

ANCIENT CHINESE PHONOLOGY AND THE *CH'IEH-YÜN*

KUN CHANG

A correct understanding of the nature of the rime dictionary *Ch'ieh-yün* and a proper interpretation of the phonological categories preserved in this dictionary are the most fundamental tasks in the field of Chinese historical phonology.

The *Ch'ieh-yün* was completed in 601 by Lu Fa-yen, though the framework for the dictionary was established some twenty years earlier by a circle of scholars, one of whom was Lu's father. *Ch'ieh-yün* has been traditionally interpreted as a co-ordinative compound: *ch'ieh* 'the initial part of a syllable' and *yün* 'what is left after the initial part is removed'. Wang Hsien (1961) points out, however, that in a fragmentary manuscript found in Tun-huang and alleged to be from Wang Jen-hsü's *Ch'ieh-yün* of 706, *ch'ieh-yün* is said to be synonymous with *tien-yin* 'standard pronunciation' and is therefore a subordinative compound.

In the *Ch'ieh-yün*, syllables are first classified into four groups on the basis of tone. Within these groups, syllables are classified on the basis of their rimes or finals (several finals, with or without medials, may belong to one rime category); each of these subgroups is further divided on the basis of initials. Under the first member of each of these smallest groups a *fan-ch'ieh* spelling is given. A *fan-ch'ieh* consists of two characters; the first indicates the initial, the second the final and tone. Medials or their absence are not always adequately expressed by the *fan-ch'ieh* spellings.

Of the original version of the *Ch'ieh-yün* we have Lu Fa-yen's preface; the body of Lu's work is preserved only in later revised and enlarged versions. For many years all that was available was the *Kuang-yün*, an expanded version of the *Ch'ieh-yün* completed in 1007-8 under the auspices of the Sung government. Two studies of the *Kuang-yün* by Ch'ing scholars are noteworthy: Ch'en Li's exhaustive research into the *fan-ch'ieh* spellings and his tabulation of the distribution of tones, initials, and finals (1879) and Liang Seng-pao's distribution charts (1890). In 1938 Chou Tsu-mo published a critical edition of the *Kuang-yün* with textual critical notes. Wei Chien-kung (1957) explored the principles underlying the arrangement of the rime categories in the *Ch'ieh-yün*. Within the twelve primary groups which are based on rime (see Chart 1), he discovered a common alphabetical order, according to which the rubric words for the rime categories of each group, such as 東, 冬, 鍾, 江, are arranged. This order ranges from dentals to labials in a manner which has, for the most part, neither known precedent nor apparent phonetic reason: t, th, s, š, s, tš, ts, tsh, dz, j, k, ŋ, h, h, ?, b, m. In some cases, however, the four tonal variations of a rime category do not have the same initial (e.g. 東 [t-]; 董 [t-]; 送 [s-]; 屋 [ʔ-]). Wei (1958) offered a variety of explanations

for such discrepancies, and also discussed the differences in rime arrangements in the various recensions of the *Ch'ieh-yün*.

In 1947 a manuscript version of Wang Jen-hsü's 706 edition of the *Ch'ieh-yün* was discovered in Peiping. Chou-tsu-mo (1966c) discussed the date of compilation of Wang's *Ch'ieh-yün*. Tung T'ung-ho (1948, 1952) made systematic investigations into the *fan-ch'ieh* spellings in this dictionary. Li Jung (1956) tabulated the distribution of tones, initials, and finals, discussed the *fan-ch'ieh* spellings, and proposed reconstructions. Lung Yü-ch'un (1968) published a critical edition of this version of the *Ch'ieh-yün* with copious emendations and annotations.

In addition to the *Kuang-yün* and the 706 edition, more than twenty fragments of the *Ch'ieh-yün*—a few block-prints, but mostly manuscripts—were discovered in northwest China, mainly in Tun-huang. These were reproduced in Liu Fu (1936), Wei Chien-kung (1948), and Chiang Liang-fu (1955), with lengthy discussions (in Liu Fu's posthumous publication by Lo Ch'ang-p'ei and Wei Chien-kung). There have been tentative attempts to identify these fragments with different recensions of the *Ch'ieh-yün* reported in historical documents (Chart 2). In spite of a time span extending over four hundred years and a marked increase in the number of dictionary entries, the various editions differ very little in their phonological categories, as the tables of contents reconstructed by Wei Chien-kung show (1948; Chart 3).

Foremost among Karlgren's contributions to Chinese phonology is his reconstruction of the *Ch'ieh-yün*'s phonological categories. In this reconstruction, presented in *Études sur la phonologie chinoise* (1915-26), he made use of modern Chinese dialects and Sino-Xenic pronunciations—Sino-Japanese, Sino-Korean, Sino-Annamese—as well as information derived from the phonological charts, which represent mainly the arrangement of the *Ch'ieh-yün*'s materials by late T'ang or early Sung scholars, who were influenced in this by the dialects which they themselves spoke. These charts were simplified during the Liao, Chin, and Yüan dynasties. Karlgren assumed, incorrectly as we shall see, that since the *Ch'ieh-yün* was completed in 601 in Ch'ang-an, it must represent the spoken language of Ch'ang-an, the capital of the Sui-T'ang period. The consequent interest in the 1920's in reconstructing the phonological system of the Ch'ang-an dialect is also reflected in H. Maspero's work on the Ch'ang-an dialect of the T'ang Dynasty (1920) and A. A. Dragunov's contribution to the reconstruction of Ancient Chinese (1928).

Scholars have been in fair agreement with Karlgren on the reconstruction of the initials in the *Ch'ieh-yün* (Chart 4). There are, however, problems in the following areas:

(1) The point of articulation of the sounds represented by the initial categories 知, 徹, and 澄. These initials are generally reconstructed as palatal stops: \check{t} , \check{th} , \check{d} . Lo Ch'ang-p'ei (1931) argued against this reconstruction. He allowed that in those instances where the initial was followed by a medial -j-, the -j- may have caused palatalization after the eleventh century. The only evidence for earlier pronuncia-

tions, however, indicated dental stops during the sixth century and retroflex stops from the end of the sixth century to the beginning of the eleventh century. Lo's argument was supported by his investigations into Chinese transliterations of Sanskrit. The correspondences between the Sanskrit retroflex stops ṣ , ṭh , ḍ , and their Chinese transliterations have also been studied by Chou Fa-kao (1945c, 1948c) and Chi Hsien-lin (1948). Chou pointed out that, because of changes in the Chinese language, we must take into account the time when a transliteration was made in order to properly interpret it: transliterations made prior to the Sui Dynasty may mean something different from those made during the Sui-T'ang period, and those made during the early T'ang may not have had the same pronunciations as those made during the late T'ang or the beginning of the Sung Dynasty. There may also have been differences in the originals, as Chi asserted: not all Buddhist texts in Sanskrit were in classical Sanskrit, nor were all Buddhist texts originally written in Sanskrit. Some of those translated into Chinese may have been written in an Indian dialect or in some Central Asian language. The study of the Chinese transliterations of Buddhist terms should thus be pursued with caution. Li Fang-kuei (1971) adopted Lo's reconstruction of ṣ , ṭh , ḍ for the initials 知, 徹, 澄 in Ancient Chinese in his article on Archaic Chinese phonology.

