But none of these graphs is older than 牙, and our conclusion is not affected.

The meaning of ch’ih in the oracle bones is primarily ‘human tooth,’ including ‘molar.’ On one shell, there

occurred the statement.....which has been interpreted, “Yn came to send a tribute of elephant’s tusks.”** But other interpretations are also possible. The use of ch’ih as ‘tusk, ivory’ is most clearly illustrated in Ode 299 懷彼淮夷，來獻其琛，元龜象齒 “Far away are those Huai tribes, but they come to present their treasures, big tortoise, elephant’s tusks”; and not quite so clearly in two passages in the 禹貢 “Y kung,” both of which listed 齒，革，羽，毛 as items of tribute. Here ch’ih can mean either ‘ivory’ or ‘bones and tusks of animals,’ all used for carving. Lastly, ch’ih also applies to tooth of other animals, 相鼠有齒 “Look at the rat, it has its teeth” (Ode 52).

Beginning with the Book of Odes we have unambiguous evidence for the use of ya. But in the pre-Han texts ya still did not occur frequently, and an analysis of this small corpus reveals that ya was never used for human tooth. Hence the Shuo-wen’s definition of ya as 牡齒, usually interpreted as ‘molar,’ seems to reflect a later, probably post-Ch’in, development.** The most frequent occurrence of ya in the sense of ‘tooth’ is in the compound 爪牙 ‘claw and tooth,’ and there the reference to animal tooth is quite clear. The Yi-ching contains a line in which the meaning of ya was ‘tusk’: 豕之牙吉 ‘the tusk of a castrated hog: [the sign is] propitious.’ The line in Ode 17 誰謂鼠無牙 probably means ‘who says the rat has no tusks?’ but some scholars prefer to interpret ya simply as ‘teeth (incisors).’

Elephants once existed in North China; remains of elephants have been unearthed in Neolithic sites as well as in An-yang.** Ivory carving was also a highly developed craft during the Shang dynasty.** These facts, however, should not mislead us into thinking that elephants had always been common in ancient North China. Yang Chung-chien and Liu Tung-sheng made an analysis of over six thousand mammalian remains from the An-yang site and reported the following finding: over 100 individuals, dog, pig, deer, lamb, cow, etc.; between 10 and 100 individuals, tiger, rabbit, horse, bear, badger (獾) etc.; under 10 individuals, elephant, monkey, whale, fox, rhinoceros, etc.** The authors went on to say that rare species such as the whale, the rhinoceros, and the elephant were obviously imported from outside, and their uses were limited to that of display as items of curiosity. This view is also confirmed by literary sources. In the Han Fei-tzu, it is said that when King Chou of the Shang dynasty made ivory chopsticks, Chi Tzi, a loyal minister, became apprehensive – implying that when as rare an item as ivory was used for chopsticks, the king’s other extravagances could be easily imagined.** Importation of ivory in the form of tribute was also reported in Ode 299 and in the “Yü-kung,” both of which were cited above.

The history of ya and ch’ih can now be reconstructed as follows: The people of the Shang and Chou dynasties have always depended upon import for their supply of ivory. But during the early stage, ivory and other animal tusks and bones were designated by ch’ih, which was also the general word for ‘tooth.’ Items made of ivory were also indicated by adding a modifier 象 hsiang ‘elephant’ before the noun, for example 象簪, 象弭, 象箸 ‘ivory comb-pin,’ ‘ivory bow tip,’ ‘ivory chopsticks.’** Then ya came into the Chinese language in the sense of ‘tusk.’ Because a tusk is larger than other types of teeth, ya gradually acquired the meaning of ‘big tooth, molar’ by extension, thus encroaching upon the former domain of ch’ih. When later lexicographers defined ya as ‘molar’ and ch’ih as ‘front tooth,’ they are describing, though without clear awareness, the usage of the Han dynasty and thereafter. By further extension, ya also became the general word for ‘tooth,’ while retaining its special meaning of ‘ivory.’

Some Min dialects still employ 齒 in the sense of tooth. The common word for tooth in Amoy is simply k’i. Foochow has nai3 which is a fusion of ɲ plus k’i, i.e. 牙齒. This strongly suggests that in Min the real old word for ‘tooth’ is 齒 as in Amoy, the implication being that this was still the colloquial word for ‘tooth’ well into Han when Fukien was first settled by the Chinese. The Japanese use 齒 as kanji to write ha ‘tooth’ in their language; 牙 rarely occurs. Both these facts provide supplementary evidence for the thesis that the use of ya as the general word for ‘tooth’ was a relatively late development.

In a note published in BSOAS, vol. 18, Walter Simon proposed that Tibetan so ‘tooth’ and Chinese ya 牙 (OC *ng*) are cognates, thus reviving a view once expressed by Sten Konow. Simon’s entire argument was based upon historical phonology; he tried to show

(a) OC ha8d consonant clusters of the type sng- and C-, (b) by reconstructing 牙 as sng*>zng >nga and 邪 as z□*>z**, one can affirm Hs Shen’s view that 邪 has 牙 as its phonetic, and (c) Chinese sng* can then be related to a Proto-Tibetan *sngwa and Burmese swa:>θwa:.

Our etymology for ya ‘tooth’ implies a rejection of Simon’s view; if ya is borrowed from AA, then the question of Sino-Tibetan comparison simply does not arise. And even if our theory is not accepted, there is no reason to adopt Simon’s analysis; ya is clearly a word of relatively late origin, and the fact that 邪 has 牙 as its phonetic can be explained by assuming that the z- of 邪 resulted from the palatalization of an earlier g-.**

(7) 弩 ** na/nuo/nu ‘crossbow’

‘crossbow’ in AA: VN n*; Proto-Mnong * so’na; ** Proto-Tai * hnaa.

Cf. Mon, Old Mon t̃a; Palaung kaŋ, kaŋ□; Tibeto-Burman: Nung the-na; Mso ta-na.

The crossbow is at present widely used by the tribes in southwest China and Indo-China. The cover of Mon-Khmer Studies. II,** for example, shows a picture of the crossbow. Early references to the crossbow in Chinese texts also point to that general region as the place of origin. The Han-shu explicitly mentioned the crossbow as one of the weapons used by the tribes inhabiting Hainan Island, and implied that it was also used by other tribes farther south. ** The Shih-chi stated that the crossbow produced in the state of Han 韩 was called “His-tzu” 奚谷子, which is also the name of a southern tribe. ** Szechuan was famous for its crossbow. Both the Hua-yang-kuo chih 华阳国志 and the Hou-han-shu reported that when a white tiger roamed the area of Ch’in and neighboring states, a man from Pa (巴郡阆中人) had to be called in, and he killed the tiger with a crossbow made of white bamboo. King An-yang, a prince from Szechuan, is said to have brought along the crossbow as he entered Vietnam when Chao T’o tried to conquer Vietnam at the end of the Ch’in dynasty; he was for a time stymied by King An-yang’s archers using crossbow. **

The fact that the crossbow has a southern distribution, past and present, suggests that it was acquired by the Chinese. Phonology provides another reason. The Tai and Vietnamese, because of their proximity to Chinese speaking peoples, were the most likely points of contact. The Tai form implies voiceless initial **-. VN n is in the sc tone, which comes from a voiceless initial. Proto-Mnong *so’na indicates that perhaps the Proto-AA form should be *s-na. Now, under the hypothesis that Chinese borrowed this word from AA, we only need to assume that *s- (or the voicelessness of the initial *n-) was lost in the process of borrowing. Under the contrary hypothesis that the loan was in the opposite direction, none of the AA or Thai forms can be easily explained.

The crossbow was widely used during the Han dynasty. The character ‘crossbow’ and the terms for the trigger of the crossbow (机栝, 发机) appeared in texts written during the Warring States Period, but not earlier.** The third and fourth century B.C. seems to be the time when the crossbow and the term for it were introduced into China.