(2) The phonetic values of the 喻 initial and its relationship to 匣 have interested many scholars. Tseng Yün-ch'ien (1927) identified two subcategories in the 喻 group, 于 and 以, and suggested that 于 was the counterpart of hsia or *h- (匣), differing from it only in being followed by a medial *j- glide. Until then, reconstructions of Ancient Chinese velars had two gaps. There was no *hj- corresponding to *h- and no *g- corresponding to *gj- . The remaining gap was filled in by Li Jung (1965), who reconstructed an initial *g- for Ancient Chinese on the basis of evidence from modern Min, Wu, and Hui Dialects.

The pairing of 匣 (*h-) and 于 (*hj-) is supported by the evidence from southern dialects preserved in Lu Te-ming's *Ching-tien Shih-wen* and the original edition of Ku Yeh-wang's *Yü-p'ien*, two dictionaries compiled in the south during the sixth century A. D. (Lo Ch'ang-p'ei 1939, Chou Tsu-mo 1966a). In spite of this evidence, Lung (1970) ignored the interpretation of 于 as *hj- , reconstructing *j- for 于 and *ji- for 以.

(3) The contrasts of initial voiced affricates (*dz , *dž) and voiced fricatives (*z , *ž) in the *Ch'ieh-yün*, as well as the *Ching-tien Shih-wen* and the *Yü-p'ien* (original edition), do not always correlate with the modern pronunciations of particular words in the dialects which have these distinctions. Some dialects, however, such as those in the Wu region, do not make these distinctions at all, and it is possible that the compilers of these dictionaries spoke such dialects and thus erred when it came to segregating these two sets of initials. We know that the *Ching-tien Shih-wen* and the *Yü-p'ien* (original edition) are products of the Wu region of the sixth century. Chou Tsu-mo (1966a), in analyzing the *fan-ch'ieh* spellings in the *Yü-p'ien* (original edition), briefly touched upon this problem,

(4) Downer (1957) noted that there was no -j-: zero contrast between the retroflex initials tʂ, tʂh, dz, ʂ, and the low front vowel a in the *Ch'ieh-yün*. My own study shows that the *fan-ch'ieh* spellings in the *Ch'ieh-yün* usually indicate no medial -j- between the retroflex affricates and the low vowel a. After the retroflex fricatives, there are some double readings; these, however, represent variants of different times and different places. The first members of the following sets of alternative pronunciations were, for example, reported in the *Ching-tien Shih-wen* as the pronunciations of Hsü Miao (344-97).

敵 *ʂjap (D) versus *ʂap (D)

機 *ʂjat (D) versus *ʂat (D)

殺 *ʂjaj (C) versus *ʂaj (C)

(5) While no-one reconstructs a contrast of unaspirated versus aspirated voiced stops and affricates for Ancient Chinese, there is disagreement on the manner of articulation of these initials in the *Ch'ieh-yün*. Li Jung (1956) disputed Karlgren's contention that they were aspirated; Li's strongest evidence is the Chinese transliterations of Sanskrit, which has a four-way distinction among stops. (Chart 5 gives examples of the Chinese transliterations for Sanskrit labial-stop initials.) Chinese words with voiced labial-stop initials are used to transcribe Sanskrit ba (Chart 5, column 3). Chinese counterparts to Sanskrit bha are characters with voiced labial-stop initials which are modified in some way (Chart 5, column 4): in some cases, an additional character, 何, is used to represent the aspiration; in other cases, a small 口 is added to the left of the character; in still other cases, the character is glossed 重音 'with heavy pronunciation'. In eighth-century Chinese, transliterations of Sanskrit ba are represented by Chinese words pronounced mba (presumably in northwestern Chinese dialects.)

Karlgren's reconstruction of the *Ch'ieh-yün* has undergone constant revision. Chao Yuen-ren (1941) made the first attempt to apply phonemic principles to the analysis of the phonological system reconstructed by Karlgren. Samuel Martin, under Chao's guidance, published a monograph on the phonemes of Ancient Chinese (1953).

Major discussions have centered on the reconstruction of vowels in open syllables. As early as 1923, Wang Jung-pao offered substantial evidence from Chinese transliterations of Sanskrit and other languages for the reconstruction of the vowel â in the *Ch'ieh-yün*'s 歌 (â) and 戈 (uâ) categories. Lo Ch'ang-p'ei (1932), studying the rime patterns of authors from the fall of the Han Dynasty to the Sui unification (220-581), concluded that at this time the distinction of 魚 and 虞 was a special feature of the dialects around Chin-ling (Nanking). He added (1933) that though the Chinese transliterations of Tibetan names in the official treaty concluded in 822 between the Chinese and Tibetan governments indicate that words of the 魚 and 虞 categories were homonymous in the dialect of Ch'ang-an, Chinese-Tibetan bilingual

material of the late T'ang or Five-Dynasties period from the northwestern region around Tun-huang maintains a distinction. The words of the 虞 category had a rounded element; those of the 魚 category did not. Chou Fa-kao (1945b, 1948b) studied the 侯, 尤, 模, 虞, 魚 categories, for which he gave the following reconstructions:

	侯	尤	模	虞	魚
Pre-T'ang	u	ju	o	jo	jɔ
T'ang	əu	jəu	wo	jwo	jo

He noted that words of the 侯, 尤, 模, 虞 categories were at one time all used to transcribe Sanskrit words with -u and -o vowels, but that words of the 魚 category were never used in this way. Through the diphthongization among words of the 侯, 尤 categories which took place at the end of the sixth century he accounted for the fact that before this time words of the 侯, 尤, 模, 虞 categories were used indiscriminately to transcribe Sanskrit words with -u and -o, while afterward only words of the 模, 虞 categories were so used. Two questions now remain. The 幽 category, like 尤, is generally reconstructed with a diphthong whose second member is a rounded element. Were words of this category ever used to transcribe Sanskrit words with rounded vowels? If not, was it because these words were so rare? Why, during the T'ang Dynasty, were words of the 魚 category, reconstructed *-jo, not used to transcribe Sanskrit words with rounded vowels? Was it because by this time words of the 模, 虞 categories were so commonly associated with this practice?

Ch'ung-niu doublets became the major topic of investigation during the forties after Chou Tsu-mo (1940) and P. Nagel (1941) pointed out in critical reviews of Ch'en Li's work on the *Ch'ieh-yün* that in the *Ch'ieh-yün*'s 支, 脂, 祭, 宵, 眞, 仙, 侵, and 鹽 categories there are sets of doublets with labial and velar initials and dental or labial endings. The evidence for these doublets is of various sorts. (1) They have different *fan-ch'ieh* spellings and must therefore have had different pronunciations. The ch'ung-niu doublets imply, of course, both the earlier presence of contrasts and their later merging. So, for example, by the time of the *Ch'ieh-yün* 眞^a (*-jin) and 眞^b (*-jən) had merged to become members of the one 眞 category, and 仙^a (*-jan) and 仙^b (*-jān) had merged in the 仙 category. Before labial endings merging had taken place so early and so thoroughly that there are just traces of the earlier 侵^{a/b} (*-jim/*-jəm) and 鹽^{a/b} (*-jam/*-jām) distinctions. (2) They are assigned different positions in the four rows of the phonological charts (e.g. the *Yün-ching* and the *Ch'i-yin-lüeh*), of which our earliest editions date back to the twelfth century: one set is in the fourth row (type "a"), the other in the third (type "b"). (3) They have certain crucial differences in their Sino-Xenic reflexes. In Sino-Annamese, for instance, there are corresponding to words with Chinese labial initials two subsets of reflexes, one with labial initials (type "b"), the other with dental initials (type "a"):

支 ^b	皮	bi	支 ^a	脾	tỳ
脂 ^b	悲	bi	脂 ^a	琵琶	ti
眞 ^b	彬	bân	眞 ^a	賓	tân
	岷	mân		民	dân
	密	mât		必	tât
仙 ^b	弁	biên	仙 ^a	便	tiên
	免	miên		緬	diên
	別	biệt		滅	diệt

In Sino-Korean, there are differences among words with velar initials:

支 ^b	寄	kui	支 ^a	企	ki
	儀	ui		移	i
脂 ^b	肌	kui	脂 ^a	夷	i
	器	kui		塞	ki
眞 ^b	巾	kun	眞 ^a	因	in
	乙	ul		一	il
	窘	kun		均	kiun
	隕	un		尹	iun

(4) Phonetic compounds also support the reconstruction of different sources for the members of these doublets. 仙^a, for example, shares the same phonetic element with 先 in graphic representations; 仙^b shares the same phonetic elements with 元.

To account for this body of evidence, several hypotheses have been formulated. (Chart 6 summarizes a number of the resultant reconstructions.)

(1) There was a difference in Ancient Chinese main vowels. This view was first set forth in independent studies made by Tung T'ung-ho (1945, 1948) and Chou Fa-kao (1945a, 1948a).

(2) There was a difference in Ancient Chinese medials (Lu Chih-wei [1947], Li Jung [1956], E. G. Pulleyblank [1961-2]).

(3) The Ancient Chinese distinction was that the b categories had a -j- glide and the a categories had a -j- glide followed by -i-. Lung (1970), who advocates this view, extends the distinction to the finals 尤 (*-jəw) and 幽 (*-jiəw) and to the initials 喻_三 (于) (*-j-) and 喻_四 (以) (*-ji-). Lung insists that *-i- was the distinguishing mark of the fourth-division finals.

(4) In the *Ch'ieh-yün's* third division, where the ch'ung-niu doublets are found, there is always in addition to the "a" and "b" categories a third, "c" category. Historically, these categories are assumed by Chang and Chang 1972 to have merged in two different ways: one led to the distinctions of *Shih-ching* Archaic Chinese; the other is represented by a southern tradition which is preserved in modern

Foochow and the Sino-Xenic Go-on dialect (Chang and Chang 1972; especially 22, 46 ff.). For example:

Non-*Shih-ching* merging眞^a 眞^b // 殷^c仙^a 仙^b // 元^c*Shih-ching* merging眞^a // 眞^b 殷^c仙^a // 仙^b 元^c

That is, the early merging of the ch'ung-niu doublets was a non-*Shih-ching* type change. The *Ch'ieh-yün*'s incorporation of the results of these two types of development yielded the tripartite "a", "b", "c" categorization which will be as revealing for historical linguistics, when it is properly understood, as it has been puzzling to students of the ch'ung-niu problem.

Other modifications of Karlgren's reconstructions of Ancient Chinese have been suggested. Wang Ching-ju (1941) hypothesized two types of medial -u/-w- glides: strong -u- and weak -w-. These two medials are, however, not contrastive in the *Ch'ieh-yün* system. Ma Hsueh-liang and Lo Chi-kuang (1962) proposed long -ii- as the main vowel for the finals of the fourth division (Chart 7), thus unnecessarily bringing length as a distinctive element into the phonological system. M. Hashimoto (1970) added palatal endings, *-ń and *-c, to the system, eliminating the combinations of ɤ, æ, and e with velar endings:

Karlgren: ɤŋ/k, wɤŋ/k, iɤŋ/k, iwɤŋ/k, æŋ/k, wæŋ/k, iɛŋ/k, iwɛŋ/k, ieŋ/k, iweŋ/k
Hashimoto: ań/c, ɯań/c, iań/c, ɤań/c, eń/c, ɤeń/c, iɛń/c, ɤeń/c, eń/c, ɤeń/c

While great effort was being expended on the improvement of Karlgren's reconstructions for the *Ch'ieh-yün*'s phonological categories, scholars were gradually becoming interested in exploring the linguistic background of this rime dictionary. This exploration began as early as 1928 when the Institute of Philology and History at the National Chung-shan University in Canton devoted three special issues of its weekly publication to the *Ch'ieh-yün*; the contents include a short biography of Lu Fa-yen by Ting Shan, an annotated preface of the *Ch'ieh-yün* by Lo Ch'ang-p'ei, a chronological chart outlining the events leading to the compilation of the *Ch'ieh-yün* by Tung Tso-pin, and a long list of critical textual notes on the *Ch'ieh-yün* by Ting Shan. Serious discussion on the linguistic background of the *Ch'ieh-yün* started with Ch'en Yin-k'o's article (1949), in which Ch'en, on the basis of historical evidence, concluded that the *Ch'ieh-yün* was not a description of the Ch'ang-an dialect of the seventh century. Ch'en's assumption has been confirmed by the materials which are believed to represent the Ch'ang-an dialect or other northwestern dialects of the seventh, eighth, ninth, and tenth centuries, such as Yen Shih-ku's commentaries on *Han Shu* (641), Yen Yüan-sun's *Kan-lu tzu-shu* (710-20), Hui Yüan's *Yi-ch'ieh-ching yin-yi* (c. 720), Chang Shen's *Wu-ching wen-tzu* (775-6), Hui Lin's *Yi-ch'ieh-ching yin-yi* (810), and the Tun-huang manuscripts—folk literature in verses and Sino-Tibetan bilingual texts. All these materials show that the Ch'ang-an

dialect and other northwestern dialects of the seventh century and later had a much simpler phonological system than the system implied by the *Ch'ieh-yün*. The Ch'ang-an dialect and other northwestern dialects did not make such *Ch'ien-yün* distinctions as 哈:泰, 覃:談, 東:冬, 皆:夬:佳音分, 佳音分:麻, 咸:銜, 山:刪, 耕:庚, 鹽:添, 仙:先, 潛:青, 宵:蕭, 祭:霽, 支:脂:之:微, 模音字:侯音字, 虞音字:尤音字. Also, contrary to the *Ch'ieh-yün*, there are clear indications that in these dialects some of the earlier p- initials had undergone the dentilabialization process, changing to f-, and that words with voiced initials (excluding nasals, laterals, and semivowels) and B tone were pronounced with the same tone as those words which originally had the C tone. There were several dictionaries based on the Ch'ang-an dialect (Ch'in-yin) compiled by Chang Chien during the time of Empress Wu (684-704), by Yüan T'ing-chien during the reign of T'ien-pao of Hsüan Tsung (742-56), and Wu Hsüan-chih (time unknown). These dictionaries were quoted repeatedly by Hui Lin to refute the pronunciations given in the *Ch'ieh-yün*. Unfortunately, they were based on too narrow a linguistic foundation to win the widespread acceptance of the *Ch'ieh-yün* and are lost to us.