The Japanese scholar Fujita Toyohchi believes that the Chinese crossbow came from India, on the strength of the Sanskrit word dhanu ‘bow’ and the fact that India already used the crossbow in warfare during the fourth century B.C.** The Sanskrit word may have something to do with Mon and Old Mon t̃a, Nung thə-na, Moso ta-na, but is unlikely to be the direct source of 弩; 弩 belongs to the MC 鱼 rhyme, and as Chou Fa-kao has shown, Sanskrit -o and -u were regularly transcribed before the Tang dynasty by words belonging to 尤, 侯, 虞, 模 rhymes but seldom by words belonging to the 鱼 rhyme.** Whether the ultimate origin of the crossbow is to be sought in India or elsewhere is a question lying beyond the scope of this paper.

We would now like to consider the possibility of the survival of AA forms in some modern Chinese dialects spoken in areas occupied by the ancient Yeh peoples.

The Min dialects spoken in Fukien and northeastern Kwangtung represent the most aberrant group of dialects in China. While most of the vocabulary found in these dialects can be traced back to early Chinese sources, there remains a residue of forms which cannot be explained in this way. A possible explanation of such words would be to consider them relic forms from the non-Chinese language spoken in this region before the Chinese began to settle there in the Han dynasty. The pre-Han inhabitants of Fukien were the Min Yeh; they appear to have been a semi-civilized state which was finally destroyed by Han Wu in 110 B.C.**

Above we have demonstrated that the language of the Nan Yeh was most likely Austroasiatic. Might we not go one step further and suppose that all the various Yüeh peoples of ancient southeastern China were AA speaking? In other words, we would propose that the term Yeh was essentially linguistic. If this supposition is

correct, then the present day Min dialects have an AA substratum, and we should expect to find a certain number of relic words of AA origin in these dialects. We believe that this is indeed the case, and below we list and discuss such forms as we have been able to identify up until now.

It is noteworthy that the forms we discuss are best represented in Vietnamese. This is not surprising since the modern Vietnamese are the descendants of the ancient Yüeh and their present territory represents the AA-speaking region closest to Fukien and northeastern Kwangtung.

In discussing Min words we will give the forms in Foochow (FC hereafter) and Amoy (AM hereafter); other dialects will be cited where relevant. Dialect forms will be given in a broad IPA transcription; tones will be indicated by superscript numerals.**

(8) FC t*ɲ/AM t*ɲ ‘shaman, spirit healer, medium’

It is not entirely clear whether the word in question is basically a nominal or verbal root since it occurs in constructions of both types. Thus in FC dialect we have t*ɲ-tsi ‘shaman,’ t*ɲ-tsi ‘to shamanize,’ t*ɲ-siŋ ‘id.’ pha□-t*ɲ ‘shaman’s assistant’; in Amoy we have ‘id.,’ ‘id.,’ ‘to dance under the influence of spirits,’ ‘id.’ (note: both and mean ‘to leap, to dance’), ‘the spirit leaves the shaman,’ ‘to become possessed.’ In the Kienyang dialect (northwest Fukien) we have ‘shaman’ and ‘to become possessed.’ Yungan (Central Fukien) has ‘to shamanize’ (‘to jump, to dance’), ‘shaman.’ The common element in all these expressions is Foochow, Amoy, Kienyang, and Yungan; these forms point back to a Proto-Min * in the tonal category corresponding to the classical p’ing tone. All of the dialects show lower register (yang) tones indicating that the protoform had a voiced initial. The word in question is sometimes written with the character (MC d’ung) which means ‘boy, lad, child’; but it is hard to see what relationship the two words have, since a shaman is always an adult and never a young boy.

In Vietnamese we find a word which both semantically and phonologically corresponds to the unexplained min etymon perfectly: ‘to shamanize, to communicate with spirits,’ ** ** ‘male, shamanistic spirit,’ ‘to shamanize, to communicate with spirits,’ ‘shameness,’ ‘female shamanistic spirit,’ ‘shaman, sorcerer.’** This word is not confined to Vietnamese within Austroasiatic. In Written Mon the cognate is ‘to dance (as if) under daemonic possession,’ ‘trance of? shaman.’** In Modern Mon the corresponding form is ‘to leap with the feet together, to proceed by leaps, to dance while under daemonic possession, to climb’; Shorto also lists a derived meaning ‘shaman(?)’** Further AA connections can be adduced: Shorto links the Written Mon form with Khasi lyngdoh ‘priest’; to support this equation, one can cite similar examples of Mon final – corresponding to Khasi –h: spoken Mon, Written Mon ‘belly,’ Khasi ‘id.’ On the Munda side, there are at least three good cognates: Santali ‘a kind of dance, drumming and singing connected with marriage’; Ho dong ‘a wedding song’; Sora toŋ ‘to dance.’**

(9) 𠵹 FC kiaŋ/AM kiã ‘son, child’

This word like the preceding one is attested for all Min dialects. From the conservative dialects of northeastern Fukien, we can see that the word originally ended in –n: Fuan ki□ŋ, Ningteh kian. The Proto-Min form was probably something like *kian with the tone which corresponds to the classical shang or rising tone. This word is attested textually quite early. The T’ang poet Ku K’uang 顾况 (? 725-? 816) composed a poem when he was serving in Fukien in which he used the word in question. In the poet’s own preface to the poem he explains the word 𠵹: “it is pronounced like the word 蹇 (MC k* □n-k* ān-shang tone); in Fukien ‘son’ is called 𠵹 in the popular language.”** This word is clearly the same as the modern Min words for ‘son, child.’

We would like to suggest that the Min word is related to the AA etymon represented by VN con ‘child.’ This etymon is very widely distributed throughout Austroasiatic: Khmer koun, Spoken Mon kon, Written Mon kon, kwen, Bru k□□n, Chong kheen, Wa kn, Khasi khu: n;** it is also well represented in Munda: Kharia knn ‘small,’ Santali ‘son, child,’ Hohon ‘child.’** The Min form agrees with the AA forms predominantly show low to mid unrounded vowels. The Min form of Kienyang kyeŋ, however, has a rounded medial which may indicate that the Min forms derive from some type of earlier rounded vowel.

(10) AM/Fuan tam ‘damp, wet, moist’

These forms which are attested in most eastern Min dialects except Foochow can be related to VN **, ‘wet,

moist.’

(11) FC siŋ/AM tsim ‘a type of crab’

These forms may bear some relationship to VN sam ‘king crab.’ The VN form is probably further related to Mon-Khmer forms such as Bahnar, Written Mon khatham, etc.**

(12) FC pai□/AM bat ‘to know, to recognize’

AM b- generally corresponds to FC m-; the upper register tone with a voiced initial is also incongruous. Douglas gives a Tung-an form pat for Southern Min, so we regard the AM form as irregular. We can compare all these forms with VN biēt ‘to know, to recognize.’

(13) FC p’uo□/AM p’e□., cf. Fuan p’ut ‘scum, froth’

Compare VN ‘scum, bubbles, froth.’

(14) FC p’iu /AM p’io ‘duckweed’

This word is recorded in Kuo P’u’s (AD 276-324) commentary to the Erh-ya where he states that p’iao was the Chiang-tung (southeastern China south of the Yangtze) word for ‘duckweed.’** VN bèò ‘duckweed’ is obviously related to all these forms. The VN form is probably further related to Spoken Mon pè, Written Mon bew ‘to ride low in the water.’

(15) FC kie/AM kue, cf. Kienyang ai ‘(small) salted fish’

Baldwin and Maclay define the Foochow word as follows: “a kind of salted seafish; it is small varying from one to four or five inches in length.” There is a VN word kè which is defined as a ‘type of fish; it is small and resembles the gecko.’ The primitive Yeh etymon probably meant a small fish of some sort, and the specialization of meaning took place in the various languages later.

We will conclude with two general observations.