Ch'en's article was followed by several articles presenting different views on the linguistic background of the *Ch'ieh-yün*, by Li Yü-p'ing (1957), Wang Hsien (1961, 1962), Shao Jung-fen (1961), Ho Chiu-ying (1961), Huang Ts'ui-po (1962), Chao Chen-to (1962), and Chou Tsu-mo (1963, 1966). The last item was summarized in English by G. Malmquist (1968).

In his preface to the *Ch'ieh-yün*, Lu Fa-yen criticized the substandard pronunciations of the outlying areas: Wu-Ch'ü in the southeast, Yen-Chao in the northeast, Ch'in-Lung in the northwest, and Liang-Yi in the southwest. From this we may infer that the language used in the central part of China was what Lu considered standard. Within this territory there were four major cities: Ch'ang-an, Lo-yang, Yeh (Lin-chang, now in Honan), and Chin-ling. Ch'en contended that the *Ch'ieh-yün* represented the traditional pronunciations of classical texts by educated people and that this tradition could be traced back to the Later Han Dynasty, whose capital was Lo-yang. Wang, Shao, and Chao held that the *Ch'ieh-yün* was based on the spoken language of Lo-yang because Yen Chih-t'ui, the chief participant in designing the framework for the *Ch'ieh-yün*, recognized the dialects of Chin-ling and Lo-yang as the standard languages of the nation. Yen, however, did not specify the Lo-yang dialect as the only standard; moreover, he listed Lo-yang after Chin-ling. The same evidence used by Wang, Shao, and Chao can, therefore, be used to argue in favor of the spoken language of Chin-ling as the major dialect underlying the *Ch'ieh-yün*. Also, there are several things we do not know. Were there two sets of pronunciation in the Lo-yang dialect, one used by the educated in reading classical texts, the other by common people in their daily conversation? How much did the dialects of Lo-yang, Yeh, and Chin-ling differ from one another? Ch'en was inclined to believe that the inhabitants of the cities of Yeh and Chin-ling were

originally from Lo-yang and that the Lo-yang dialect had therefore been used by the upper classes, including the officials and scholars, in Yeh and Chin-ling. It is obvious that the *Ch'ieh-yün* is not based solely on either the Ch'ang-an dialect or the Lo-yang dialect. Even Wang, Shao, and Chao conceded that the group of scholars who originally designed the framework of the *Ch'ieh-yün* at the beginning of the Sui Dynasty admitted into this framework elements from dialects other than that of Lo-yang. Three of these ten scholars (Yen Chih-t'ui Hsiao Kai, and Liu Chen) were from Chin-ling; the rest (Lu Szu-tao, Wei Yen-yüan, Li Jo, Hsin Te-yüan, Hsüeh Tao-heng, Lu Shuang, and Lu Fa-yen) were from Yeh. None of them spoke the Ch'ang-an dialect. It is stated in the preface of the *Ch'ieh-yün* that Yen Chih-t'ui and Hsiao Kai played decisive roles in the planning of the *Ch'ieh-yün*. I assume that this was partly because they were competent philologists, but perhaps also because they knew the southern dialects.

The preface to the *Ch'ieh-yün* mentions five rime dictionaries, by Lü Ching, Hsia-hou Kai (or Yung), Yang Hsiu-chih, Li Chi-chieh, and Tu T'ai-ch'ing; the table of contents in Wang Jen-hsü's edition of the *Ch'ieh-yün* gives detailed information on their differences of categorization. We assume that these dictionaries represented different efforts to prescribe (not describe) the rime categories of their ideal standard languages. Yang, Li, and Tu were officials at the capital of Yeh; Hsia-hou was said to be an official at the capital of Chin-ling. Lü Ching, a native of Jen-ch'eng (now Ch'ü-fu in Shantung), authored the first of these dictionaries. (There seem, however, to have been several recensions of Lü Ching's *Yün-chi*; we do not know which of these Lu consulted.) From the information preserved in the table of contents in Wang's *Ch'ieh-yün* we know that the *Ch'ieh-yün* adopted the maximum number of categories contained in the earlier rime dictionaries. Of these five dictionaries, Lü's, which is the oldest, and Hsia-hou's, which may represent the southern dialects, have more rime categories than the other three; the *Ch'ieh-yün*'s categorization therefore owes more to these dictionaries.

The predominance of southern elements in the *Ch'ieh-yün*, in preference to the northern dialects, was criticized as early as the ninth century by Li Fu (李涪), who had noticed significant differences between the Lo-yang pronunciation and the phonological categories of the *Ch'ieh-yün*. This is a strong point in favor of the argument (Ho and Huang) that the *Ch'ieh-yün* was not based on the dialect of Lo-yang but was, instead, a synthesis of previous rime dictionaries. The *Ch'ieh-yün* was probably not a hodgepodge conglomeration of all the distinctions recognized in these dictionaries; rather, it was an effort to systematize all the possible distinctions in the ideal standard language reconstructed by this group of scholars on the basis of the dialects of the three major cities (Lo-yang, Yeh, and Chin-ling) which enjoyed greater prestige than Ch'ang-an and other outlying areas prior to the Sui reunification. The existence among educated people of such a generally accepted standard language, which is not identical with any dialect actually spoken

at any one place or at any one time, also explains the close resemblances in the rime categories of the *Ch'ieh-yün*, *Yü-p'ien* (original edition), and Hsüan Ying's *Yi-chieh-ching yin-yi*, a dictionary for reading Buddhist texts. Chou Fa-kao reproduced Hsüan Ying's dictionary (1962), made an index to it (1968a), and studied the phonological system reflected by the fan-ch'ieh spellings in this work (1948d). The *Yü-p'ien* was compiled about fifty years before, Hsüan Ying's work about fifty years after, the *Ch'ieh-yün*. Chou Tsu-mo (1963, 1966) also noted similarities between the riming practice of poetry composed between 479 and 589 and the *Ch'ieh-yün*'s categorizations.

Yen Chih-t'ui, who played such an influential role in forming the framework of the *Ch'ieh-yün*, makes very clear the purpose behind the compilation of this work in the chapter on phonology of his *Family Instructions for the Yen Clan*. For example:

"People of the nine regions (of ancient China) spoke different dialects; and it has been so since the beginning of mankind.... There are... differences between ancient and modern languages... (after 265 A. D.) many works dealing with sounds and rimes came out. Each work kept its local pronunciation and criticized the others.... Only between the two imperial capitals, Chin-ling (Nanking, the capital of the Southern Dynasties) and Lo-yang (the capital of the Northern Dynasties), can different usages be compared and ancient and modern pronunciations examined, so as to obtain a well-balanced point of view.... In general, a southern gentleman speaks better than a northern gentleman; however, a northern peasant speaks better than his southern counterpart. The speech of a southern-educated gentleman can immediately be detected even if he dresses as a commoner. On the other hand, behind a wall you cannot tell a northern courtier from a peasant even if you listen to their conversation all day. The southerners have been imbued with the usage of the Wu-Yüeh states, while the northerners have assimilated barbarian habits. Both have their deep-rooted defects which are too numerous to be discussed in detail.... Since coming to Yeh, I have met only Ts'ui Tzu-yüeh and his nephew, Ts'ui Chan, Li Tsu-jen and his younger brother, Li Yü, who are careful in their speech and comparatively accurate in their pronunciations. Li Chi-chieh wrote the *Yin-yün chüeh-i* (Determination of doubtful sounds and rimes) which contains frequent errors. Yang Hsiu-chih (509-582) compiled the *Ch'ieh-yün* which was rather carelessly done and, therefore, unpolished...." (English translation from Teng Szu-yü 1968)

The above quotation indicates clearly that during the sixth century the Chinese language had undergone changes as a result of contact in the south with the Wu dialects and in the north with the non-Chinese invaders. The purpose of the compilation of the *Ch'ieh-yün*, after the reunification of the Sui Dynasty, was to re-establish standard pronunciations for the Chinese language by adopting distinctions of the dialects of the major cities, such as Chin-ling, Yeh, and Lo-yang.

Once we realize the composite nature of the *Ch'ieh-yün*, we have no choice but to abandon the traditional approach initiated by Karlgren, which inserts this bulging mass into a straight line drawn from the Archaic system based on the riming practice of the *Shih-ching* to the modern dialects. Whereas the geographical background of the *Shih-ching* system is limited to the north, the *Ch'ieh-yün* encompasses the phonological distinctions of the dialects spoken both in the north and in the south. Many of the southern characteristics of the *Ch'ieh-yün* system are still reflected in the modern dialects spoken in the south. For instance: (1) The four-tone system is still preserved in Ch'ao-chou, Wen-chou, and Canton, though with tonal splits based on the voiceless and voiced natures of the initials. (2) The final consonantal endings -p, -m, -t, -n, -k, -ŋ are still preserved in the dialects of Ch'ao-chou, Amoy, Canton, and Meihsien. (3) In the *Ch'ieh-yün*, there are two sets of rime categories described as third-division and fourth-division finals. Historically, the third-division set was derived from a single, low-vowel source. The fourth-division set was derived from several sources with vowels of different heights (though rarely with rounded vowels); through sound change, these vowels had merged into one category in the *Ch'ieh-yün*. The distinctions of 宵:蕭 and 祭:霽 are not reflected in any modern dialect. In the Wu dialects of Chin-hua (colloquial style) (Yüeh-chai 1958) and Yi-wu (Chin 1964), however, the distinctions of 鹽:添 and 仙:先 are preserved in words with dental initials (Chart 8). (4) The contrast of rounded and unrounded vowels before both velar and dental endings is a characteristic shared by the *Ch'ieh-yün* and the Foochow dialect. In the Foochow dialect, the distinctions between the words of the *Ch'ieh-yün* categories 眞質 and 殷迄, for example, are represented by -(e)ij/k: -(œ)yŋ/k and those between 仙薛 and 元月 by -ieŋ/k -yoŋ/k. (Chart 9 lists some examples of these correspondences, and some exceptions. There is more than one possible explanation for these exceptions. Not the least plausible is that there were mistakes in the *Ch'ieh-yün*. After all, how can the *Ch'ieh-yün* be assumed free of all error?!) (5) The *Ch'ieh-yün* distinguishes the 魚 and 虞 categories. This distinction, lost in the north as early as the third century A. D., was recognized in the third to sixth-century riming practice of poets in the south around Chin-ling (Lo Ch'ang-p'ei 1931a). Norman (1969) pointed out the preservation of this distinction in the Min dialects; in his proto-Min phonological system he reconstructed *y for 魚 and *io for 虞. The following examples, just a few of many, show the contrast between 魚 and 虞 in the dialects of Foochow and Ch'ao-chou.

	煮:主	書:輸	除:厨	梳:數	居:拘
Foochow	ʿtsy : ʿtsio	ɛtsy : ɛsio	ɛty : ɛtio	ɛsø : ʿsouʔ	ɛky : ɛky
Ch'ao-chou	ʿtsur : ʿtsu	ɛtsur : ɛsu	ɛtur : ɛtu	ɛsiu : ʿsieuʔ	ɛku : ɛkhu

These last two phenomena, of course, refute Karlgren's repeated assertion that all modern Chinese dialects, with the *exception* of Min dialects, derive from the

Ch'ieh-yün language (e. g. *Compendium*, pp. 212, 216); on the contrary, significant features of the *Ch'ieh-yün* are preserved only in these dialects.

We cannot put the *Shih-ching* and the *Ch'ieh-yün* in a straight line once we understand the basic difference between the reconstructed *Shih-ching* system and the reconstructed *Ch'ieh-yün* system. The *Shih-ching* has a narrow geographical base; we cannot project from it an historical origin which will explain all the categories of the *Ch'ieh-yün*, which has a broad geographical foundation. On the broad base of the *Ch'ieh-yün* we can, however, project a pre-Archaic system which accounts, through the application of different sound changes (primarily different types of vowel-merging) for the distinctions set forth in the *Ch'ieh-yün*, as well as those embodied in the *Shih-ching* and in modern Chinese dialects. This is the approach set forth in detail in Chang and Chang (1972).

Chart 2

Recensions of the *Ch'ieh-yün*, 601 to 1089

(Numbers in the leftmost column correspond to the columns in Chart 3)

1, 2	601	Lu Fa-yen's edition
3	677	Chang-sun No-yen's annotated edition
4	706	Wang Jeh-hsü's corrected and enlarged edition
	713-41	Kuo Chih-hsüan's corrected and enlarged edition
	720	Sun Mien's edition (under the title <i>T'ang-yün</i>)
	751	Sun Mien's second edition of the <i>T'ang-yün</i>
5	763-84	Li Chou's version [Kuan Liang, Hsüeh Hsün, Chu Shang-ch'iu, Yen Pao-wen, P'ei Wu-ch'i, and Ch'en Tao-ku are all said to have made their contributions to enlarging the corpus of the <i>Ch'ieh-yün</i> during this period.]
6	1007-8	Ch'en P'eng-nien and Ch'iu Yung's <i>Kuang-yün</i>
7	1038-9	Ting Tu's <i>Chi-yün</i>

Chart 3

Contents of Various *Ch'ieh-yün* Recensions (Wei 1948)