Until the 1950’s archaic loans into Chinese have not been seriously studied. Part of the reason is quite understandable. As alluded to before, the languages of China’s neighbors and ethnic minorities were not sufficiently known, and without such knowledge, it was impossible to estimate the time-depth of a non-Chinese word suspected as the source of a loan, or to reconstruct its old form. But this handicap is rapidly being removed. There is, however, another reason – in fact-, a prejudice – that is blocking progress in the field. We have in mind the widely held that the Chinese culture was so superior that there was no need for her to borrow anything, linguistic elements included. ** When a Chinese word shows similarity to a non-Chinese word, it was automatically assumed that Chinese was the donor, not the receiver. With the recent discovery of cereal grains and bronze artifacts at archaeological sites in Northern Thailand, we now know that Southeast Asia had a highly developed culture in remote antiquity, quite capable of serving as the originator and donor of cultural inventions. Leaving aside the question of relative cultural superiority – which can never be subject to precise scientific proof – it seems evident that when two peoples are in contact, borrowing is almost always a two-way street. Witness the large number of American Indian words in English and vice versa. A people may have given more than what she receives. But to assert that a certain people in principle cannot and need not receive anything seems to go against common sense and all known instances of cultural contact. The evidence presented above, we hope, will help to undermine that ancient myth whose downfall is long overdue.

Chinese is one of the major languages of the world without an adequate etymological dictionary, ** and we may take a moment to consider what sort of preparatory work is necessary to bring it into existence. Obviously one of the basic unresolved questions is the linguistic affiliation of Chinese. If Chinese is related to Tibetan or Tibeto-Burman, as most scholars believe to be the case, then the origin of a Chinese word is ascertained once its cognates in these languages are found. The same applies to Tai if Tai also turns out to be related to Chinese. Here already we encounter a problem, for the assumption is that we are dealing with an original Chinese word. How can we be sure? Phonological regularity provides one test. If, for example, a Chinese word and a Tibetan word in the same semantic range show regular phonological correspondence, then this fact

provides strong evidence that both are derived from the proto-language. Even here there is the possibility that both words are loans from a third language, witness Chinese **kron* and Tibetan *klu*. Further, in the present state of Sino-Tibetan studies there is much uncertainty concerning phonological matters, and therefore this test has only limited application.

Another often followed procedure is to look up GSR and see if the word is included. This, we submit, is only the first step and not the last. The GSR includes words from the oracle bones up to texts written before the Ch'in dynasty, a period of over a thousand years, during which time many things could have happened to the lexicon. To ascertain whether a word is old, or new and therefore possibly a loan, we need to ask a number of questions. Is it attested in the oracle bones or bronze inscriptions? Does it have a skewed geographic distribution? Does it have many synonyms or few? Is its meaning unusually restricted, as loan words tend to be when first introduced into a language? Finally, there is always one way to show the relative recency of a word, that is, to establish the fact that it is a loan. In this sense, the study of loan words is complementary to the comparative reconstruction of words in the proto-language, and provides the peripheral vision without which no etymological work can proceed safely.

- 1 We follow the scheme set forth by Norman Zide in his Introduction to Zide ed., *Studies in Comparative Austroasiatic Linguistics* (Hague, 1966), hereafter SCAL; H.J. Pinnow's *Versuch einer historischen Lautlehre der Kharia-Sprache* (Wiesbaden, 1959) has a convenient linguistic map of the AA languages, but he did not include Vietnamese-Muong.
- 2 A. Haudricourt, "La place du vietnamien dans les langues austroasiatiques," *Bulletin de la Société de Linguistique* 49 (1953), 122-28, and "L'origine des tons vietnamiens," *JA* 242 (1954), 69-82.
- 3 Ruth Wilson, "Muong and some Mon-Khmer languages," in SCAL.
- 4 H.R. Davies, *Yun-nan, the link between India and the Yangtze* (Cambridge, 1909), p. 341; R.A.D. Forrest, *The Chinese language* (second edition, London, 1965), p. 95; A. Haudricourt, "Austroasiatic in the northeast," in SCAL, p. 54 ff.
- 5 A. Meillet and M. Cohen, *Les langues du monde*, 1st ed. (1924), K. Wulff, *Chinesisch und Tai* (Copenhagen, 1934).
- 6 Paul Benedict, "Thai, Kadai, and Indonesian: a new alignment in Southeastern Asia," *Am. Anthr.* 44 (1942), 576-601.
- 7 P.K. Benedict, "Austro-Thai studies," I, *Behavior Science Notes*, vol. 1, no. 4 (1966); II, *BSN*, vol. 2, no. 3 (1967); III, *BSN*, vol. 2, no. 4 (1967). See especially the 1966 article, pp. 258-259.
- 8 E. Pulleyblank, "Chinese and Indo-Europeans," *JRAS* (Great Britain & Ireland) (1966), 9-39; R.A.D. Forrest, *op. cit.*, p. 135; Benedict, especially the third article, "Austro-Thai studies, III; Chinese and Austro-Thai."
- 9 Dictionaries such as H.L. Shorto's two Mon dictionaries; see notes 69, 70 below.
- 10 L. Aurousseau, "La première conquête chinoise de pays annamites," *BEFEO* 23 (1924), 137-266.
- 11 Lo Hsiang-lin 罗香林 <百越文化与源流> (Taipei, 1955), p. 10; on the oracle bone form of yeh: Yung Keng 容庚 <鸟书考>, *Yen-ching Hseh-pao* 16 (1934); on the bronze form of ## (=越): Paul Serruys, "Five word studies on Fang Yen (second part)," *Monumenta Serica* 21 (1962), p. 279, no. 35; Serruys thinks that yeh was a stepped adze, but that may be going too far.
- 12 L. Finot, "L'Indochine préhistorique," *Bull. Comité Asie française*, Feb./July, 1919; also G. Coedès, *Les Peuples de la péninsule Indochinoise* (Paris, 1962), p. 32. Chang Kwang-chih, *Archaeology of Ancient China* (New Haven, 1963), p. 123, note 40, and p. 129.
- 13 Izumi Hisanosuke 泉井久之助 <刘向<说苑>卷十一越歌> Gengo Kenkyū 22/23 (1953), pp. 41-5.