(1)	(2)	(3)	(4)	(5)	(6)	(7)
陸甲 對唐 入筱	陸乙 對唐 平筱	長孫·王	王·裴	李	廣	集
東董送屋	東董送屋	東董送屋	東董送屋	東董送屋	東董送屋	東董送屋
冬 宋沃	冬 宋沃	冬 宋沃	冬 宋沃	冬 宋沃	冬 宋沃	冬 宋沃
鍾腫用獨	鍾腫用獨	鍾腫用獨	鍾腫用獨	鍾腫用獨	鍾腫用獨	鍾腫用獨
江講絳覺	江講絳覺	江講絳覺	江講絳覺	江講絳覺	江講絳覺	江講絳覺
支紙寘	支紙寘	支紙寘	陽養漾藥	藥	支紙寘	支紙寘
脂旨至	脂旨至	脂旨至	唐蕩宕鐸	鐸	脂旨至	脂旨至
之止志	之止志	之止志	支紙寘	支紙寘	之止志	之止志
微尾未	微尾未	微尾未	脂旨至	脂旨至	微尾未	微尾未
魚語御	魚語御	魚語御	之止志	之止志	魚語御	魚語御
處麌遇	處麌遇	處麌遇	微尾未	微尾未	處麌遇	處麌遇
模姥暮	模姥暮	模姥暮	魚語御	魚語御	模姥暮	模姥暮
齊齊霽	齊齊霽	齊齊霽	處麌遇	處麌遇	齊齊霽	齊齊霽
祭	祭	祭	模姥暮	模姥暮	祭	祭
齊齊霽	齊齊霽	齊齊霽	齊齊霽	齊齊霽	齊齊霽	齊齊霽
佳蟹卦	佳蟹卦	佳蟹卦	祭	祭	佳蟹卦	佳蟹卦
皆駭怪	皆駭怪	皆駭怪	泰	泰	皆駭怪	皆駭怪
夬	夬	夬	皆駭界	佳蟹卦	夬	夬
灰賄隊	灰賄隊	灰賄隊	夬	皆駭怪	灰賄隊	灰賄隊
哈海代	哈海代	哈海代	廢	夬	哈海代	哈海代
廢	廢	廢	灰賄誨	灰賄隊	廢	廢
眞軫震質	眞軫震質	眞軫震質	臺待代	哈海代	眞軫震質	眞軫震質
文吻問物	臻	臻	眞軫震質	廢	諄準稕術	諄準稕術
臻 櫛	文吻問物	文吻問物	臻 櫛	眞軫震質	臻 櫛	臻 櫛

Chart 4

Reconstructed *Ch'ieh-yün* Initials

(Initials separated by ~ are in complementary distribution.)

p, pj	ph, phj	b, bj	m, mj		
t~t~tj	th~th~thj	d~d~dj	n (nj?)		l, lj
ts, tsj	tsh, tshj	dz, dzj		s, sj	zj
tšj	tšhj	džj	ñj	šj	žj
tʂ	tʂh	dʂ		ʂ	(ʐ)
k, kj	kh, khj	g, gj	ŋ, ŋj	h, hj	<u>h</u> , <u>hj</u>
ʔ, ʔj	j-	w-			

Chart 5

Chinese Transliterations of Sanskrit Labial-stop Initials

Translator	Date	p	ph	b	bh
西晉竺法護	286	波	頗	波	披 何
東晉法顯	417	波	頗	婆	婆(重音)
劉宋慧嚴等	424-32?	波	頗	婆	婆(重音)
北涼曇無讖	414-21	波	頗	婆	滂
梁僧伽婆羅	518	波	頗	婆	梵
隋闍那崛多	591	𪛗	頗	婆	𪛗
唐善無畏	724	波	頗	摩	婆
唐不空	771	跋	頗	麼	婆(去)
唐智廣	780-804?	跋	頗	婆(輕音)	婆(重音)
唐般若	798	跋	頗	婆(暮我反)	婆(滂我反)
唐慧琳 ¹	788-810	跋	頗	麼	婆
唐慧琳 ²	788-810	跋	頗	麼	滂

Chart 6

Reconstructed Ch'ung-niu Doublets

[Note that with the exception of the reconstruction of Chang and Chang 1972, which is for proto-Chinese, these reconstructions are for Ancient Chinese]

	祭	蕭	仙	鹽	脂	眞	侵
Lu	iei/Iei	ieu/Ieu	ien/Ien	iem/Iem	iei/Iei	iēn/Iēn	iēm/Iēm
Li	iäi/jäi	iäu/jäu	iän/jän	iäm/jäm	ie/je	iēn/jēn	iēm/jēm
Pulleyblank	ᵿei/yei*	ᵿeu/yeu	ᵿen/yen	ᵿem/yem	ᵿe/ye	ᵿin/yin	ᵿim/yim
Tong	jæi/jæi	jæu/jæu	jæn/jæn	jæm/jæm	jei/jëi	jen/jēn	jem/jēm
Chou 1948	jei/jëi	jeu/jëu	jen/jēn	jem/jëm	jëi/jëi	jēn/jēn	jēm/jēm
Chou 1968	iæi/iai	iæu/iau	iæn/ian	iæm/iam	iI/ie	iIn/ien	iIm/iem
Chang and Chang 1972	jai/jäi	jau/jäu	jan/jän	jam/jäm	ji/jöi	jIn/jøn	jIm/jëm
Lung 1970	jai/jiai	jau/jiau	jan/jian	jam/jiam	je/jie	jen/jien	jem/jiem

* Pulleyblank's ᵿ=i and is "retracted"; y is "close, fronted".

Chart 7
Reconstructed *Ch'ieh-yün* Fourth-division Finals

Ma and Lo	ii	iiu	iiŋ	iin	iim
Karlgren	iei	ieü	ieŋ	ien	iem
Martin	iei	ieü	ieŋ	ien	iem
Tong	iɛi	iɛü	iɛŋ	iɛn	iɛm
Wang	iei	ieü	ieŋ	ien	iem
Chou (1968)	iei	iɛü	iɛŋ	iɛn	iɛm
Lu	ɛi	ɛü	ɛŋ	ɛn	ɛm
Li	ei	eu	eŋ	en	em
Pulleyblank	ei	eu	eŋ	en	em
Chang and Chang	iai	iau	iaŋ	ian	iam

Chart 8a

鹽:添, 仙:先 Contrasts in the Chin-hua Dialect (Yüeh-chai 1958)
(Forms in parentheses are exceptions.)

Init. \ Fin.	Third Division -ie				Fourth Division -ia			
	*-m	*-n	*-p	*-t	*-m	*-n	*-p	*-t
n-	粘			孽 ²	捻 ² 念 ² 卮 ²	年		捏 ²
l-	簾 ² 鍊 ²	連 ² 聯 ² (麟)				練 ² 煉 ² (獵 ²) 鍊 ² (鏈 ²) (戀 ²)		(英烈 ²)
ts-	尖	煎 ² 箭 ² (荐 ²)	接 ²			剪		節 ²
tsh-	簽	遷 ² 淺 ² (千)						切 ²
z-	潛 ² 漸 ²	賤 ² 踐 ²				前		截 ²
s-		仙 ² 鮮 ² 線 ²				先		
t-					黠 ² 店 ²	顛 ² 顛 ² 典 ²		跌 ²
th-					添 ² 添 ² 添 ²	天	貼 ² 帖 ²	鐵 ²
d-		錢 ²			甜 ² 簾 ² 墊 ²	田 ² 填 ² 電 ² 佃 ² 殿 ²	叠 ² 碟 ² 蝶 ²	

Chart 8b

鹽:添,仙:先 Contrasts in the Yi-wu Dialect (Chin 1964)

Init.	Fin.	Third Division -ie				Fourth Division -ie			
		*-m	*-n	*-p	*-t	*-m	*-n	*-p	*-t
ñ-		黏	碾	聶		黏 念	年		捏
l-		廉 鍊 簾 斂 殮	連 鏈 聯	獵	列 裂 烈	憐 蓮 練 煉 (簾)	(鏈)		
ts-		尖	煎 箭 澗 (荐)	接		剪 戩		節	
tsh-		籤 筵 霰	遷 掇 淺	妾		千		切	
z-		潛 漸	錢 賤	捷		前		截	
s-		暹 織	仙 鮮 和 鮮 線		薛 泄	先		屑	
ñ (t-?)						點 店	顯 典		
th-						添 添		貼 帖	
d-			錢			甜 啞	田 填 電 甸 殿 澗 佃 澗	香 蝶 牒	迭

Chart 9a

眞質:殷迄 Contrasts in the Foochow Dialect

	-(e)ij/k	-(œ)ij/k
k-	緊 吉	斤 筋 (巾) (僅) (覲) (殮) (饌) (饌) (璣) (壓) 近
kh-	(迄)	芹 勤 勸 (毀) 乞
ŋ-	(根)	(銀) 艮 根 君 問 (置) (愨)
h-		欣 昕 (毀)
ʔ-	因 人 仁 引 印 胤 一 乙 逸	殷 感 隱 纒

Chart 9b

仙薛:元月 Contrasts in the Foochow Dialect

	-ieŋ/k	-ioŋ/k
k-	乾 虔 揭 碼 偶 竭 傑	健 蹇 建 健 捷 蹇 蹇 (件 ²)
kh-	愆 蹇 蹇 遣 謹	
ŋ-	彥 諺 孽 藥	言
h-	(.掀)	憲 獻 歇 謁
ʔ-	演 衍 (‘假) (‘蝦) (‘殿) 熱	焉 (‘延) (‘然) (件 ²) 謁

BIBLIOGRAPHY

- Chang (1968): Chang Kun, "Phonological system during the Sui-T'ang period", *Papers of the CIC Far-Eastern Language Institute* (1966-7), Edited by J. Yamagiwa.
- Chang & Chang (1972): Chang Kun & Betty Shefts, "The Proto-Chinese final system and the Ch'ieh-yün", *Monographs A*, No. 26, The Institute of History and Philology, Academia Sinica.
- Chao¹ (1962): 趙振鐸, 從切韻序論切韻, 中國語文, 467-77。
- Chao² (1941): Chao Yuen Ren, "Distinctions within Ancient Chinese", *Harvard Journal of Asiatic Studies*, 5, 203-33.
- Ch'en¹ (1879): 陳澧, 切韻考。
- Ch'en² (1948, 1949): 陳寅恪, 從史實論切韻, 國立北京大學五十週年紀念論文集, 嶺南文學院第十二種學報, 9.2.1-18。
- Chi (1948): 季羨林, 論梵文的 t, d 音譯, 國立北京大學五十週年紀念論文集, 文學院, 第五種。
- Chiang (1955): 姜亮夫, 瀛涯敦煌韻輯。
- Chin (1964): 金有景, 義烏話裏咸山兩攝三四等字的分別, 中國語文, 61。
- Chou¹ (1945a, 1948a): 周法高, 廣韻重紐的研究, 六同別錄 (上) 1-62, 國立中央研究院歷史語言研究所集刊, 13.49-117。
- Chou¹ (1945b, 1948b): 周法高, 切韻魚虞之音讀及其流變, 六同別錄 (上) 1-35, 國立中央研究院歷史語言研究所集刊, 13.119-52。
- Chou¹ (1945c, 1948c): 周法高, 梵文 t, d 的讀音, 六同別錄 (下) 1-8, 國立中央研究院歷史語言研究所集刊, 14.249-55。
- Chou¹ (1948d): 周法高, 玄應反切考, 國立中央研究院歷史語言研究所集刊, 20.359-444。
- Chou¹ (1948e): 周法高, 古音中的二等韻兼論古音的寫法, 國立中央研究院歷史語言研究所集刊, 19.203-33。
- Chou¹ (1954): 周法高, 論古代漢語音位, 國立中央研究院歷史語言研究所集刊, 25.1-19。

- Chou¹ (1962): 周法高編, 玄應一切經音義, 專刊第四十七種, 國立中央研究院歷史語言研究所。
- Chou¹ (1968a): 周法高, 玄應反切字表。
- Chou¹ (1968b): 周法高, 論切韻音, 香港中文大學中國文化研究所學報, 1.89-112。
- Chou¹ (1970): 周法高, 論上古音和切韻音, 香港中文大學中國文化研究所學報, 3.2.321-457。
- Chou² (1940): 周祖謨, 切韻考辨誤, 輔仁學誌, 9.7-60。
- Chou² (1943): 周祖謨, 顏氏家訓音辭篇注補, 輔仁學誌, 12.201-22。
- Chou² (1963, 1966): 周祖謨, 切韻的性質和它的音系基礎, 語言學論叢, 5.39-70, 問學集, 434-73。
- Chou² (1966a): 周祖謨, 萬象名義中原本玉篇音系, 問學集, 271-404。
- Chou² (1966b): 周祖謨, 切韻與吳音, 問學集, 474-82。
- Chou² (1966c): 周祖謨, 王仁昉切韻著作年代釋疑, 問學集, 483-93。
- Chou² (1958, 1966d): 周祖謨, 關於唐代方言中四聲讀法的一些資料, 語言學論叢, 2.11-16, 問學集, 494-500。
- Downer (1957): Downer G. B., "A problem in *Ch'ieh-yün* Chinese", *Bulletin of the School of Oriental and African Studies*, 19.515-25.
- Dragunov (1928): Dragunov, A. A., "Contribution to the reconstruction of Ancient Chinese", *T'oung Pao*, 26.1-16.
- Hashimoto (1970): Hashimoto, M., "Internal evidence for Ancient Chinese palatal endings", *Language*, 46.336-65.
- Ho (1961): 何九盈, 切韻音系的性質及其他, 中國語文, 108.10-18。
- Huang (1931): 黃淬伯, 慧琳一切經音義反切考, 專刊第六種, 國立中央研究院歷史語言研究所。
- Huang (1962): 黃淬伯, 關於切韻音系基礎的問題, 中國語文, 85-9。
- Karlgren (1915-26): Karlgren, B., "*Études sur la phonologie chinoise*" (Chinese translation by 趙元任, 李方桂, 羅常培)。
- Karlgren (1954): Karlgren, B., "Compendium of phonetics in Ancient and Archaic Chinese", *Bulletin of the Museum of Far Eastern Antiquities*, 26.211-367.
- Ko (1932): Ko Yi-ch'ing (葛毅卿), "On the consonantal value of Yü-class words", *T'oung Pao*, 29.100-3.
- Ko (1939): 葛毅卿, 喻三入匣再證, 國立中央研究院歷史語言研究所集刊, 8.91。
- Li¹ (1971): 李方桂, 上古音研究, 清華學報, 新九卷一、二期合刊, 1-61。
- Li² (1956): 李榮, 切韻音系。
- Li² (1965): 李榮, 從現代方言論古羣母有一二四等, 中國語文, 337-42, 355。
- Li³ (1957): 李子平, 陸法言的切韻, 中國語文, 56.28-36。
- Liang (1890): 梁僧寶, 四聲韻譜。
- Lin (1969): 林素珍, 廣韻又音研究, 國立政治大學國文研究所論文。
- Liu (1936): 劉復編, 十韻彙編。