- 14 Lo Hsiang-lin, *op. cit.*, pp. 151-172 has a convenient collection of such words.
- 15 The sign ** means our reconstruction of OC; * means Karlgren's OC reconstruction as given in GSR.
- 16 Chou Li, SPTK 4, 21a; Cheng's commentary is attached to.
- 17 Tuan Y-ts'ai 段玉裁<说文解字注>, Yi-wen reprint, Taipei (1965), p. 268.
- 18 Chiang Yu-kao 江有诰 <谐声表>(in <音韵学丛书>, 二十一部, 11b).
- 19 N. Bodman, *A linguistic study of the Shih-ming* (Cambridge, Mass., 1954), p. 100, no. 779.
- 20 Tung T'ung-ho 董同禾<上古音韵表稿>, reprinted 1967, Academia Sinica.
- 21 H.L. Shorto, "Mon labial clusters," BSOAS 32, part I (1969), p.8.
- 22 R. Burling, *Proto Lolo-Burmese* (=International Journal of American Linguistics, 33, no. 2, part II, [April 1967]), p. 78.
- 23 Benedict, "Austro-Thai studies III; Chinese and Austro-Thai," cited above.
- 24 A. Haudricourt, "Introduction phonologie historique des langues miaoyao," BEFEO 44(1954), 2, p. 568, item no. 56.
- 25 A. Haudricourt, "Austroasiatics in the northeast," SCAL, p. 55.
- 26 S.E. Yakhontov, "Consonant combinations in Archaic Chinese," XXV International Congress of Orientalists, papers presented by the USSR delegation (Moscow, 1960); E. Pulleyblank, "The consonantal system of Old Chinese," part I, *Asia Major* (new series) 9 (1962), pp. 59-144.
- 27 Li Fang-kuei 李方桂<上古音研究>, *Tsing Hua Journal of Chinese Studies* (new series) 9.1 & 2 (1971), 1-61.
- 28 See Wen I-to 闻一多<闻一多全集>II, p. 206.
- 29 Tung T'ung-ho, *op. cit.*; E. Pulleyblank, "The consonantal system of Old Chinese," part 2, *Asia Major* 9 (1963), 206-65; S.E. Yakhontov, "Fonetika kitaiskogo yazyka I tysyacheletiya do n.e. (sistema finalei)" in two parts, *Problemy vostokovedeniya* 2 (1959), 137-47, (1960), 102-15, English translation by Jerry Norman in *Chilin* (Publication of the Chinese Linguistic Project, Princeton University), nos. 1 & 6.
- 30 Cf. Mongolian 'river'; but it may have some connection with Tibetan rgal 'a ford,' rgal-ba 'to cross, to ford.' In a future article we hope to set forth evidence for final-l in 歌部 of OC.
- 31 Li Hsiao-ting 李孝定<甲骨文字集释>, 16 volumes, Academia Sinica (Taipei, 1965). All subsequent reference to the oracle bones, unless otherwise noted, is to this work.
- 32 Fu Ssu-nien 傅斯年<周颂说>, BIHP 1 (1928), 107-108.
- 33 Tuan Y-ts'ai <说文解字注> under ##; Ch'ien Ta-hsin 钱大昕<十驾斋养新录>, chan11. For the opposite view, see Jao Tsung-yi 饶宗颐<楚辞地理考>(Shanghai, 1946), 78-83.
- 34 L.Aurrouseau, *op. cit.*, p. 263.
- 35 <大越史记外记全书>卷一<鸿庞记>。
- 36 Chang Kwang-chih, *op. cit.*, 249-255.