- Lo¹ (1931a): 羅常培, 切韻魚虞之音讀及其所據方音考, 國立中央研究院歷史語言研究所集刊, 2.358-85。
- Lo¹ (1931b): 羅常培, 知徹澄娘考, 國立中央研究院歷史語言研究所集刊, 3.121-57。
- Lo¹ (1933): 羅常培, 唐五代西北方音, 專刊甲種第十二種, 國立中央研究院歷史語言研究所。
- Lo¹ (1939): 羅常培, 經典釋文和原本玉篇反切中的匣喻兩母, 國立中央研究院歷史語言研究所集刊, 8.85-90。
- Lo² (1969): 羅宗濤, 敦煌變文用韻考。
- Lu (1939a): 陸志章, 證廣韻五十一聲類, 燕京學報, 25.1-58。
- Lu (1939b): 陸志章, 三四等與所謂喻化, 燕京學報, 26.143-73。
- Lu (1947): 陸志章, 古音說略, 燕京學報, 專號第二十種。
- Lung (1968): 龍宇純, 唐寫全本王仁昫刊謬補闕切韻校箋。
- Lung (1970): 龍宇純, 廣韻重紐音值兼論尤幽及喻母音值, 崇基學報, 9.2.161-81。
- Ma & Lo (1962): 馬學良、羅季光, 切韻純四等韻的主要元音, 中國語文, 533-9。
- Malmquist (1968): Malmquist, G., "Chou Tsu-mo on the *Ch'ieh-yün*", *Bulletin of the Museum of Far Eastern Antiquities*, 40.33-78.
- Martin (1953): Martin, S., "The phonemes of Ancient Chinese", *Journal of American Oriental Society*, Supplement.
- Maspero (1920): Maspero, H., "Le dialecte de Tch'ang-ngan sou le T'ang", *Bulletin de L'Ecole Française d'Extrême-Orient*, 20.2.1-124.
- Mei (1970): Mei Tsu-lin, "Tones and prosody in Middle Chinese and the origin of the rising tone", *Harvard Journal of Asiatic Studies*, 30.86-110.
- Mizutani (1959): 水谷眞成, 慧苑音義音韻考, 大谷大學研究年報, 11.145-221。
- Nagel (1941): Nagel, P., "Beiträge zur Rekonstruktion der *Ts'ieh-yün* Sprache auf Grund von Ch'en Li's *Ts'ieh-yün k'au*", *T'oung Pao*, 36.95-158.
- Norman (1969): Norman, J., "Some Observations on 魚 and 虞", a paper presented at the second meeting on Sino-Tibetan reconstruction at Columbia University.
- Oshima (1969, 1971): 大島正二, 顏師古漢書音義の研究 (上)、(下), 北海道大學文學部紀要, 17.1.47-237, 19.4.1-85。
- Oshima (1971): 大島正二, 顏師古漢書音義韻類考, 言語研究, 59.43-61。
- Pai (1931): 白濂洲, 廣韻聲紐之統計, 女師大學術季刊, 2.1.1-28。
- Pulleyblank (1961-2): Pulleyblank, E. G., "The consonantal System of Old Chinese", *Asia Major*, New Series, 9.59-144, 206-65.
- Shao (1961): 邵榮芬, 切韻音系的性質和它在漢語語音史上的地位, 中國語文, 103.26-32。
- Shao (1962): 邵榮芬, 敦煌俗文學中的別字異文和唐代西北方音, 中國語文, 193-217。
- Teng (1968): Teng Szu-yü, "Family instructions for the Yen clan", *T'oung Pao Monographie No. 4*.
- Tseng (1927): 曾運乾, 切韻五聲五十一紐考, 東北大學季刊, 1.14-21。
- Tseng (1928): 曾運乾, 喻母古讀考, 東北大學季刊, 2.58-64。

- Tung (1945, 1948): 董同龢, 廣韻重紐試釋, 六同別錄 (上) 1-20, 國立中央研究院歷史語言研究所集刊, 13.1-20。
- Tung (1948): 董同龢, 全本王仁昫刊謬補闕切韻的反切下字, 國立中央研究院歷史語言研究所集刊, 19.549-88。
- Tung (1952): 董同龢, 全本王仁昫刊謬補闕的反切上字, 國立中央研究院歷史語言研究所集刊, 23.511-22。
- Wang¹ (1941): 王靜如, 論開合口, 燕京學報, 29.143-92。
- Wang¹ (1948): 王靜如, 論古漢語之顎介音, 燕京學報, 35.51-94。
- Wang² (1961): 王顯, 切韻的命名和切韻的性質, 中國語文, 103.16-25。
- Wang² (1962): 王顯, 再談切韻音系的性質, 中國語文, 540-47。
- Wang³ (1923): 汪榮寶, 歌戈魚虞模古讀考, 北京大學國學季刊, 1.241-63。
- Wei (1948): 魏建功, 十韻彙編資料補並釋, 國立北京大學五十週年紀念論文集, 文學院, 第十五種。
- Wei (1957): 魏建功, 切韻韻目次第考源, 北京大學學報, 1957.4.69-83。
- Wei (1958): 魏建功, 切韻韻目四聲不一貫的解釋, 北京大學學報, 1958.2.45-67。
- Yüeh-chai (1958): 約齋, 金華方音與北京語音的對照, 方音與普通話集刊, 5.25-98。

論中古音與切韻之關係

張 琨

研究中古音一定要對切韻有正確的了解。切韻雖成書於601年，適當隋朝統一南北之際，並不代表隋朝之長安方音，也不是南北朝時之洛陽方音。切韻之作由於陸爽、陸法言父子及陸爽之友人顏之推、蕭該等集議，兼採古今南北各方言中之音韻類別，以求編著一部適合全國之韻書。切韻中之音韻類別多與南方方言相應，即所謂吳音。吳音與秦音有別。秦音即長安方音。據現有方音材料，七、八、九、十世紀西北方音（包括長安方音）比切韻中之音韻類別簡單的多。切韻韻類非但比現代任何方言中之韻類多，比詩經中的韻類也多。詩經韻類代表北方方言，與以南方方言為根據的楚辭韻類不同。現代潮州、廈門方言中的韻類之多是因為文白異讀等原因，不能與切韻韻類之多相提並論。