- 37 We are indebted to Professor Nicolas Bodman of Cornell University for pointing this out to us. The Mon-Khmer data is taken from Franklin Huffman, "An examination of lexical correspondences between Vietnamese and some other Mon-Khmer languages," a paper presented to the Cornell Linguistics Club, April, 1974 and also to the 8th Sino-Tibetan Conference.
- 38 Li Fang-kuei, *op. cit.*, p. 10.
- 39 <史记•楚世家>: "熊渠曰: '我蛮夷也, 不与中国之号谥'; <楚辞•九章•涉江>: "哀南夷之莫吾知也"; <吕氏春秋>: "楚变于蛮者也"。
- 40 We have presented more detailed arguments in Tsu-lin Mei and Jerry Norman, "Cl->s- in some Northern Min dialects," *Tsing-hua Journal of Chinese Studies (new series)* 9,1 & 2(1971), 96-105.
- 41 Tsu-lin Mei, "Tones and prosody in Middle Chinese and the origin of the rising tone," *HJAS* 30 (1970), 86-110.
- 42 Shou Chen-huang 寿振黄主编<中国经纪动物志•兽类>(Peking, 1962); G.M.Allen, *The Mammals of China and Mongolia* (New York, 1940).
- 43 Yang Chung-chien and Liu Tung-sheng, 4(1949), 145-153.
- 44 F.B. J. Kuiper, "Consonant variation in Munda," *Lingua* 14 (1964), 85-87.
- 45 Henry Blood, *A reconstruction of Proto-Mnong* (Summer Institute of Linguistics, 1966), p. 9 & p. 72.
- 46 Li Hsiao-ting, *op. cit.*, Yung Keng 容庚<金文编>.
- 47 Kuo Muo-jo 郭沫若<两周金文大系考释>p. 196.
- 48 Chang Ping-ch'an 张秉权<殷虚文字丙编>上辑(二)(Academia Sinica, 1959), p. 132 ff.; Hu Hou-hsan 胡厚宣<殷人疾病考>, <甲骨学商史论丛初集>(1944).
- 49 Chang Ping-ch'an, *ibid.*
- 50 Li Hsiao-ting, *op. cit.*, p. 0625.
- 51 Tuan Y-ts'ai, *op. cit.*, see Tuan's note under ya.
- 52 Hs Chung-shu 徐中舒<殷人服象及象之南迁>, *BIHP* 2 (1930), 60-75; Yang Chung-chien and Liu Tung-sheng, *op. cit.*
- 53 Kuo Pao-chn 郭宝钧<中国青铜器时代>(Peking, 1963), p. 77.
- 54 Yang Chung-chien and Liu Tung-sheng, *op. cit.*
- 55 <韩非子•喻老>: "昔者纣为象箸而箕子怖。"
- 56 象##Ode No. 107, 象弭Ode No. 167, 象箸Han-fei-tzu.
- 57 For example, S.E. Yakhontov, *Drevne-Kitaiskii Yazyk [The Old Chinese language]*, (Moscow, 1965), pp. 30-31.
- 58 Henry Blood, *op. cit.*
- 59 *Mon-Khmer Studies* 2(1966), Publications of the Linguistic Circle of Saigon.

- 60 <汉书•地理志>。
- 61 <史记•苏秦传>。
- 62 <旧唐书>卷四十一。
- 63 See the quotations cited from Mo-tzu, Chuang-tzu, Sun-tzu, Huai-nan-tzu, 徐中舒<弋射与弩之渊源及关于此类名物之考释>, BIHP 4 (1934), p. 427. Hs asserts that ##(a graphic variant of弩) appeared in a Western Chou bronze vessel, , and goes on to argue that the crossbow already existed during that Western Chou. Without other supporting evidence, Hs's case seems doubtful.
- 64 Fujita Toyohachi藤田丰八<支那石刻之由来>, Toy Gakuh 16, 2 (1927), pp. 170-171.
- 65 Chou Fa-kao周法高<切韵鱼虞之音读及其演变>, BIHP 13 (1948), 119-152.
- 66 Fan Wen-lan范文澜<中国通史简编>(Peking, 1964), part II, p. 90.
- 67 Foochow forms are based on R. S. Maclay and C.C. Baldwin, An alphabetic dictionary of the Chinese language in Foochow dialect (Foochow, 1870); Amoy forms are taken from Carstairs Douglas, Chinese-English dictionary of the vernacular or spoken language of Amoy (London, 1899). Forms from other Min dialects are from J. Norman's field notes. For Proto-Min, see Jerry Norman, "Tonal development in Min," Journal of Chinese Linguistics 1.2 (1973), 222-238; and "The Initials of Proto-Min," JCL 2, 1 (1974), 27-36.
- 68 VN forms are taken from Ho Ch'eng et al., <越汉辞典>(Peking, 1966). Hereafter all VN forms will be cited from this source.
- 69 H.L. Shorto, A dictionary of the Mon inscriptions (London, 1971), p. 200.
- 70 H.L. Shorto, A dictionary of the modern spoken Mon (London, 1962), p. 117.
- 71 Munda forms are taken from the following sources: Santali-P.O. Bodding, A Santal dictionary (Oslo, 1934); Ho-Lionel Burrows, Ho grammar (Calcutta, 1915); Sora-Rao Sahib G. V. Ramamurti, Sora-English dictionary (Madras, 1938).
- 72 For the quotation from Ku K'uang, see The Institute of Literature of the Chinese Academy of Science, <中国文学史>(Peking, 1963), voll II, p. 414.
- 73 See Franklin Huffman, op. cit.
- 74 Pinnow, op. cit., pp. 111-112.
- 75 Pinnow, op. cit., p. 77.
- 76 This definition is discussed at length by Wang Nien-sun in his Kuangya shu-cheng <广雅疏证>, ch. 10a.
- 77 The latest example of this belief is found in Charles Li and Sandra Thompson, "An explanation of word order change SVO>SOV," Foundations of Language 12:2 (1974), where it is stated that China had "the overwhelming dominance of civilization in pre-twentieth century Asia..." and "such cultural dominance precludes the possibility of an external influence on Chinese."
- 78 One way to measure the distance future etymological work has to advance is to examine the work by Td Akiyasu藤堂明保<汉字语源辞典>[An etymological dictionary of Chinese characters].

这篇用借词来说明，汉族渡江南下以前，长江以南的原住民族是南亚民族。

最重要的证据是“江”字。“江”字上古音 *krong, 南亚语有它的同源词，如越南语，Sedang krong, 古高棉文krung等等。这个字是汉语从南亚语借来的，因为(1)“江”最早是长江的专名，南亚语里的同源词一直是河流的通名；(2)“江”字在文献里晚出，甲骨文里没有，金文才有；(3)唐代孔颖达指正，只有江南的河流才用“江”做通名，江北的河流不用。这条证据说明，周朝以前，南亚民族曾经在长江的南岸居住。

本文还说明闽语的“囡”(小孩)，“𦰩”(浮萍)等字在汉语里找不到语源，是从南亚语里借来的。<周礼>郑玄注：“越人谓死为札”，南亚语有个“死”义“札”音的字，如越南语，孟语。由此可见郑玄注里的“越人”是南亚民族。

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